Journal of Social Sciences & Humanities

About the Journal

Overview

Pertanika Journal of Social Sciences & Humanities (JSSH) is the official journal of Universiti Putra Malaysia published by UPM Press. It is an open-access online scientific journal which is free of charge. It publishes the scientific outputs. It neither accepts nor commissions third party content.

Recognized internationally as the leading peer-reviewed interdisciplinary journal devoted to the publication of original papers, it serves as a forum for practical approaches to improving quality in issues pertaining to social and behavioural sciences as well as the humanities.

JSSH is a **quarterly** (*March, June, September* and *December*) periodical that considers for publication original articles as per its scope. The journal publishes in **English** and it is open to authors around the world regardless of the nationality.

The Journal is available world-wide.

Aims and scope

Pertanika Journal of Social Sciences & Humanities aims to develop as a pioneer journal for the social sciences with a focus on emerging issues pertaining to the social and behavioural sciences as well as the humanities. Areas relevant to the scope of the journal include Social Sciences—Accounting, anthropology, Archaeology and history, Architecture and habitat, Consumer and family economics, Economics, Education, Finance, Geography, Law, Management studies, Media and communication studies, Political sciences and public policy, Population studies, Psychology, Sociology, Technology management, Tourism; Humanities—Arts and culture, Dance, Historical and civilisation studies, Language and Linguistics, Literature, Music, Philosophy, Religious studies, Sports.

History

Pertanika was founded in 1978. A decision was made in 1992 to streamline Pertanika into three journals as Journal of Tropical Agricultural Science, Journal of Science & Technology, and **Journal of Social Sciences & Humanities** to meet the need for specialised journals in areas of study aligned with the interdisciplinary strengths of the university.

After almost 27 years, as an interdisciplinary Journal of Social Sciences & Humanities, the revamped journal focuses on research in social and behavioural sciences as well as the humanities, particularly in the Asia Pacific region.

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Our goal is to bring the highest quality research to the widest possible audience.

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We aim for excellence, sustained by a responsible and professional approach to journal publishing. Submissions are guaranteed to receive a decision within 14 weeks. The elapsed time from submission to publication for the articles averages 5-6 months.

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We are continuously improving access to our journal archives, content, and research services. We have the drive to realise exciting new horizons that will benefit not only the academic community, but society itself.

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The abbreviation for *Pertanika* Journal of Social Sciences & Humanities is *Pertanika J. Soc. Sci. Hum.*

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Pertanika policy prohibits an author from submitting the same manuscript for concurrent consideration by two or more publications. It prohibits as well publication of any manuscript that has already been published either in whole or substantial part elsewhere. It also does not permit publication of manuscript that has been published in full in Proceedings.

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The Pertanika Journals and Universiti Putra Malaysia takes seriously the responsibility of all of its journal publications to reflect the highest in publication ethics. Thus all journals and journal editors are expected to abide by the Journal's codes of ethics. Refer to Pertanika's **Code of Ethics** for full details, or visit the Journal's web link at http://www.pertanika.upm.edu.my/code_of_ethics.php

International Standard Serial Number (ISSN)

An ISSN is an 8-digit code used to identify periodicals such as journals of all kinds and on all media–print and electronic. All Pertanika journals have ISSN as well as an e-ISSN.

Journal of Social Sciences & Humanities: ISSN 0128-7702 *(Print)*; ISSN 2231-8534 *(Online)*.

Lag time

A decision on acceptance or rejection of a manuscript is reached in 3 to 4 months (average 14 weeks). The elapsed time from submission to publication for the articles averages 5-6 months.

Authorship

Authors are not permitted to add or remove any names from the authorship provided at the time of initial submission without the consent of the Journal's Chief Executive Editor.

Manuscript preparation

Refer to Pertanika's **Instructions to Authors** at the back of this journal.

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Authors are notified with an acknowledgement containing a *Manuscript ID* on receipt of a manuscript, and upon the editorial decision regarding publication.

Pertanika follows a **double-blind peer-review** process. Manuscripts deemed suitable for publication are usually sent to reviewers. Authors are encouraged to suggest names of at least three potential reviewers at the time of submission of their manuscript to Pertanika, but the editors will make the final choice. The editors are not, however, bound by these suggestions.

Notification of the editorial decision is usually provided within ten to fourteen weeks from the receipt of manuscript. Publication of solicited manuscripts is not guaranteed. In most cases, manuscripts are accepted conditionally, pending an author's revision of the material.

The Journal's peer-review

In the peer-review process, three referees independently evaluate the scientific quality of the submitted manuscripts.

Peer reviewers are experts chosen by journal editors to provide written assessment of the **strengths** and **weaknesses** of written research, with the aim of improving the reporting of research and identifying the most appropriate and highest quality material for the journal.

Operating and review process

What happens to a manuscript once it is submitted to *Pertanika*? Typically, there are seven steps to the editorial review process:

1. The Journal's Chief Executive Editor (CEE) and the Editorial Board Members examine the paper to determine whether it is appropriate for the journal and should be reviewed. If not appropriate, the manuscript is rejected outright and the author is informed.

2. The CEE sends the article-identifying information having been removed, to three reviewers who are specialists in the subject matter represented by the article. The CEE requests them to complete the review in three weeks.

   Comments to authors are about the appropriateness and adequacy of the theoretical or conceptual framework, literature review, method, results and discussion, and conclusions. Reviewers often include suggestions for strengthening of the manuscript. Comments to the editor are in the nature of the significance of the work and its potential contribution to the field.

3. The CEE, in consultation with the Editor-in-Chief (EiC), examines the reviews and decides whether to reject the manuscript, invites the author(s) to revise and resubmit the manuscript. The CEE may seek additional reviews. Final acceptance or rejection rests with the CEE and EiC, who reserve the right to refuse any material for publication. In rare instances, the manuscript is accepted with almost no revision. Almost without exception, reviewers' comments (to the author) are forwarded to the author. If a revision is indicated, the editor provides guidelines for attending to the reviewers' suggestions and perhaps additional advice about revising the manuscript.

4. The authors decide whether and how to address the reviewers' comments and criticisms and the editor's concerns. The authors return a revised version of the paper to the CEE editor along with specific information describing how they have answered' the concerns of the reviewers and the editor, usually in a tabular form. The author(s) may also submit a rebuttal if there is a need especially when the author disagrees with certain comments provided by reviewer(s).

5. The CEE sends the revised paper out for re-review. Typically, at least one of the original reviewers will be asked to examine the article.

6. When the reviewers have completed their work, the CEE in consultation with the EiC and Editorial Board Members examine their comments and decide whether the paper is ready to be published, needs another round of revisions, or should be rejected.

7. If the decision is to accept, an acceptance letter is sent to all the author(s), the paper is sent to the Press. The article should appear in print in approximately three months.

   The Publisher ensures that the paper adheres to the correct style (in-text citations, the reference list, and tables are typical areas of concern, clarity, and grammar). The authors are asked to respond to any minor queries by the Publisher. Following these corrections, page proofs are mailed to the corresponding authors for their final approval. At this point, **only essential changes are accepted**. Finally, the article appears in the pages of the Journal and is posted on-line.

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Foreword

Welcome to the Third Issue of 2019 for the Journal of Social Sciences and Humanities (JSSH)!

JSSH is an open-access journal for studies in Social Sciences and Humanities published by Universiti Putra Malaysia Press. It is independently owned and managed by the university for the benefit of the world-wide science community.

This issue contains 50 articles; two are review articles; three case studies; one conceptual paper; and the rest are regular articles. The authors of these articles come from different countries namely Australia, Indonesia, Iran, Iraq, Malaysia, Nigeria, Philippines, Saudi Arabia, Thailand and United Arab Emirates.

Articles submitted in this issue cover various scopes of Social Sciences and Humanities including: accounting; architecture and habitat; arts and culture; economics; education; finance; language and linguistics; law; literature; management studies; philosophy; political sciences and public policy; population studies; psychology; religious studies; sociology; and sports.

Anna Christina Abdullah and researchers summarized the use of ICTE-Q as an instrument to measure the intercultural competence component of teacher education programmes in their article, which entitled "Assessing the Psychometric Properties of the Intercultural Competence in Teacher Education Questionnaire (ICTE-Q)". The psychometric properties of the ICTE-Q was assessed using the Rasch Model analysis. Further details of the study can be found on page 1691.

A selected regular paper from the scope of arts and culture, entitled "The New Order Play: *Wayang* as a Medium for Development Messages, 1969–84" discussed about the relationship between the state and the performing arts in the transmission of political messages in Java during the New Order era. The New Order government was filled with Javanese culture and the economic development agenda was widely affected through *wayang* arts. Details of this study is available on page 2017.

A regular article entitled "Changes of Lower Limb Kinematics during 2000m Ergometer Rowing among Male Junior National Rowers" discussed about the kinematical variabilities that were observed across sections particularly in frontal and transverse planes of lower limb joints of rowers. The lower limb joint kinematics was compared across every 500m sections to evaluate its changes during 2000m rowing trial. The detailed information of this article is presented on page 2169.

We anticipate that you will find the evidences presented in this issue to be intriguing, thought-provoking and useful in reaching new milestones in your own research. Please recommend the journal to your colleagues and students to make this endeavour meaningful.

All the papers published in this edition underwent Pertanika's stringent peer-review process involving a minimum of two reviewers comprising internal as well as external referees. This was to ensure that the quality of the papers justified the high ranking of the journal, which is renowned as a heavily-cited journal not only by authors and researchers in Malaysia but by those in other countries around the world as well.

We would also like to express our gratitude to all the contributors, namely the authors, reviewers, Editor-in-Chief and Editorial Board Members of JSSH (Prof. Ain Nadzimah Abdullah and Dr. Vahid Nimehchisalem), who have made this issue possible.

JSSH is currently accepting manuscripts for upcoming issues based on original qualitative or quantitative research that opens new areas of inquiry and investigation.

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SOCIAL SCIENCES & HUMANITIES

Review article

A Typology of Research Trends and Themes in English for Academic Purposes: From 1986 to 2015

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ABSTRACT

This study reviews the current trends of research in English for Academic Purposes (EAP) as a subfield of Applied Linguistics. Through an extensive review of literature and an undertaking process of data collection, 15 books, 6 book chapters, and 347 research articles (RAs) were analyzed for identifying the major issues in EAP. Drawing upon the grounded approach, it was found that Academic Writing, Curriculum Development, and Critical EAP were the most challenging issues in EAP studies. Each of the research themes subsumed important issues such as genre analysis and approaches to teaching academic writing for Academic Writing; discussions on standard variety of English in academic contexts and practice of EAP among local students and teachers for Curriculum Development; and, critical thinking and pragmatism for Critical EAP. These issues and challenges explained in this paper hoped to be helpful for EAP to be matured as a field, and see itself in charge of preparing students to hold new roles both in academic and cultural contexts. However, it is acknowledged that, the concerns and issues are still unresolved and further research is needed for responding to them.

Keywords: Academic writing, critical EAP, EAP, EAP curriculum development, EAP trends

INTRODUCTION

Since the inception of EAP in 1980s, the field of English Language Teaching (ELT) has witnessed the establishment of EAP as its central branch. It was originally considered as a part of English for Specific Purposes (ESP) to deal with the commands of internationalization of education (Hyland, 2006). However, EAP currently is a

major force in ELT research and aimed at concentrating on the communicative skills required for academic purposes in formal educational settings (Jordan, 1997). The commitment to research-oriented language education and the compilation of different theories have placed EAP "at the front line of both theory development and innovative practice in teaching English a second/other language" (Hyland, 2006). For Hyland and Hamp-Lyons (2002), EAP creates grounding instruction for understanding the "cognitive, social and linguistic demands of specific academic disciplines". This means that EAP has two-fold goals: improving proficiency in English, and equipping students with appropriate communicative skills required for doing academic tasks like presenting in conferences, writing research essays, and active participation in academic discussions and seminars (Gao & Bartlett, 2014). Because of such high aims, EAP becomes important in educational systems of those countries which have English as a medium of instruction (MOI) (Ashraf et al., 2014; Gao & Bartlett, 2014). One of the consequences of this interest is the increase number of courses taught in English. Moreover, the rapid rate of movements to western and international universities has sparked on the increasing demand for EAP courses in order to prepare students for reaching their academic goals (Liyanage & Walker, 2014). This demanding orientation has made EAP a potential area for investigating abundance of effective variables that students and instructors confront in their educational career. The introduction of new EAP courses

and the distinction of EAP courses from the courses of English for General Purposes are important for the researchers in EAP (Gao & Bartlett, 2014). However, it may be said that the essential need for investigating EAP is comprehensively explained by Swales and Feak (2012). They stated that the ever-increasing use of technology in educational settings, the abundance of research papers published by the co-authorship of graduate and post-graduate students, the presence of students at more conferences comparing to the past, the erosion of the traditional borders between native and nonnative, the emergence of world Englishes, and importantly, the collaborative works of graduate and post-graduate students as networked groups of researchers evidence the importance of EAP.

Based on what Jordan (1997), Flowerdew and Peacock (2001) noted, EAP was associated with teaching English for assisting and supporting those who tended to do research and study in English. Hence, Hyland (2006) asserted that the area could include teaching English to the graduates and postgraduates, research on classroom interactions and discussions, research genres, students writing, and administrative practice. However, he discussed that the communicative demands of current populations and modern universities involved EAP in more critical understanding of the contexts beyond immediate academic communication. In short, it is "specialized English-language teaching grounded in the social, cognitive and linguistic demands of academic target

situations, providing focused instruction informed by an understanding of texts and the constraints of academic contexts" (Hyland, 2006). The changing trends of EAP have been associated with some factors explained by Hyland (2006):

- The explosive growth of English as dominant language for the dissemination of academic knowledge and research findings
- Rapid rise of internationalization and globalization of higher education
- Diversity of learning needs over different communicative contexts
- Teaching English-language skills to the non-native English-speaking academics, especially in the contexts with English as medium of instruction (MOI), and the last not the least
- The concerns about the socio-political implications of EAP practices in local contexts related to what Benesch (1993) called hegemony of English

These are some of the challenges that EAP scholars recognize and highlight in order to find ways for dealing with them. Hyland (2006) asserted that the field was responsive to all the challenges because "EAP is a field open to self-scrutiny and change, and for these reasons it offers language teachers an ethical, reflective and fruitful field of research and professional practice and offers students a way of understanding their chosen courses and disciplines". The published research articles (hereafter RAs) associated with these challenges and responses reflect the assertions made by Hyland (2006) and other EAP scholars. However, the main practices reflected in the published papers by different researchers over different contexts have not received due attention, or to some extent, overlooked. RAs are the most updated sources of research findings reflecting the current developments across different fields of study. They mirror a wide variety of investigations published periodically and conducted by well-known, experienced, or rather novice researchers. Moreover, as Huang (2016) noted, the area of research like EAP has found its way and developed steadily over the years. This development cannot be acknowledged without attending both to the local practices and global perspectives for their invaluable contributions to the field. RAs are the showcases of these studies, which are very influential in establishing trends of research in the field. For this reason, in addition to the review of published books on EAP, the current study aimed at exploring the research trends of EAP reflected in the RAs published in the popular journals of Applied Linguistics.

METHOD

Corpus

Since the study aimed at evaluating research themes being practiced in the area of EAP, the corpus consisted of a huge collection of RAs (including conference papers), books, and book chapters investigating EAP issues between 1986 and 2015. The extensive

review of literature located 15 books relevant to this study, all of which are well-known and highly referred among EAP researchers and Applied Linguists (e.g., Benesch, 2001; Flowerdew & Peacock, 2001; Hyland, 2006; Jordan, 1997), 6 book chapters specifically written for EAP teachers and students (e.g., Harwood & Petric´, 2011), 347 RAs picked up from 12 Applied Linguistics journals introduced as the top-most journals by the researchers such as Jung (2004), Egbert (2007), and Plonsky (2011): English for Academic Purposes, English for Specific Purposes, Modern Language Journal, Language Learning, System, Foreign Language Annals, Applied Linguistics, Studies in Second Language Acquisition, TESOL Quarterly, Language Testing, Language Teaching, and Language Teaching Research. The journals were mainly edited by well-known scholars and verified by leading figures in the field; therefore, the research methods used to present EAP issues in the papers were supposed to be sound and acceptable. The process of collecting the corpus and the procedure for analyzing the data are given in the following section.

Procedure for Data Collection and Analysis

This study is a meta-analysis of the research issues in EAP area of study. In this section, the selection of studies, coding process, and analysis procedure are discussed. To start with, a comprehensive literature review was conducted to find the studies exploring the issues, challenges, and research themes of EAP. First, a computer search was conducted over different electronic databases such as Science Direct, Sage Publication, ERIC and Oxford Journals. Second, more than 40 journals in Applied Linguistics which might have relevant papers were reviewed for issues published since 1980s. Third, the references cited in the articles found as relevant were reviewed for locating other publications containing data for EAP themes of research. Fourth, the titles of relevant papers were copied in Google Scholar search engine to find link for these publications via "cited in" applicability. Finally, we emailed those researchers who have studied EAP and published articles in this theme to send their papers and relevant articles. More than 2500 papers were collected for analysis. However, thorough review of the papers revealed that many of the studies had not included any implications for EAP practices. Moreover, there have been some studies which overlapped each other. Therefore, more than 700 articles were excluded from the list. In cases of doubt, group discussion was always conducted to reach consensus. Next, the papers were grouped into three categories: RAs (including conference papers), books, and book chapters. Through meticulous evaluation of each category, group discussion, and consultation with colleagues, PhD students and some accessible experts, we decided to exclude most of the conference papers and some of the RAs because of their lack of research qualities. The final papers qualified to be included in this study were 1436 RAs, 15 books, and 6 book chapters mainly explored different research issues in

EAP through sound research methodology. In cases where sufficient data on a particular issue were available, the research theme was considered as important and included in the major issues of EAP. If the insufficient number of studies provided evidence on a particular issue, the data were kept to see how they can be fit into the final report. As a matter of fact, we attempted to be as conservative as possible to minimize the possible inconsistencies in decisions.

The starting point for identifying research themes of EAP was coding the reported and examined variables in each article. The primary analysis of research variables included a dozen issues (e.g., perceptions of EAP teachers and students, problems of EAP practices, standard English vs. world Englishes, cultural and social issues in EAP practices, EAP curriculum, ESL contexts and EAP practices, many of them were convergent around a similar theme and some others were divergent from the main trends. To make this up, Glaser and Strauss' (1967) grounded theory was adopted to synthesize the themes, continually analyze them, and select the headings and sub-headings. Likewise, the constant comparative method by Lincoln and Guba (1985) stated that the reviewed articles and obtained themes should be constantly compared to reach the final major theme. For example, the researchers read an article, extracted its main theme, and wrote out the theme to form a tentative research theme category. The next articles were read and their main themes were written and compared the previous ones.

If the themes were similar, the category did not change and the review proceeded to the next papers. If the themes were different, a new category was created. Through this grounded approach, all the selected papers, books, and book chapters were reviewed and compared to each other. After conducting this undertaking process, the explicit coding procedure explained by Glaser and Strauss (1967) and the constant comparative method given by Lincoln and Guba (1985) produced core codes such as EAP curriculum development, academic writing skill in EAP research, and critical EAP.

RESULTS

After an extensive review of selected corpora for this study, various trends of research as a response to the challenges and issues of EAP have been found. However, because of space limitation, and to make the results manageable, the major trends were noted in advance, and those which received less attention or underrepresented were just explained briefly. At the end, future directions and concerns of EAP are added. Trends of research in EAP are presented in Table 1.

According to Table 1, orientation towards writing RAs (n= 130, 35.32%) was the most researched trend in EAP studies. Analyzing discourse features of RAs (n= 34, 9.24%), discussing approaches to teaching academic writing (n= 22, 5.98%), lexical analysis and its contribution to writing acceptable academic texts (n= 22, 5.98%), and examining the English for general/

specific purposes (n= 21, 5.70) were the other frequent researched themes in EAP RAs. Writing competence in local practices (n= 16, 4.35%), needs/right analysis (n= 16, 4.35%), sociocultural issues in EAP curriculum (n= 16, 4.35%), and standard variety of English in academic contexts (n= 16, 4.35%) were also found to be important among researchers. Results also indicate that, in addition to writing academic texts and RAs, critical views toward academic teaching, sociocultural perspectives, and movement toward delineating various variables involved in EAP teaching and learning enhanced in recent years. For instance, critical thinking and pragmatism were flourished during 1996-2015, approving the importance of critical approaches in EAP.

Drawing upon the data, it was found that Academic Writing, Curriculum Development, and Critical EAP were the most challenging issues in EAP studies. Each of these research themes subsumed important issues such as genre analysis and approaches to teaching academic writing; discussions on standard variety of English in academic contexts and practice of EAP among local students and teachers; and, critical thinking and pragmatism. Academic writing is the most-researched topic in EAP articles. These major trends are discussed below.

Table 1
Frequency of trends of research in EAP

Trends of Research	Years of Publication			
	1986-1995	1996-2005	2006-2015	Total
Writing Skill in Academic Contexts				
Writing skill and authoring RAs	18	44	58	130(35.32)
Discourse features	5	11	18	34(9.24)
Approaches to teaching writing	4	7	11	22(5.98)
Lexical analysis	4	7	11	22(5.98)
Writing competence in local practices	2	6	8	16(4.35)
Writing assessment	2	5	6	13(3.53)
Transfer	1	5	6	12(3.26)
Corpus approach contribution	1	4	5	10(2.72)
EAP Curriculum Development				
English for General/Specific Academic Purposes	4	6	11	21(5.70)
Needs analysis/Right Analysis	1	6	9	16(4.35)
Sociocultural issues	1	7	8	16(4.35)
Standard Variety of English in Academic Contexts	4	5	7	16(4.35)
Preparing English Resources	2	6	7	15(4.08)
Evaluation in EAP programs	2	3	4	9 (2.44)
Critical EAP				
Critical Thinking	-	6	8	14(3.80)
Pragmatism	-	5	7	12(3.26)

DISCUSSION

Academic Writing

Academic writing is the most-researched topic in EAP articles. The changes of teaching academic writing have been observed over the years (De Silva, 2014; Reichelt et al., 2012). Swales and Feak (2012) noted that for many scholars "academic writing today is much more of a collaborative activity than it used to be". The importance of academic writing stems from the notion of English for specific academic purposes emphasizing the disciplinary-based literacies, encouraging practitioners to think of different discourse and practices distinguished by specialized content areas (Hyland, 2006). Researchers have attempted to demonstrate these differences of discourses and disciplinary variations in the produced written texts. They did this, following the study skills, disciplinary socialization, and academic literacy approaches (see the discussion below).

Approaches to Teaching Writing. Writing as an academic skill in and across the disciplines for which students are trained in university curricula perceived to be an important skill for university students. Shih (1986) suggested a content-based approach for teaching academic wiring skills. Leki and Carson (1994) surveyed those university students who passed ESL curricula in their tertiary levels to see how the writing skills they learned had been generalizable to the disciplinary practices in their university courses. Results indicated that some of the skills and strategies that students learned were useful for their content courses, though they demanded new writing skills for their ongoing courses. Another suggested dominant perspective regarding teaching academic writing has been 'deficit approach' (Altbach, 2004) which tends to diminish the diversities and mismatches between the local performances and normalized expectations, and "advocates remediation, adjustment, and adaptation on the part of students" (Liyanage & Walker, 2014). The studies done in this regard (e.g., Carr, 2003; Cruickshank et al., 2003; Liyanage & Birch, 2001) found out that the potential of this approach for the remediation procedures and the production of discipline-specific teaching skill practices has not responded adequately. The failure of this approach in supporting instructors in teaching academic skills was attributed to the cultural issues (Hudson & Morris, 2003). Hence, the researchers suggested that cultural studies should focus on the value differences and the instructors should teach to difference and to advocate learners (Liyanage & Walker, 2014).

To move beyond the immediate contexts and practice academic writing across the contexts and disciplines has been another interesting area of inquiry for researchers. This tendency associated with the disciplinary socialization approach in which students are required to be involved in different academic content fields and make space for their voices over different contexts. Spack (1988), through the analysis of L1 writing programs, reported that to develop students' academic writing and to help the students promote in this skill,

the experts in every discipline should be the writing teacher of that discipline and, in this case, the focus should be on the general principles of inquiry and rhetoric, emphasizing writing from sources.

Writing Competence in Local Practices. Canagarajah (2014) asserted that local scholars tended to spend less time in writing. That is why the genres of their writing are different from those published in the West. Local writers tend to be more involved in the local epistemologies and express their local voices even in the papers submitted to the international journals (Canagarajah, 1996). Therefore, writing practices as well as communicative conventions in the area of academic literacies are found to be productive and important for novice/ local scholars. The evaluative language of local writers was also noted to be important (Geng & Wharton, 2016; Loi et al., 2016). This linguistic knowledge besides textual interactions (Green, 2013) are notable writing competencies for local writers. Canagarajah (2014) stated that different competencies such as language awareness, discourse practices, negotiation strategies, awareness of language norms and genre conventions, are important for local practitioners. He pointed out that students should learn how to transfer their academic competencies to different contexts with variant traditions and audience expectations. The learners should learn how to adapt their writing approaches to different communities, how to cross some local norms and values, and how to make space for their voices in global academic communication.

Canagarajah (2014) proposed that EAP instructors followed genre-based teaching of oral/aural tasks and course in order to prepare their students for participating in discussions and lectures with different formats.

Genre Analysis. One of the research strands aimed at improving academic writing and helping non-native and novice writers was genre analysis, originally used in literary texts in Aristotle's Rhetoric (Motta-Roth & Heberle, 2015). This notion was considered as an effective procedure for teaching academic writing (Bailey, 2004; Nassaji, 2009; Samraj, 2006; Swales, 1990, 2004). The generic structure, organizing patterns, formats of academic papers, and lexico-grammatical features of the texts were the most research targets in genre studies (Flowerdew, 2015). The studies of these areas were mostly built on according to the three well-known genre schools of thought:

- The British ESP School (Swales, 1990) aimed at describing the linguistic features and discourse analysis of research papers for teaching academic writing to ESL graduate students (Jordan, 1997; Swales & Feak, 2004). The school tends to use social construct genre to provide devices for putting different texts under the same goals in certain academic fields. The priority of communicative purpose rather than the similarities of forms in classifying texts is the most notable feature of this school of genre.

- The North-American New Rhetoric (Bazerman, 1988) emerged to focus on academic texts as an indication of connections between form regularities and discourse content with social and cultural spheres of language in use (Freedman & Medway, 1994). This view of genre emphasizes that rhetorical practices rather than forms and content are the distinguishing features of genres.

- The Sydney Systemic Functional School (Hasan, 1989) in genre analysis concerned with the inter-relationship between language and its functions in social setting (Hyon, 1996). Accordingly, the texts are shaped by field, tenor, and mode as the semiotic variables surrounding social contexts. These variables are related to the systems of lexoci-grammatical features of the texts such as cohesion, coherence, syntax, types of reference, and lexis (Bruce, 2008).

Following these theories, abundance of studies has been conducted on different academic texts within or across disciplines (e.g., Bazerman, 1988; Guinda, 2015; Hyland, 2002b; Ozturk, 2007; Samraj, 2002). The studies moved from providing generic-structure frameworks for academic texts to the recent ones which have attempted to make a social orientation towards genre pedagogies, credit the meaning production of academic texts, and pass the traditional rote memorization of linguistic features (Motta-Roth & Heberle, 2015). The attraction of

genre studies in recent years in different Applied Linguistics journals reveals that its functions and aims are helpful for teaching academic writing (Johns, 2015; Nwogu, 1997). Contrastive rhetoric studies have also appeared to be important in this regard. There have been comparative rhetorical studies demonstrating similarities and differences of similar genres across native and non-native English speakers or English and non-English texts (Mauranene, 1993; Petric´, 2007). The major objective of these studies was to show that writing cultures might be different over different context even though the same language was used for presenting common genres (Connor, 2002; Paltridge, 2002).

Additional Related Issues. The view of transfer in reshaping previous knowledge in new writing contexts (De Larios et al., 2006; Lonin & Montrul, 2010; Rinnert et al., 2015), the efficacy of feedback (Cohen, 1991; Kang & Han, 2015; Reid, 1994), corpus studies in second language writing (Laufer & Waldman, 2011), emergent attempts to reformulate traditions of writing approaches (Raimes, 1991), and assessment of writing in EAP contexts (Clapham, 2000) were some related issues which had been covered in the studies of academic writing.

EAP Curriculum Development

The issue of EAP curriculum development has been a challenging point of research for EAP practitioners and investigators. The research themes included in this issue have been some moot point like standard variety

of English in academic contexts, preparing materials for EAP students, the discussions of English for General Academic Purposes (EGAP) and English for Specific Academic English (ESAP), and needs analysis which are discussed below.

Standard Variety of English in Academic Contexts. One of the major issues attracted by the EAP researchers has been the use of Standard English variety in academic environments. This tendency of one variety of English in EAP practices has shown to have some contrasting consequences. Liyanage and Walker (2014), for instance, asserted that this movement had been a failure "to grasp the dynamic nature of language, but also sits uneasily in an environment suffused by the rhetoric of internationalization". They believed that the internationalization helped the students brought their local experiences and cultures into the university classrooms and constructed ways of embedding local values in so-called standard variety of English. If not, the students' local variety was considered as inferior comparing to the dominant paradigms of knowledge constructing. Additionally, it confined students from exposing different varieties of English in schools and universities while created limited opportunities for representing themselves within the dominant discourse (Liyanage & Walker, 2014). Changing this trend has faced difficulties: the teacher education system is not adapted to the current internationalization movement, the educational system leaves little space for

diversity of academic practices and world of Englishes, and the current teachers are the students of this educational systems and few of them have experienced different systems. Therefore, it is needed to provide opportunities for recognizing the dynamicity of English and experiencing the emergence of world Englishes to the academic settings and practices (Liyanage & Walker, 2014). It is also possible to draw forth from the translingual pedagogy suggested by Canagarajah (2012) to build hybrid academic practices, destruct the monolithic standard variety, and make space for the negotiation of variant communicative practices. Other similar pedagogical models such as metrolingualism, biliteracy, and code-meshing (Hornberger, 2003; Pennycook, 2010; Young, 2004) were also used to voice the local languages in multilingual countries and contexts. These concepts help the students make a connection between their local needs and global demands (Bhattarai, 1999).

Preparing English Resources. Following the establishment and popularity of EAP as a branch of ELT, various research studies have been devoted to the issues related to the EAP practices across different countries and universities, the typical EAP models across different countries, and feasibility of EAP practices over EFL/ESL contexts. To have a curriculum covering appropriate EAP practices in universities, some factors such as students' needs, EFL/ESL or native contexts, local/western programs or a mixed of both for EAP practices, the English MOI

academic courses, western/hybrid models of EAP practices, and the educational reformation should be considered in advance (Gao & Bartlett, 2014). The researchers such as Stoller (1999) announced that the time for using discrete-skills approaches in EAP programs had turned away in favor of hybrid curriculum for EAP including content-based instruction to meet the students' academic inspirations and content-learning demands.

One of the problems related to the use of English as the MOI is the limited English resources for some specific academic majors. Preparing EAP courses is not a simple and an easy-to-use recipe for instructors and educational stakeholders. The policy makers and educational deciders are the major agents in proposing and determining the EAP courses for universities. Ashraf et al. (2014) explained that in contexts such as Pakistan in which Urdu is the formal language for education in universities, the shift to English as MOI was welcomed just in some specific majors as the English resources for all the majors were not available or limited to translated versions. This problem along with the teacher education deficiencies, students' educational background, and transition shock from Urdu to English problematize the use of English as MOI in higher education (Ashraf et al., 2014). To solve this problem, researchers suggest the use of more than one language for input and tasks as a reasonable discursive practice in bi/multilingual contexts (Cenoz & Gorter, 2011). This suggestion helps the strengthening balance between English and other local languages in academic practices.

However, most of the researchers tend to explicate those curricula which present those educational and communicative skills which students in higher education need to achieve their educational goals through the medium of English (Gillet, 2004). This tendency, as Ashraf et al., (2014) noted, led to the emergence of EAP courses such as "Communication Skills in English, Functional English, Technical Writing, and Business Communication" as compulsory courses in undergraduate students' programs for supporting their academic English skills in higher levels of postgraduate. However, still researchers observe that EAP practices in plurilingual countries have not located the permissible place.

English for General/Specific Academic Purposes. The distinction of English for General Academic Purposes (EGAP) and English for Specific Academic Purposes (ESAP) is an unresolved issue in designing curriculum for EAP students. The former focuses on the academic communicative skills for students enrolling in any field while the latter relates to the discipline-specific requirements (Blue, 1988). The researchers such as Spack (1988) favored EGAP, Hyland (2002a) advocated ESAP. They argued that in cases of diverse fields of study and high population of students, EGAP might be more appealing and economical, and in places where content teachers and EAP had close and strong relations for discussing the requirements of students studying various fields of study ESAP could be more helpful (Harwood & Petric´,

2011). Recent studies, however, have shown that disciplines have their own discourses variant from each other, favoring teaching ESPA (Hyland, 2000; Swales et al., 1998; Thompson, 2003).

The cooperation of content and EAP teachers was reported to be important in designing syllabi, course development, and team teaching; however, as Barron (2002) noted, some factors such as the institutional contexts, methodological differences, power relation with little space for EAP teachers' voices, and in general, differences in teaching philosophies impacted on the level of cooperation. In reality, however, those who decide about the specificity or generality of EAP "do not always take as much account of research findings in the field as they should" (Harwood & Petric´, 2011); hence, it is required to be research-based and decide based on the students' needs and the teachable academic skills rather than then the national and institutional constraints.

Needs Analysis and/or Right Analysis. The issue of needs analysis is the cornerstone of designing syllabi, assigning learning goals and tasks, selecting texts, and developing materials as well as evaluating students and programs (Cameron, 1998; Carkin, 2005). However, this issue has faced some challenges over the years: the meaning of needs analysis (Belcher, 2006), the target group for whom the needs analysis should be conducted, the instruments that should be used (Jordan, 1997) and the people who have right to identify needs (West, 1994). In addition, learners' preferences, language proficiencies, target communicative contexts, and reasons of taking courses should also be considered as important factors in needs analysis (Hyland, 2006). This tendency towards learners made the scholars talk of rights analysis instead of needs analysis, allowing the learners to be involved in the process of designing what is supposed to be covered in their EAP classes (Bitchener & Basturkmen, 2006; Benesch, 2001).

Critical EAP

Along with the appearance of critical pedagogy in ELT, critical EAP has also found its way in the field (Strong, 2015). This area of research includes challenging issues like critical thinking and pragmatism which are explained in the following sections.

Critical Thinking. Critical thinking as an illustration of critical pedagogy has also observed to be important in EAP. Critical thinking is characterized as a reasonable analysis and synthesis of educational practices to attain desirable outcomes (Atkinson, 1997). This critical development of thinking skills embedded in the EAP courses is helpful in enhancing language learning skills. Gunawardena and Petraki (2014) believed that "the role of critical thinking has been at the heart of a controversial debate in English for Academic Purposes (EAP) circles, dividing Western and non-Western education". They pointed out that EAP was identified as an appropriate

area for practicing critical thinking skills because of the students' experiences in doing problem-solving activities and their intellectual maturity. The researchers also reported that the critical thinking was an ideal notion for Western education and non-Western education lacked it obviously (Durkin, 2008). Kumaravadivelu (2003) related this deficiency of non-Western education to the limited English language communicative skills and, of course, the cultural differences. To make it in a scientific framework, Gunawardena and Petraki (2014) studied the challenges and difficulties that Sri Lankan teachers face in implementing a Western-oriented critical thinking pedagogy in a non-Western education setting.

Though the researchers affirmed that critical thinking can facilitated enhancing language learning in EAP classrooms, some researchers such as Atkinson (1997) and Pennycook (1999, 2001) cautioned the practitioners to the problems and challenges posed by the practice of critical thinking in the non-Western classrooms. They noted that cultural norms, social values, religion, and cultural values complicated the process of critical thinking practices. Gunawardena and Petraki (2014) criticized such views and argued that such studies were conducted in Western contexts with the participation of some non-Western students. They continued that the non-Western teachers had solid knowledge of the critical thinking skills and confirmed that the critical thinking was composed of some interrelated skills commonly observable in the teaching

practices of EAP teachers. However, in line with what Kumaravadivelu (2003) noted, Gunawardena and Petraki (2014) reported that "students' limited English language skills hinder their understanding or application of critical thinking". It is also acknowledged that the students' limited knowledge of vocabulary and grammatical competence interfered with the students' comprehension of input, impeding students' development of critical thinking skills. Another issue is related to the teachers' education. Kumaravadivelu (2003) reported that teachers in non-Western education were not managed to be trained for critical pedagogies, making them unable to be proficient language teacher and critical thinkers at the same time. Those EAP pedagogies heavily relied on the translation of texts, teacher-dependent, memorization-oriented, and teaching-for-testing movements could be helpful in engaging students' in problem-solving activities and developing their critical thinking (Gunawardena & Petraki, 2014).

Pragmatism. The issue of pragmatism in EAP has also been attractive to the researchers. For Allison (1996), pragmatism is conformity of students to the predetermined roles in their educational programs. This pragmatic view was criticized by researchers (Benesch, 1996; Pennycook, 1990), for they believed that establishing academic communicative competence reflected ideological conformity in practice. Likewise, Chowdhury and Kamal (2014) questioned the pragmatic

approach towards EAP and pointed out that "EAP pragmatism paradoxically denies both learners and teachers' own voices within a dominant culture". This monolithic ideology along with unified EAP practices are more aimed to be conformist rather than reformist while the acceptable alternate approach should include contextualizing EAP practices adaptable to the identified educational goals of inculcated in the practitioners' and scholars' possibilities and constraints (Allison, 1996). Therefore, instead of a pragmatic approach which views students as passive recipients of knowledge, a critical approach is more workable (Chowdhury and Kamal, 2014). This approach, as Pennycook (1990) and Benesch (2001) emphasized, consists of critical needs analysis of the learners, training critical learners as the agents of change, critical teachers sensitive to the unchanged institutional policies, and critical views towards the socially constructed knowledge by the policy makers. This approach critiques the accommodationist stance of EAP and tends to consider socio-political contexts of teaching and learning as well as social identities of students and teachers (Benesch, 1993; 2009). A synthesis of both critical and pragmatic approach – critical-pragmatic approach – was recommended by Chowdhury and Kamal (2014). They acknowledge both sides and emphasized the importance of exposing students' to the norms and conventions of dominant discourse and at the same time the students' right to have choices of their own. This mild view was literally

proposed by Pennycook (1994), explaining that instead of leaving students to decision making, we need to make a connection between language and the economic and social standards and then problematizes the various statuses that the languages might present to the students. In this way, the vulnerabilities of pragmatism can be lowered (Chowdhury & Kamal, 2014). One of the criticisms of critical EAP stemmed from those who believe that this movement tended to be theoretical rather than practical (Johnston, 1999). This critic was responded by Benesch (2001) by offering theoretical and practical issues, describing critical teaching, learning, and associated tasks in EAP classes. He noted that if critical EAP could not be appropriate for local practices and did not address the learners' needs and rights in any EAP class, it was regarded as nothing. The same viewpoints are given by Guardado and Light (2017).

CONCLUSION

All of the issues given in this paper reflect the attempts devoted for meeting the students' demands for EAP as a way of preparing them for the programs with MOI and, certainly, assisting them for studying abroad and understanding those lectures delivered by native speakers. Gao and Bartlett (2014) optimistically suggested that through the cooperation of academic instructors, college teachers, students, administrators, and policy makers it was possible to provide opportunities for English education reforms over the worlds. It was also an attempt to

list the most challenging issues in the area of EAP over the years of publications. However, there have been some important topics which are of utmost importance for EAP teachers and students. Academic vocabulary (Coxhead, 2000; Hyland & Tse, 2007), lexical bundles (Hyland, 2008), and EAP tests and assessment (Ertürk & Mumford, 2016; Hamilton et al., 1993; Jensen & Hansen, 1995; Lumley, 1993) are the research topics investigated by EAP researchers. Findings of these studies are advantageous for theory production and practical uses.

The analysis, however, showed that some points of research have not received due attention and in some cases they were almost overlooked by the researchers. One of the main issues almost overlooked by the researchers in EAP has been the oral/aural skills (Huang, 2006). This gap of research in EAP has been acknowledged by Ferris (1998) and Ferris and Tagg (1996a, 1996b) as they found out that university instructors emphasized that the university students need to participate in discussions and have oral presentation that mostly associated with their listening and speaking skills rather than mere knowledge of reading and writing. Interestingly, the higher preference for receptive skills was reported by Christison and Krahnke (1986), as they studied the non-native students' perceptions of EAP programs, in and out of class experiences in relation to their academic abilities, and the academic skills required for participating in class discussions and presentations.

Another important issue that researchers should take into account is the abundance of research on non-English speaking countries in which English is the MOI or at least is important in tertiary education, while, as Hyland (2006) acknowledged, because of heterogeneity of population, there are some native English speakers who need necessary education in academic communication skills. And, the last not the least point can be related the commonalities of EAP and ESP in some specific directions which are helpful in educating students. For instance, an EAP course, in addition to the materials associated with the students' disciplinary studies, can include those skills directly related to the professional preparation of the students (Flowerdew & Peacock, 2001). This coincidence can be considered in different departments for more helpful cooperation.

Finally, the issues and challenges elaborated in this paper helped EAP to be matured as a field, and see itself responsible for equipping students to hold new roles both in academic and cultural contexts (Hyland, 2006). However, as it was repeatedly noted, the concerns and issues are still unresolved and further research is needed for responding to them. Therefore, as noted by Harwood and Petric´ (2011) and revealed in the present review, the issues such as the efficacy of different EAP programs, training programs for EAP teacher education, the relationship between EAP and second language acquisition, the analysis of the contexts in which the academic texts are

produced rather than the mere analysis and description of the texts, the study of language in use besides productive skills, and multidisciplinary approaches to EAP, and EAP assessment are salient for EAP scholars which need to be studied more in future.

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Examining University Teachers' Writing Errors in the Philippines: Implications for Teacher Qualifications

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ABSTRACT

Since teachers are known to be models in the classroom, mastery of the course they teach and a good English proficiency should be a few of the qualities that should be considered. This present study attempts to identify, classify, and analyze the sentence-level writing errors found in the compositions of fifty (50) selected probationary faculty members in one of the universities in Mindanao, Philippines. The instrument used in the study was the participants' composition in English. Fifty compositions were subjected to error identification, classification, and analysis. Findings revealed that syntactical errors were found common in the participants' compositions. Other errors found were lexical, morphological, and mechanical. The results showed that the probationary faculty members really need a refresher course on the basics of the language for the enhancement of their language ability. The implication of this study is for the school administrators, deans, and department heads to look into the English proficiency of their faculty members and design a language enhancement training program to address the problem.

Keywords: Error analysis, faculty members, language proficiency, sentence-level errors, writing skills

INTRODUCTION

Considering the role and responsibility of the teacher as respected authority and model, it is very important that qualification standards and merits are strictly upheld in the recruitment process by the schools, universities, and colleges. Although some studies in the literature revealed that a

number of school districts worldwide faced a challenging issue and a serious concern on teacher shortages (Aragon, 2016; Barth et al., 2016; Education for All Global Monitoring Report, 2015), this does not mean that hiring qualified, proficient, and effective teachers will no longer be taken into account. A combination of proper motivation, carefully thought out teaching strategies, a rich variety of teaching tools or instructional materials, commitment and a good command of the English language should be a few of the basis for the teachers to be part in the teaching profession. Cárdenas and Chaves (2013), Namaghi and Hosseini (2015), O'Dowd (2015), and Samson and Collins (2012) clarified that English proficiency among teachers should be emphasized in order to prepare them to teach courses using English as a medium of instruction.

In the Philippines, the education system is patterned after the American system, with English as the medium of instruction. The English language is used as the primary medium of instruction in all public and private institutions of learning in the secondary level, including those established as laboratory and/or experimental schools, and non-formal and vocational or technical educational institutions. As the primary medium of instruction, the percentage of time allotment for learning areas conducted in the English language is expected to be not less than 70% of the total time allotment for all learning areas in the secondary level (Executive Order No. 210, s. 2003). Even in tertiary education, all higher institutions in the country were encouraged to adopt the use of the English language as the

primary medium of instruction. With this, an accepted English language proficiency level in speaking and writing is required even of teachers who teach courses other than English (Department of Education, 2016). Likewise, the Department of Education (DepEd), through the National Educators' Academy of the Philippines [NEAP], the Educational Development Project Implementing Task Force [EDPITAF], the CHED, the TESDA, as well as through the educational institutions in the private sector, was mandated to evaluate the proficiency of educators in the English language and conduct training programs nationwide to develop and improve it (Executive Order No. 210, s. 2003).

Although language requirements are not as exacting for teachers who do not teach English, still in their classes, discussion is facilitated by using the English language. In fact, English is most likely to be conveniently adopted as the lingua franca in many classrooms in Mindanao, Philippines because of the diverse cultural and linguistic backgrounds of the students. Likewise, in the case of an English teacher, anything less than mastery or perfect command of the second language calls to question the competence of the teacher. For the students, the language classroom is a venue where language is taught, learned and reinforced. They depend so much on the teacher's competence to model and master the English language.

Thus, this present study aims at identifying, classifying, and analyzing the sentence-level language errors found in the written output of selected probationary

faculty members in one of the private universities in Mindanao, Philippines. It is expected that through this study, the university's administration, the human resource management, and the heads of the different academic departments in different public and private education institutions in the ASEAN region could draw ideas in hiring and training of English language teachers. Studies of this kind is not only relevant in the Philippine context, but also to all the nations in the ASEAN region where the teaching of English has been of great importance since English has been used as a common language and a lingua franca in the region.

RELATED LITERATURE

Historical Development of Error Analysis

The study of error analysis in the field of second language teaching and learning has been going on for some time and it has still captured the interest of many researchers. The work of Corder (1967) became influential in the later developments of error analysis (EA) in the second language that it opens for more studies and debates. It was thought to be an alternative to Lado's (1957) work on Contrastive Analysis (CA). While CA believed that errors were solely products from the interference of the first language, there are some types of errors which cannot be justified by interference alone. Thus, the focus shifted from contrastive analysis to error analysis in the late 1960's (Lennon, 2008; Tomkova, 2013). Although both CA and EA shared the same purpose of

explaining and identifying the sources of learners' errors, they differed significantly in the process of doing it (Tomkova, 2013). CA only focused on first language interference as the cause of errors in learning the target language, while EA indicated that there are a number of sources of learners' errors. These sources of errors are constantly manifested among language learners learning the target language and whose first language is not English. These errors can then be carried over to learning their second or target language (Lennon, 2008). In other words, learning English as a second language always entails errors regardless of one's first language.

Consequently, with the development of error analysis as a linguistic method (Tomkova, 2013) to explain and identify the sources of errors in the second language learning, it is best to distinguish the difference between "errors" and "mistakes". Some definitions and distinctions between the two terms were illustrated in the literature. For example, Corder (1973) identified mistakes as lapses and as 'breaches of code' of native speakers since by definition, the learners know the formation rules of their mother tongue. However, an error is "a systematic deviation from what is regarded as the norm" by a foreign learner of the language. Edge (1989) used mistake as a generic term that applies to a number of categories of incorrect use or forms: slips which a student can self-correct; errors which a student cannot self-correct, but where it is clear which form the student wanted to use, and where the class is familiar with that

form; and attempts, where students have no real idea how to structure what they want to mean, where intended meaning and structure are not clear to the teacher. In this construct, there is a big group known as mistakes of form which occur when the speaker's English departs from standard English. He also distinguished between two sorts of mistake: the mistake that occurs when a speaker uses a correct piece of language (linguistic form) that does not mean what the speaker wanted to mean, and the mistake that occurs when the speaker uses a correct form which, unfortunately, is socially inappropriate or unacceptable. As quite clear from the foregoing discussion, mistake is an umbrella term covering several types or classes, including errors.

Masorong (2010) asserted that mistakes were inevitable since learners tried different ways to master the language as a means for a more effective communication. Thus, errors provide valuable insight into the language learning process not just to the learners of the target language, but also to ELT practitioner. It is errors that serve as the basis for a more effective program for the treatment of the errors committed. Lastly, according to Brown (2000), a "mistake" refers to a performance error in that it is a failure to utilize a known system correctly, while an "error" is a noticeable deviation from the adult grammar of a native speaker, reflecting the interlanguage competence of the learner. This recognition process is followed by the error description process. Learners' sentences are compared with the correct sentences in the target language and finding the errors follows. Then comes the next step—explanation stage, or finding the sources of errors. The beginning stages of learning a second language are characterized by a good deal of interlingual transfer from the native language. In the early stages, the native language is the only linguistic system upon which the learner can draw. These kinds of errors can be found in all aspects of language learning. Intralingual transfer (within the target language itself) is also a major factor. At an intermediate level, learners' previous experience and existing level of competence begin to influence structures within the target language itself. Most of the time, negative intralingual transfer or overgeneralization occurs, and these kinds of errors are called developmental errors. It has also been found that overgeneralization makes the study of the psychological process of language learners significant. Cultural interference can cause either linguistic errors or inappropriateness in certain contexts. In addition, it sometimes hinders communication, so it should be taken seriously.

Errors and mistakes are usually thought of as a problem. However, authorities in the field have now this area of agreement: errors are a useful or necessary part of language learning. They are the indicators of the stage or progress of one's language learning (Abu-Jarad, 1986; Corder, 1973; Dulay & Burt, 1974; Richards, 1974; Richards & Sampson, 1974; Selinker, 1992). Hence, errors must not be regarded as evils that hinder progress of learning. They in fact reveal the strategies

and styles that learners devise and use to learn in their struggle to master the language system of the target language. Analyzing the learners' language errors is the key towards understanding their language ability.

Related Studies on Error Analysis

Studies which focused on the analysis of EFL/ESL and the errors in the speech or in the written materials include that of Ananda et al. (2014). The researchers investigated the types of sentence errors and their frequency made by 44 first grader students from a high school in Banda Aceh in their writing of English. The findings revealed that three out of four sentence errors in the students' writing were fragmented sentences while nearly a quarter of the errors were run-on or comma splice sentences. The researchers also found that there were only a few choppy sentence errors and no stringy sentence errors.

Jabeen et al. (2015) tried to investigate why Pakistani ESL and Iranian EFL learners failed to produce grammatically correct sentences in English in spite of having English as a compulsory subject at all levels in their learning institutions and schools. Findings revealed that students lacked grammatical accuracy in their writing and they were not sure of the grammatical rules that may apply in their writing in English. To this, the researchers concluded that the participants were highly influenced by the rules of their first language (L1). Likewise, Tesfaye and Tsadik (2015) also made a study on error analysis by focusing on the common errors made by graduating

trainees in selected colleges of Oromia Regional State. The researchers chose the sample group which consisted of 200 learners. The results indicated that the learners made extensive errors in spelling, word choice, sentence fragment, verb form, capitalization; errors in punctuation/comma splices, word form, and run on sentences.

Owu-Ewie and Lomotey (2016) conducted the same study on error analysis to fifteen Akan speakers in the Junior High School (JHS) in Ghana. The study made use of ninety (90) written essays that were subjected for analysis. Findings revealed that transliteration, omissions, wrong word use, L1 induced spelling errors and wrong pronoun use were the errors that occurred in the students' writings as a result of L1 interference. It was also identified that transliteration and omission errors were the most frequently committed by Akan speakers.

In the local scene, the immediate antecedent of the present study is Anonas' (2008) inquiry on the problem for her master's thesis "Error Analysis of the Interoffice Correspondence of Selected MSU Offices, 2007-2008". Error analysis was performed on corpora of texts consisting of Special Orders, memorandums, cover letters, endorsements, and letters from the offices of the President, Vice Chancellor for Academic Affairs, and the Graduate School. Findings revealed that most of the errors, a total of one hundred sixty-six (166) comprising 90.36% of the sum collected from the entire body of data, were local errors; the remaining one hundred fifty

(150), forming only 9.64%, were global. It was further found that the causes or sources of the errors were mostly developmental, interlingual (influence of L1 on L2), and ambiguous. Further, that despite this seemingly large number of errors found to mar the compositions, on the whole, clarity of the meaning did not suffer much, thus comprehension of the intended message and the communicative purpose of the language was still achieved, although with some difficulty.

The study of Masorong, completed in 2010 for her thesis "An Error Analysis Performed on English 230 Students' ELPT Compositions: A Basis for a Proposed Intensive Grammar Enhancement (2009)," could count among the more recent investigations that lent impetus to the present study (Masorong, 2010). As in the study of Anonas (2008), errors gathered from the Test of Written English (TWE) compositions of the English 230 students who took the ELPT in the SY 2008-2009, were first broadly classified as local or global, then classified into the three categories, according to the level at which they occurred: morphological, syntactic, and lexical. Another group of errors, Mechanical/Others was treated separately. Of the six hundred and seventy-eight (678) errors discovered, 83.2% were determined to be local, and the rest comprising 16.8% identified as global. Out of the total of 678 local errors, 154 (27.3%) were classified as syntactic errors, thus the most numerous in terms of frequency. This category was closely followed by lexical errors (26.4%);

morphological errors (20.9%) formed the smallest group.

All the studies mentioned above formed part of the basis of this study – theoretical and methodological; the rest, particularly the related studies reviewed provided empirical support as well. However, it is worth mentioning here that these studies did not include examination of the errors of faculty members as the focal concern of the study. They only concentrated on the errors committed by struggling learners of English as a second or foreign language. Thus, this present study is conducted in order to provide additional literature on error analysis with faculty members of a university as participants. It is hoped that through this, other education institutions, teacher education programs, and heads of different academic organizations in the ASEAN context would be able to check on their teacher professional development programs and address the language proficiency problem of their teachers.

RESEARCH QUESTIONS

1. What types or classes of language errors are found in the compositions of the participating faculty members?
2. What could account for the occurrence of these types of errors?
3. What implication does this study have for the education institutions, and teacher educations program with regards to the English proficiency of their faculty members?

METHODOLOGY

For this study, a combined quantitative-qualitative design was adopted. It is quantitative-qualitative because it determined the demographic profile of the faculty-respondents and used frequency count and percentage in analyzing the errors in the compositions. Likewise, the data were gathered through documentary or content analysis and a non-probability sampling, specifically purposive sampling.

Participants

Of the 77 fulltime probationary faculty members in one of the private universities in Mindanao, Philippines, only 50 (38 females; 12 males), their informed consent secured, took part as the participants of this study. The other 27 were not free during the conduct of the study. Furthermore, these faculty members were the probationary lecturers of Arts and Sciences and other selected programs in the university. There were 32 participants who had only earned a bachelor's degree and 18 who were taking their master's degree. Most of the participants had 1 to 3 years of teaching experience and had been using English as their second language. They had been also using English as their medium of instruction in the classroom. The researcher considered them as ideal respondents of the study since they had not yet been awarded tenure; and one of the qualifications for tenure was language proficiency through a written exam and interview. Table 1 shows the demographic profile of the respondents.

Data Gathering Procedure

This research study made use of non-probability sampling, specifically purposive sampling. From the population of

Table 1

Demographic profile and distribution of the respondents

Programs	Total number of respondents	Number of BS/AB Degree Holders	Number of MA/MS units earners	Years of Teaching Experience (1-3 years)	Years of Teaching Experience (4-6 years)
Arts and Sciences (full-time probationary and part-time faculty)	29	20	9	19	10
Accountancy	2	2		2	
Business Administration	3	3			3
Computer Studies and IT	2	2		2	
Engineering and Technology	2	2		2	

Table 1 *(Continued)*

Programs	Total number of respondents	Number of BS/AB Degree Holders	Number of MA/MS units earners	Years of Teaching Experience (1-3 years)	Years of Teaching Experience (4-6 years)
Law Enforcement Academy	1	1		1	
Nursing	8		8	3	5
Teacher Education	3	2	1	2	1
Total	50	32	18	31	19

probationary faculty, the researcher selected only those who were not tenured yet and were willing to join the study as respondents. It also made use of a modified survey questionnaire to draw the demographic profile of the respondents. Before administering the survey questionnaires, the self-constructed tool was submitted to the researcher's adviser to ensure the validity of the items.

The first step taken by the researcher in order to start the research, particularly the collection of needed data was to inform the Office of the Vice President for the Academic Affairs through a letter of permission to conduct the study in the said university, with some of the institution's fulltime probationary faculty members as participants. It was made clear in the letter the purpose of the study and its contribution to the university. After securing the essential approval from said office, the researcher then forwarded the letter to the Office of the Human Resource Management Division and to the Office of the President of the university. He had to make sure that he had institutional support or cooperation for the research undertaking.

After obtaining approval from the Office of the President, the researcher then wrote a letter addressed to the participants informing them about the purpose of the research and that they were chosen as participants. They were also assured of the confidentiality of the study, and that their participation was voluntary. In order to convene them at a common time and place, the researcher organized a one-half day lecture type seminar on K+ 12 with the Dean of the Teacher Education Program as the resource speaker. After the resource speaker delivered her lecture in the morning, the researcher asked the respondents to write a 2-3 paragraph piece on how they felt about the implementation of K+12 in the Philippines, a move of the DepEd which has stirred up a raging controversy in the afternoon. Thus, since the faculty-respondents had the whole afternoon to write on their reflections, the writing activity was untimed. However, most of the respondents finished the writing in 2 hours.

The researcher then photocopied the written outputs, read and highlighted the errors in the composition, and forwarded these to the three language experts to check

and validate the identification of errors. With the help of the three expert raters, the written outputs were subjected to analysis, following the procedure outlined by Corder (1967): recognition or identification, description, and explanation. The researcher retrieved the body of data from the raters after three (3) weeks for analysis and tabulation. Then the data were submitted to the statistician to apply the appropriate descriptive statistics, specifically measure of central tendency.

FINDINGS

As shown in Table 2, errors were distributed in terms of frequency of occurrence as well as percentage. Thus, lexical, 40 (33.89%); syntactic, 56 (47.47%); and morphological, 22 (18.64). Errors occurring at the syntactic level formed the largest group (47.47%), comprising nearly 50% of the total number of local errors. There is a wide margin between it and the next class, the lexical (33.89%), and a much wider margin between the two and the morphological group of errors, which constituted only 18.64%.

Table 3 shows the list of types of errors committed by the participants in the study. These are broken down into more specific types under the three subdivisions or areas: lexical, syntactic, and morphological. Lexical errors were identified as follows: Verb (omission/Misuse of verb form); Noun (misuse/omission of noun); Adjective (misuse/omission of adjective); Adverb (misuse/omission of adverb). In this class, the most numerous was the Verb (omission/Misuse of verb form) group which had 25 or 21.19%. Trailing behind were Noun (misuse/omission of noun), 8 (6.78%), Adjective (misuse/omission of adjective), 6 (5.08%); and Adverb (misuse/omission of adverb), 1 (0.85%). Sample errors and their corrections are shown in Table 4.

The fault in the sentence in item 1 as presented in Table 4, is in the use of the verb "be". Since it is preceded by the "be" verb. The verb "enhance" should be in the past participle form. The verb enhance being a regular verb, its past participle would require only the addition of "-ed," hence, enhanced.

Table 2

Frequency and percentage distribution of errors by categories: Lexical, syntactic and morphological

Errors	Frequency	Percentage %
Lexical	40	33.89
Syntactic	56	47.47
Morphological	22	18.64
Total	118	100

Table 3

Distribution of errors by specific category

Errors		Frequency	Percentage %
Lecical Errors	Verb (Omission/Misuse of verb form)	25	21.19
	Noun (Misuse/omission of noun)	8	6.78
	Adjective (Misuse/omission of adjective)	6	5.08
	Adverb (Misuse/omission of adverb)	1	0.85
Syntatic Errors	Articles (Misuse/omission of article)	13	11.02
	Pronouns (Misuse/omission of pronouns)	10	8.70
	Word Order	5	4.24
	Prepositions (Misuse/omission of prepositions)	28	23.73
Morphological Errors	Subject-verb Agreement (Improper use of subject-verb agreement)	15	12.71
	Plural Markers (Improper use of plural markers)	7	5.70
Total		118	100

Table 4

Sample lexical errors and their corrections

Lexical errors	Corrections
1. …our present Basic Ed curriculum needs to be enhance.	1. …our present basic education curriculum needs to be enhanced.
2. I hope the program to be offer will be for free.	2. a. I hope that the program to be offered will be for free. 2. b. I hope that the program will be offered for free.
3. If this K12 will__ implemented what will be the assurance that the students who will be enroll in this program will ready in facing the future?	3. a. If this K12 will be implemented, what will be the assurance that the students who will be enrolled in this program are ready to face the future? 3. b. If this K12 will be implemented, what will be the assurance that the students who will enroll in this program are ready to face the future?

In sentence number 2, it represents the same case – i.e. erroneous use of "be" verbs. It has an incorrect verb form of "offer". The verb "offer' should also be in the past participle form since it follows the verb "be".

A more terse but straightforward version appears in item 2.b. There is a rub, though. The gain in simplicity and concision could be at the cost of sacrificing an important thought, that is, the futurity of the program in question; the program is apparently still on the drawing board. However, if in a preceding sentence, the futurity of the program has been established, the second version is the better choice.

Following in sentence 3 is another sample sentence that illustrates the same problem as the cases above. This time, the error is caused by the omission of the "be" verb, which forms a unit with the helping or auxiliary verb *will* and the main verb *implemented*.

The first verb "implemented" should have been preceded by the verb "be", making it "will be implemented"; instead in the original sentence, the verb *be* is missing, thus the erroneous construction "will implemented". The writer here forgot to insert the word "be" that is, if it is a simple case of carelessness or sloppiness. Or, it could be a case of inadequate knowledge/ application of the rule or correct form: helping/auxiliary verb+ verb *be* + main verb.

The other error has to do with the verb *enroll* which is preceded again by the verb "be", but remains in the base form. This time, the writer forgot to use past participle form of the verb *enroll*.

In the second recast (3.b.), the monotony created by the repetition of the past participle structure in the second half of the sentence – an embedded question – is relieved by the use of the simple future tense, *will enroll*.

Syntactical errors were classified under the following headings: Articles (misuse/omission of article); Pronouns (misuse/omission of pronouns); Word Order; and Prepositions (misuse/omission of prepositions). Prepositions (misuse/omission of prepositions) have the highest number of errors, 28 (23.73%). Errors involving articles (misuse/omission of articles) formed only nearly half of that number, 13 (11.02%). Sample errors are shown in Table 5.

In Table 5, sentence number 1 shows an error in the use of the definite article "the" as an article for "other countries." To repair the sentence necessitates crossing out the unwanted article. Likewise, another error that occurs in the same sentence is the misuse of the preposition "for" when the correct preposition is of.

Sentence number 2 violates the rule of parallelism because of the omission of the article "a" before the noun "mentor". The repaired version of the sentence is given in the correction section with the insertion of the article "a" before the noun "mentor". Putting right the sentence included the deletion of the unwanted and unnecessary preposition "for" which the verb "support" before it does not call for. If "support" were used as a noun, the preposition for could stay because that is what is idiomatic.

The following sentence number 3 also contains errors in the use of article "the".

Table 5

Sample syntactical errors and their corrections

Syntactical errors	Correction
1. Unlike the other countries, the Philippines has only 10 years for basic education.	1. Unlike other countries, the Philippines has only 10 years of basic education.
2. As mentor and an advocate of knowledge and education, I strongly support for the implementation of K12 without discrimination to the system of our education.	2. As a mentor and an advocate of knowledge and education, I strongly support the implementation of K12 without discriminating the system of our education.
3. There are the negative and positive attributes that it can bring to the country and people.	3. There are negative and positive effects that it can bring to the country and to the people.

The first sentence below shows a departure from the standard by the misuse of article "the". The article "the" is only used for definite nouns. However, in the sentence, it is used with the adjective "negative". The best way to correct this is to omit the article "the" before the adjective "negative". Another error is the opposite of the addition of an unwanted or unnecessary "the" in the first half of the sentence. This time, the problem (still concerning the use of article) is one of omission. The article the is omitted before the noun "people".

Morphological errors, on the other hand, were also classified according the following rubrics: Subject-verb Agreement (Improper use of subject-verb agreement) and Plural Markers (Improper use of plural markers). The former has the highest number of errors of 15 (12.71%), while the latter has only 7 (5.70%). Table 6 below shows sample sentences that have errors on using nouns.

The sentence in item 1 as presented in Table 6 makes use of the noun "uncertainty" which is wrongly used, thus making the meaning unclear. The writer in the sentence might mean to use the adjective form of "uncertain" to make the meaning of the sentence clear.

It is not only the misuse of noun that the sentence above is erroneous. It has also a mechanical error just like the omission of the punctuation in the word "year's" to show possession the contraction form of I am which is "I'm" and capitalization of the pronoun "I".

Table 7 shows the frequency and percentage distribution of other local errors found in the composition of the probationary faculty-respondents. Mechanical errors are errors which include Punctuation Marks (Improper/misuse of punctuation marks), Capitalization (misuse of capitalization), and Misspelling/Typographical Errors.

Table 6

Sample morphological errors and their corrections

Morphological errors	Correction
1. I also feel uncertainty for i might fail to finish the next years path that im going to take.	1. I also feel uncertain for I might fail to finish the next year's path that I am going to take.

While other types of language errors include Conjunction (Omission/misuse) and Word choice. Table 6 had an overall total of 104 errors with Punctuation Marks (Improper use of punctuation marks) as the highest with 24 errors or 23.08%, and Capitalization (Improper use of capitalization) as the lowest with 14 numbers of errors or 13.46%. The following sample sentences are erroneous because the writers have omitted the use of the punctuation mark "apostrophe". These errors are illustrated in Table 8.

DISCUSSION

The main purpose of the study was to identify, classify, and analyze the errors found in the compositions of 50 faculty respondents. From the result, it is clear where the greater linguistic problem of the respondents lies – grammar or the assembling of constituent parts of a construction into phrases, clauses and sentences. The preponderance of grammatical errors was also noted in a number of earlier studies of Ananda et al. (2014), Darus (2009) and Tesfaye and Tsadik (2015). Moreover, the prominence of syntactic errors based on frequency of

Table 7

Frequency and percentage distribution of mechanical errors (other types of language errors)

		Frequency	Percentage (%)
Mechanical errors	Punctuation Marks (Improper use of punctuation marks)	24	23.08
	Capitalization (Improper use of capitalization)	14	13.46
	Misspelling/Typographical Errors	23	22.11
Other types of errors	Conjunction	20	19.24
	Word Choice	23	22.11
Total		104	100

Table 8

Sample mechanical errors and their corrections

Mechanical errors	Correction
1. I think its a good idea for it will make the Filipino people globally competitive.	1. (it's)
2. Its quite frightening but I have no choice.	2. (It's)
3. Im personal confused on what to prioritize.	3. (I'm personally)
4. As an instructor of this university Im glad to know about this program.	4. As an instructor of this university, I'm glad to know about this program.

occurrence and error gravity gained support from French (1985) when he said that rules badly learned and wrongly applied could induce errors. However, contrary to what was asserted by others, he rejected the idea of L1 being the root cause of errors.

Errors are mostly traceable to the inability or failure of the learner to master the second language. Everyone who writes in English makes such mistakes, whether native speaker or ESL student. In many cases mechanical errors are the consequence of quick writing where the focus is on the content rather than the form. Mechanical errors seldom interfere with comprehension, but can reflect negatively on the writer, particularly in formal/academic settings (Shoebottom, 2011). This finding also calls to mind the study of Aiyewumi (2004) in which L1 interference, L2 idiosyncrasies and inappropriate learning and application of rules were named as the major causes or sources of errors. Inadequate knowledge or lack of mastery of the grammatical rules of the TL as a cause or source of errors is rivaled only by language transfer or L1 interference/influence. In the study of Politzer and Ramirez (1973) who had Mexican-American children as their subjects, they discovered how tenacious and profound the influence of Spanish as the subjects' L1, which emerged as the most common source of errors. Not far behind was the improper application of standard English. The same is true to the more recent studies of Mohammed and Abdalhussein (2015), Jabeen et. al (2015) and Owu-Ewie and Lomotey (2016).

From the findings, what can be inferred is that the same areas in which errors preponderate are common to peoples who are learning or using English as a second or foreign language. Mostly, error of usage, according to Lawal (2004) is attributable to the complexity of the English language itself. The level at which people commit error in language usage varies from one person to another depending on linguistic background of the speaker or user of the relevant language. As pointed out by Corder himself (1967), an array of factors – e.g. motivational, developmental, circumstances of learning and more – could come into play. Corder's (1967) pre-systematic errors, which are committed by the learner while he or she is trying to come to grips with a new point, or at the stage where the learner is ignorant of a particular rule and makes a random guess which goes wrong, must not be considered as a possible description or cause for the errors just analyzed, since the writers are faculty members, and are therefore past such groping stage. It is unflattering to suppose that their use of the target language depends on guesswork or random choices, rather than being the deliberate process that it should be.

From the samples of sentences presented, it is clear that the kinds of errors in grammar committed by faculty members themselves are no less serious, damning and reprehensible as their students'. The public is more forgiving with students since they could always argue that they are still learning the target language and their errors only mark the level or stage of their progress in transit to mastery; in other words, their

errors are part of their interlanguage, which is a transitory or temporary stage. The same argument cannot be brandished by the faculty who, by virtue of their advanced learning and position, are already of a different league. Errors in written discourse should be critically examined to determine the aspects of the language where they encounter difficulty, or are at their most vulnerable, hence, prone to errors. Ignoring these errors promotes fossilization in teachers and this is not good. The low level of writing proficiency detected in college teachers speaks of the kind of person they are for whom the more critical have such unflattering labels as "sloppy," "careless," "fossilized," and others.Worse, perhaps, it also reflects on the school represented by the faculty. Needless to say, the image of the institution suffers when its faculty's linguistic competence is called to question, because as pointed out language is an essential tool.

The illustrative errors reflected in the written outputs are discouraging. They obviously are no longer a function of individual's carelessness but proofs or exhibits of an inadequate command of the language, or even of fossilization. In writing, unlike oral discourse, errors are permanent or become part of records. Once thoughts are printed or written and sent out to the intended receiver, whatever errors found from the text can no longer be erased; hence, the emphasis in writing courses on writing as going through a process that involves planning, drafting, editing and revision. Errors in writing can affect not just the form but communication as well. It also matters who are committing the errors – i.e.

the teachers -- as this can have an impact on the learners' personality and development.

Generally, the present study has its own limitations. It focused only on the language errors discovered in the brief compositions of 50 selected probationary faculty members of a private university in Mindanao, Philippines. Only errors concerning language form came under critical scrutiny in this study. Faulty format, content and incorrect mechanics were excluded from the analysis. Thus, future researchers should conduct a similar study, with other types or groups of respondents and other bodies of texts. This is to maximally use error analysis as a feedback system and tool for the improvement of instructional materials and guide or basis for other pedagogical decisions like choice of approach and strategies. Future researchers can also focus on the impact of language training program packages. Tracer or assessment studies can be carried out by other workers in the field.

CONCLUSION

The results of the study showed that selected probationary faculty members lack mastery of the English language system. This may be attributed to the fact that most of the respondents were not language teachers. Although they have been using English as their second language and as a medium of instruction in the classrooms, their knowledge of the basics of the language was limited. However, the language problem of the selected probationary faculty members can always be remediated through a language proficiency program designed to address the problem. School administrators,

language program coordinators, teacher education deans and heads should seriously consider a program that would look into and deal with the English proficiency level of their faculty members. They should include language enhancement training for the newly hired faculty members so that the latter will be able to check and self-assess their command of the language. Thus, future teachers of the university will become linguistically competent not just in teaching their subjects, but in communicating with others as well. If this language problem is ignored or is not seriously dealt with, these faculty members will remain fossilized or stagnant at their low proficiency level. The negative impact of this on their students is a foregone conclusion. The vicious cycle is set off, with these faculty members transmitting their inadequacies or weaknesses to their students, and the latter handing down the inherited weaknesses to their own students.

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Code-Switching Between Informal Iraqi Dialect and English language Among Iraqi Arab Speakers via WhatsApp Application: Linguistic and Non-Linguistic Factors

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ABSTRACT

Code-switching is described as the shifting that occurs between two or more languages concurrently within one conversation. This study aims to examine the application of code-switching between Informal Iraqi Dialect (IID) and English language among Iraqi Arab speakers of English via one of the smartphone applications, namely WhatsApp Messenger (WM). The study also seeks to recognize the types of code switching and motivations among Iraqi students of English for switching from IID into English language. This research adopted a qualitative approach, which involved Fifty (50) typed conversations of twenty (20) Iraqi post-graduate students studying at Universiti Putra Malaysia (UPM). Data were collected via two instruments, dubbed WM application to gather the typed conversations and semi-structured interviews. The results obtained from the WM application indicated that the most predominant type of code-switching (CS) used by the participants was intra-sentential CS, especially the intra-lexical code-switching. The findings suggest that the majority of the Iraqi students are inclined to code-switch to English language in smaller parts within the word boundary. The analysis of the interview data disclosed three motivations for the application of code-switching, namely linguistic, technological, and political factors.

Keywords: Code-switching, informal Iraqi dialect, Iraqi monolingual speakers, WhatsApp tool

INTRODUCTION

Nowadays, people have the tendency to utilize social networking as a means of meeting, interacting and sharing ideas with others (Anderson et al., 2010). Social networking has contributed the creation of new opportunities for interactions and collaborations among people either in social contexts such as those involving friendship or in educational contexts such as those involving teachers and students. Social networking applications such as Facebook, Twitter, LinkedIn, and WhatsApp Messenger (WM) have become widely used in people's everyday communication.

In regards to the most recent popular social network applications, WM is a proprietary, cross-platform instant messaging application for smartphones. It is used to send and receive messages from individuals such as friends, family members, teachers, and students. WM is a commonly available technological tool offering many advantages for people's communication and interaction in both written and spoken modes in their mother tongue, a language common to them, or by switching between two languages.

The practice of switching to another language is common among multilingual communities and is a common indicator of language contact (Ting, 2007). Switching occurs when bilingual or multilingual speakers switch and use words from different languages in their interactions (Myers-Scotton, 1993). Eldridge (1996), for instance, mentioned possible factors that led to the occurrence of code-switching (CS) from one language to another, specifically, the linguistic and social-psychological factors. As for the former, CS occurs when individuals in the conversation are unable to express themselves in one language, which could be due to the lack of proficiency in the target language. In this case, CS serves to fill the void in the target language (L2) which is not known or understood (Cook, 2013; David, 2003). In contrast, the social-psychological factor involves speakers' conveying their attitudes to listeners.

Code switching, which could occur between two or more languages, is a common phenomenon among bilingual and multilingual speakers, and this phenomenon has been studied by various researchers (Amazouz et al., 2018; Cahyani et al., 2018; Eldridge, 1996; García et al., 2018; Milroy & Muysken, 1995). CS is defined as a communicative method which involves switching from one language to another in the same discourse by the same speaker in order to facilitate the communication process for social and educational objectives (Amazouz et al., 2018; Bahous et al., 2014; Cahyani et al., 2018; Chung, 2006; García et al., 2018; Ismail, 2015; Larbah, 2013; Milroy & Muysken, 1995; Mujiono et al., 2013; Then & Ting, 2009). The practice of code switching has different impacts on different speech communities. A speech community may only borrow some lexis from other languages. But, the constant use of code-switching in phrases and sentences can result in the invention of new languages (Eldridge, 1996; Milroy & Muysken, 1995).

Code switching from Arabic to English is a common phenomenon among Arab speakers of English (Abalhassan & Alshalawi, 2000; Al-Rowais, 2012; Amazouz et al., 2018; Bahous et al., 2014; Isamil, 2015; Ziamari, 2007). Such behaviours were studied among Arab speakers in the United States who use English as a foreign language (Abalhassan & Alshalawi, 2000). Their study revealed that all the respondents switched from Arabic into English and *vice versa* to some degree in their conversations because they did not recall terms in Arabic, and it was easier to use the equivalent terms in English and *vice versa*. This may be ascribed to their lack of linguistic competence which is deemed a key factor in leading to occurrences of code-switching. Besides that, several academicians also reported that linguistic competence acted as a significant factor in enhancing individuals' proficiency levels in a target language (Ariffin & Husin, 2011; Magid & Mugaddam, 2013). Another study in the Arab world was undertaken by Bahous et al. (2014) who examined the phenomenon of code-switching in the Lebanese context. Their findings revealed that the respondents switch in their classes for the purpose of better learning. This study also disclosed that code-switching contributed to the enhancement of the learning process. Other two studies were carried out in Saudi Arabia by Al-Rowais (2012) and Ismail (2015). Al-Rowais's (2012) study concluded that the participants had a tendency to switch from Arabic into English for the purpose of enriching meaning or strengthening the

effect of expressions. As for Ismail's (2015) study that sought to identify the type of code-switching from Arabic to English among young bilingual Saudi Arabian students, it was perceived that the participants were likely to switch from Arabic into English in terms of single nouns and adjectives. It could be argued that the main reason for the occurrence of code-switching might be the lack of linguistic competence whereby the learners were not able to convey their message to a listener. To this end, such individuals resorted to switching from a language to another in order to cultivate their attitudes in conveying their message to the listener.

The practice of CS could be a threat to a national language (e.g., Arabic language). For instance, a study by Dar (2016) examined the influence of code switching on Pakistani learners' native identity and their attitudes toward the second language (L2). The findings of this study revealed that English as a second language (ESL) posed a threat to the Pakistani learners' national languages (e.g., Urdu and other regional languages), their identity, and also the Pakistani culture. This could be an indicator of the learners' gradual shift from their native culture to the Western culture attacking the national identity of the Pakistani learners. Similarly, another study conducted by Ziamari (2007) on code-switching between Arabic and French languages used by Moroccan Arab speakers in Morocco disclosed that Moroccan Arab speakers used CS immensely *and frequently* in their everyday utterances both inside and

outside their community of speech. In fact, French language constitutes a threat to the Arabic language of the Moroccan people and has corrupted and seriously influenced the Moroccan dialects (Hachimi, 2013; Post, 2015; Ziamari, 2007). The recurring use of code-switching between French and Arabic language has led to the borrowing of numerous words (Hachimi, 2013; Post, 2015).

Similarly, Iraqis tend to code-switch sometimes in their conversations. Mohammed et al. (2015) had undertaken a study in Iraq with Iraqi EFL undergraduate students as subjects of the study. Based on their findings, four factors were detected, namely lack of proficiency in L1, linguistic, technological, and political factors *that led these Iraqi undergraduate students to* switch from Arabic into English. Furthermore, as Iraqis are a part of Arab world, this is indicative that Arab people are likely to code-switch between Arabic and English in their communication (Abalhassan & Alshalawi, 2000; Al-Rowais, 2012; Amazouz et al., 2018; Bahous et al., 2014; Hachimi, 2013; Ismail, 2015; Ziamari, 2007). Iraqi students have a tendency to code-switch between Arabic and English in their communication on the WM application with other Iraqis, especially with the Informal Iraqi Dialect (IID). The occurrence of code-switching among Iraqis may affect their first language (Arabic). This notion is supported by some academics in that the practice of code-switching has negative influences on speakers' L1, including causing the loss of L1 fluency (Dar, 2016; Sert, 2005).

From these reviews, it is clearly seen that there is an extensive amount of research on code-switching among various speech communities. However, many studies tended to focus on existing multilingual communities rather than monolingual communities such as Iraqi Arab speakers using the WM application. Thus, the current study aims to identify the types of code-switching patterns with a focus on the Informal Iraqi Dialect (IID) and English via the WM application among Iraqi male post-graduate students and to investigate their motivations for code-switching from Arabic to English.

Types of Code-switching

CS takes place at different levels of speech. Code-switching occasionally happens among the turns of diverse speakers in the same conversation, perhaps in clauses when speakers switch within the phrases they use in a conversation, or within a single sentence when they use words or terms from different languages in one sentence (Milroy & Muysken, 1995). In short, CS occurs at different sentence levels: between sentences, clauses, or within single sentences. Myers-Scotton (1993) classified CS into two categories as either inter-sentential switching (between sentences), or intra-sentential switching (within a single sentence or sentence fragment). However, Poplack (1980) classified code-switching into three categories: tag-switching, inter-sentential switching, and intra-sentential switching.

Tag Switching

Tag switching is defined as a practice where learners attach a language tag entirely onto another language during the utterances. It is also described by Qian et al. (2009) as "the insertion of a tag or a short fixed phrase in one language into an utterance which is otherwise entirely in the other language". In other words, tag-switching contains discourse markers or sentence fillers that lead a speaker to carry on talking.

Inter-sentential Switching

Inter-sentential code-switching includes switching at "a clause or sentence boundary whereby each clause or sentence is either in one language or the other" (Qian et al., 2009). In other words, the first clause/ sentence could be spoken in a language, then proceeded by another language as an entirely different language. Qian et al. (2009) stated that "inter-sentential code-switching may also occur when one speaker takes up where another leaves off".

Intra-sentential Switching

In contrast to inter-sentential switching, Hamers and Blanc (2000) defined intra-sentential code-switching as the switching that occurred within the clause or sentence boundaries, which had the highest complexity as it required the combination of the grammatical patterns of each language used. This type contains the greatest syntactic risk and a speaker should be familiar with the two languages when code-switching, or rather, the speaker should be fluent in both languages (Qian et al., 2009).

Furthermore, intra-sentential CS is fragmented into two types, dubbed "intra-lexical and intra-phrasal". The former refers to the use of the lexis of different languages in a sentence, whereas the latter means switching within phrasal boundary (Chuchu, 2007). Table 1 presents some examples related each type of CS.

Table 1

Some examples of CS types

CS Types	Examples
Tag switching	- المنافس الاخير ها ها انت غير قادر على الحصول عليها, **سو واتس ذا نيكس؟** **T**: *Last competitor haha, you can't get it, so what's the next?*
Inter-sentential Switching	- جيد, ممتاز **يو كان يوزت ان ذا كلاس.** **T**: *Good, excellent, you can use it in the class.*
Intra-sentential Switching	- ما هي موهبتك, **فوتبول** او **ريدنك** او **ترافلنك؟** **T**: *What is your hobby; football, reading or travelling?*

METHOD

Participants

In this study, 20 Iraqi post-graduate students from Universiti Putra Malaysia (UPM)-Malaysia participated in this study. These students were identified via purposive sampling whereby the participants were intentionally selected as they fitted the criteria of the participants who could provide the required data. The participants were made aware of their participation in this study, but they were not aware of the purpose of this study in order to avoid the Hawthorne Effect which was the alteration of behaviour by the subjects of a study due to their awareness of being observed (Ary et al., 2010).

The central phenomenon investigated in this study was the behaviour of the code-switching among the Iraqi male students who were enrolled in post-graduate studies (MA Programmes). Due to privacy and ethical concerns, these kinds of studies have the tendency to deal only with a small number of messages (e.g., typed conversation on WM) that researchers can collect from participants (Biesenbach-Lucas, 2007). Thus, this study was limited to analysis of only fifty (50) typed conversations from twenty participants aged from 24 to 30 years old. The participants were from one ethnic group using the same dialects and studying at different faculties in UPM. The rationale behind selecting only male participants is that the Iraqi context is one of the Arab contexts that does not support male-female relations. Thus, it is a challenging job for the researcher to contact female students for this purpose because a female student may have personal issues that cannot be published.

Instruments

The current study used two instruments: typed conversations from the WhatsApp Messenger application of the participants' smartphones and semi-structured interviews.

Typed Conversations via WM Application

WhatsApp is a Smartphone application for the purpose of instant messages where its popularity has risen. Moreover, it is a free social application that is thoroughly available for many learners of English all over the world. One of WhatsApp's significant characteristics is its ability to enhance communication within a group. The participants used this application to help them deal with some issues related to their studies and some personal topics.

The typed conversations were used to aid in understanding the central phenomenon, code-switching, among the participants. The data were analysed in particular to observe the patterns of code-switching used by the participants. A total time of four weeks was allocated to collect the data from the participants. In this study, twenty colleagues were requested to forward their typed conversations to the WM application of the researcher's personal smartphone. Of these typed conversations, the sentences that contained code-switching were extracted and arranged in two tables. The rationale behind extracting only the sentences with code-switching is that the conversations

contained some personal issues related to the participants that could not be published.

Semi-Structured Interview

Aside from collecting the typed conversations, semi-structured interviews were also conducted with the participants to collect the data that were related to their motivations for switching from the Iraqi dialect to English language. The interview involved five participants based on Creswell's (2014) recommendations reporting that 5 to 25 participants are recommended in a qualitative study. These five participants were randomly selected from the total and were voluntary.

Kvale (1994) stated that a semi-structured interview should contain a sequence of themes that were translated into questions developed in a way that were flexible to follow up answers. Such a type of interview is flexible in nature and thus, this flexibility may lead a researcher to produce new questions whenever interesting topics arise (Flick, 2008).

In accordance with this, the semi-structured interviews of this study contained some themes. These themes were developed based on the factors identified in the past empirical studies that led to the occurrence of code-switching. Content validity of the questions was prepared by experts in the research areas. The researcher requested assessments from experts such as lecturers and PhD students, and some of their suggestions and recommendations were considered to improve the questions' suitability.

Data Analysis

The data gathered from WM and semi-structured interviews were qualitatively analysed. Several steps were taken in the analysis of data. First, the conversations collected from the WM application were examined to identify Arabic and English code-switching data practiced by the Iraqi male post-graduate Arab speakers. Second, labelling of the data from the WM application was performed according to the potential types of code-switching (e.g., tag switching, inter-sentential switching, or intra-sentential switching). Third, each type was re-examined carefully to ascertain that it accurately represented the nature of its supporting data. Finally, semi-structured interview sessions were held in order to discover the motivations for switching from Arabic into English language. In this stage, the interviews were recorded, and the data were transcribed using Atkinson and Heritage's (1984) technique.

RESULTS

This section is divided into two subsections. The first subsection sheds light on the results obtained from the WM texts that are related to the types of CS employed by the participants, while the second subsection focuses on the results obtained from semi-structured interviews that are related to the motivations for the occurrences of CS.

Results of WM instrument

As mentioned previously, code-switching is categorised into three categories: tag-

switching, inter-sentential-switching, and intra-sentential switching (Poplack, 1980). The data of the fifty typed conversations indicated that the most prominent type of CS used by the participants was intra-sentential. This confirms the belief of Poplack (1980) and Scheu (2000), who claimed that the most frequently used code-switching category was intra-sentential. In more specific terms, intra-sentential is broken into two types: intra-lexical and intra-phrasal. Among the intra-sentential switches, it is found that single nouns are the most frequently code-switching category employed by the participants, which belongs to the intra-lexical CS type. The findings of this study are in accord with other research in that intra-lexical CS (within word boundaries) is the most frequently occurring CS type (Chuchu, 2007). Table 2 and Table 3 show the extracted sentences of intra-sentential CS used by the participants between IID and English language with the WM application. Table 1 presents code-switching employed for household items.

Based on Table 2, the results show that the students switched between different language lexis in one sentence. Specifically, intra-sentential switches occurred in the middle of a sentence as the participants used half the sentence in Arabic and continued to the other half in English language, as shown in the next example:

- لازم اصلح **البايب** مال الحمام

 - **T:** I have to fix the *pipe* of the bathroom

From this example, a participant began the utterance in Arabic, then shifted to English language *(pipe)* and finally resorted back to Arabic. In this case, the participant filled a gap by using a term in English language to deliver his message. Some academics have avowed that intra-lexical code-switching can be applied to fill a void in conversation as a communicative strategy (Chung, 2006; Mujiono et al., 2013; Then & Ting, 2009). Hence, most of the participants switched within word boundaries as they were not able to recall terms in Arabic. These findings support the findings of Abalhassan and Alshlawi's (2000) study, which reported that code-switching was used when participants were unable to recall terms in Arabic language.

Based on Table 2, all the terms/words used by the Iraqi students are related to household items. This may be ascribed to the products that have been imported to Iraq, especially after the American Invasion of Iraq in 2003. After 2003, trade exchanges between Iraq and other countries led to an increase in imported products such as satellite equipment, mobile devices, computers, gaming consoles, and many other products. All these products are advertised in English language, which has possibly contributed to the use of new English terms rather than the equivalent Arabic ones to identify the products. This is because these terms are not lexicalised in Arabic and may also be attributed to the sense of carelessness of linguists to provide Arabic equivalent coinages of English terms to avoid using code-switching. Such kinds of behaviour may not only threaten an individual's mother tongue but the

Table 2

English and Arabic code-switching on household items

No	English Sentences in English Language	Arabic Sentences in (IID)
1	Where is the *thermos*?	وين **ترمز** الشاي؟
2	I need to buy a new *kettle*	انا احتاج اشتري **كيتّل** جديد
3	Come to drink a *coffee*	تعال اشرب **كوفي**
4	I need to fix the *remote control*	اريد أصلح **ريمونت كونترول**
5	Please wash my *pyjamas*	اغسل **البجاما** مالتي
6	Bring the *jug* of water with you	جيب **الجك** المي معاك
7	Where is the *remote control*?	اين **ريمونت كونترول**؟
8	You need *tape* for these *wires*	انت لازم تلف **الواير بالتيب**
9	This *cable* attaches the printer to the *computer*	هذا **كيبل** يربط الطابعة **بالكمبيوتر**
10	You have a nice living room *decor*	بالمناسبة **ديكور** صالتك كلش حلوه
11	Is your *television* still under *warranty*?	هل ما زال **تلفزيونك** تحت **الورنتي**؟
12	Bring along the table *fan*	جيب معاك **الفان** المنضدية
13	I need a three-pin *plug*	احتاج **بلاك** ثلاث روس
14	Do not forget to bring the *drill*	لا تنسى تجيب **الدريل**
15	I have to fix the *pipe* of the bathroom	لازم أصلح **البايب** مال الحمام
16	Put the fish inside the *oven*	ضع السمكة **بالاوفن**
17	You do not have *air-conditioner* in your room?	لا تملك **الايركونديشن** في غرفتك؟
18	Just a moment, I need to go to the *toilet*	فقط لحظة، أنا بحاجة للذهاب **للتواليت**
19	Let's buy a sport *bicycle*	دعنا نشتري **بايسكل** رياضي

national identity. This notion is reinforced by some academics who have noted that code-switching is a significant element that may lead an individual to gradually move from his native culture to the intended culture (Dar, 2016; Hachimi, 2013; Post, 2015; Ziamari, 2007). Some examples of code-switching through the influence of the imported products after 2003 are illustrated as follows:

- اين **ريمونت كونترول**؟
- **T:** Where is the *remote control*?

- هل ما زال **تلفزيونك** تحت **الورنتي**؟
- **T:** Is your *television* still under *warranty*?

Based on this, it can be said that the participants' code-switching is in more minor components rather than a complex switching such as phrases, clauses or sentences. Table 3 presents some extracted

Table 3

English and Arabic code-switching in different domains

No	English Sentences in English Language	Arabic Sentences in (IID)
1	*Automatic gear* is more relaxing than *manual* one	القير الاوتاماتيكي اكثر راحة من مانول
2	My apartment has a nice *design*	شقتي تملك ديزاين جميل
3	The *tire* has a lot *punctures*	تاير بي هواية بناجر
4	We played football yesterday and I scored a *goal*	البارحة لعبنه طوبة وسجلت كول
5	*Mobile cover* protects your *mobile*	موبايل كفر يحفظ موبايلك
6	He changed the *battery* of his *mobile*	هو غير الباتري مال موبايله
7	Give me a *miscall* please	سويلي مسكول من فضلك
8	I forgot my *mobile phone* at your home	نسيت الموبايل فون في بيتك
9	I have read your *paper* today	انا قرأت البيبر مالتك اليوم
10	Where are you? which *cafeteria*?	انت وين باي كافتريا؟
11	What happened for your *motor*?	اشبيه ماطورك؟
12	Your car *bonnet* is open	شفت بنيد سيارتك مفتوح
14	Buy for me *blank disk* please	اشتريلي البلانك ديسك من فضلك
15	He wore a *jacket* today	شفته اليوم لابس جاكيت بالحر!!
16	Send a *message* to Mustafa	ارسل مسج لمصطفى
17	Your *T-shirt* is *large* or *medium*?	التيشيرت لارج لو مديم؟
18	I need a *lorry* for my goods?	اريد لوري لنقل الأغراض
19	Buy one *packet* enough	اشتري باكيت واحد كافي
20	It is necessary to read the *abstract* first	اقرأ الابستراكت اولاً
21	Just go to UPM *clinic* for your *headache*	روح لليو بي ام كلينك لتفحص الهيديك
22	Let's take a *taxi*	خلينيا اخذ تكسي

sentences of code-switching employed in different domains such as technological devices, mobile accessories, or car parts.

As seen in Table 3, all the code-switching applied by the participants is also within the intra-sentential type, or rather, within the word boundaries. Some individuals consciously attempted to show their prestige within a high social class community by using or speaking some words in English. Examples of code-switching in such contexts follow:

- **القير الاوتاماتيكي** اكثر راحة من **مانول**.
  - **T:** *Automatic gear* is more relaxing than *manual* one.

- ارسل **مسج** لمصطفى.
  - **T:** Send a *message* to Mustafa.

Based on these two examples, on the one hand, individuals may try to show such behaviours deliberately by using code-switching to bridge the social gap. In such an event, individuals try to show that they are at a high level of education by using some English words when communicating with others in IID. On the contrary, such behaviours could be attributed to a lack of recalling the terms in the mother tongue whereby individuals try to switch into another language in order to fill the gap. This type of code-switching is called a contrasting code-switching. Bautista (2004), for instance, endorsed this view that code-switching had two types: deficiency-driven and proficiency-driven. The former occurs when an individual is not fully proficient in using one language and thus, has to resort to another language while the latter occurs when an individual is proficient in two

languages and is able to switch from one to the other. This indicates that linguistic competence could be the significant element in motivating such kinds of behaviour which may drive individuals to the use of code-switching, and it is also a considerable element in enhancing their proficiency level in the target language (Ariffin & Husin, 2011; Bautista, 2004; Magid & Mugaddam, 2013).

Besides that, the findings of this study also revealed that the participants tended to use English words related to the technology field. Such English words included, *file*, *download, restart, handset, external hard disk, internet, screen, connect, miscall, sign in, sign out, log in, log out, keyboard, article, click, save it, update, folder, download, earphones, email,* and *message.* An example of using these words is illustrated below:

- انا ارغب بشراء **هاندست واكسترنال هارد ديسك** بالاضافة الى **فان لكمبيوتري**.
  - **T:** (I want to buy *handset*, *external hard disk* and *computer fan*)

The popularity of technological devices, i.e., computers or mobiles has altered the way of learning, teaching, and even the communication. New technologies such as social networking or mobile applications accelerate the alterations in the environments of learning and teaching. The widespread use of smartphones has brought millions of mobile applications to EFL/ESL learners such as WhatsApp Messenger (WM), Viber, and others. Kim and Kwon (2012), for instance, reported that technology enabled learners to participate in both collaborative and individual language learning activities that led to the rapid

development of English language skills, i.e., speaking, listening, reading, and writing. Added to this, technology provides a variety of language learning tools and resources that drive learners to be more motivated, independent, and socially interactive (Ahn, 2018; Kim & Kwon, 2012; Rosell-Aguilar, 2017; Viberg & Grönlund, 2012). It can be said that technology plays a considerable role in improving and expanding individuals' English language skills such as vocabulary, listening, speaking, reading comprehension, and writing. The following example illustrates the use of certain words as a result of the impact of technology:

- نسيت **الموبايل فون** في بيتك.

- **T:** (I forgot my *mobile phone* at your home)

Ahn (2018), for instance, supported the belief that "technology is an effective tool for improving English language skills such as vocabulary, listening, speaking, grammar, reading comprehension, and writing". The impact of technological devices can steer individuals to apply some terms in English such as when communicating with others using smartphone applications (i.e., WhatsApp Messenger). Thus, application of some English terms by individuals (e.g., Iraqis) in their mother tongue in daily conversations is the occurrence of code-switching.

Results of the Interviews

The intent of conducting interviews was to discover the motivations behind employing the CS. Five participants were randomly selected to participate in this interview. Based on the result of the interview,

three motivations were provided for the application of CS.

The first motivation refers to the influence of the western colonization of Iraq in 2003. A majority of participants alleged that the occurrences of CS could be influenced by the Western colonization of the country in 2003. The participants revealed that English terms and lexis have been sometimes used in their daily conversations. This may result in the formation of code-switching to English. The next is an example of one of the participants' interviews:

> *"these words I use them in our daily conversations and also my friends and family use these words I think these words came from occupation American British in 2003"*

From these responses, it is apparent that the younger generation of Iraqis could be affected by Western influences from the colonization of the British and Americans in Iraq. Thus, there are perhaps indicators that Western colonization in Iraq has expanded linguistic influences, particularly as in the use of borrowed words from English language that have been used in Iraqis' daily conversations. Phillipson (1992) described the spread of English language as a "linguistic imperialism".

> *"...linguistic imperialism is effected by penetration and the establishment of a bridgehead, for instance the establishment of*

a colonialist education system, within an exploitative structure. As English is also used widely for supranational and international links, English linguistic imperialism operates globally as a key medium of Centre- Periphery relations" (56).

Thus, this may affect the mother tongue, the identity, or even the cultural heritage. Tsui and Tollefson (2007) supported this belief that the use of English "may produce nationals who are ambivalent about their own identity, and nations that are stripped of their rich cultural heritage". Tsui and Tollefson (2007), for instance, provided an example related to this matter, i.e., Malaysia. They referred to Malaysia as a country that was influenced by the language of the colonial country (e.g., English language) whereby many English words had been inserted into the mother tongue of Malaysians (Bahasa Melayu) such as *komputer*, *fakulti*, *agensi*, *sosial*, *minit*, *nombor*, *kaunter*, and *universiti*. It is also asserted by Tan (2009) that Malaysia was influenced by the former colonial power and as "the language they left behind became more widespread within the local community, borrowing was often undertaken by those within the community who speak English concurrently with other languages". Likewise, Albury (2017) affirmed that "English had served as a lingua franca between ethnic groups – including the Malay – under British colonial rule, and is still commonly used in interethnic communication".

Another study conducted by Benabadji (2017) confirmed the phenomenon of loanwords through the influence of colonialism which occurred within Algerian Arab society. The study stressesed that many loanwords in the Algerian Arabic dialect "belong to various origins; Spanish, Turkish, Italian, English, and French which is the most expanded one, because of the long period of French colonization". In sum, colonization plays a considerable role in the borrowing of many words into the language of the colonised country.

The second motivation indicates that Arabic terms are sometimes not applied during the conversation because the equivalent words or terms in Arabic language may not be recalled. Here is an example from one of the interviewees:

"Well I find it more easy or use the English words rather than Arabic in some situations. I used or maybe I am accustomed to use these English words"

The findings of this study agree with the viewpoint of Sert (2005), who stated that students use a certain equivalent lexical item in a language, and then they code-switched. Sert (2005) defined this behaviour of code-switching as a the "equivalence function," which refers to "a defensive mechanism for students as it gives the student the opportunity to continue communication by bridging the gaps". Similarly, Azlan and Narasuman (2013) carried out a study in the Malaysian context which reported that code-switching occurred because the

participants could not recall the words. Azlan and Narasuman (2013) referred to such behaviours as a "Lack of Register", which denoted that a certain vocabulary was not available to a speaker, and then the occurrence of code-switching was manifested. It can be said that Iraqi students may employ code-switching because of not recalling terms, and based on this, they resort to the use of equivalent lexical terms.

The third motivation behind the application of CS is the impact of technological devices. The use of technological devices such as smartphones and laptops as well as the use of the Internet (e.g., social networking sites such as Facebook, Instagram, and Twitter and Internet relay chat) are major factors in using some English terms during conversations. The participants declared that the use of technological or mobile devices contributed to the enhancement of their English language skills.

> *"I see the use of technology in everyday I mean every day we sign in to some technology tools for examples, facebook or use whatsapp, viber, instagram or twitter"*

The extract above refers to the daily use of technological devices among the participants whereby the impact of these technological devices plays a significant role in employing English terms/words among the participants. Abdullah and Siraj (2018) emphasised that students had motivation to learn vocabulary through the short message

service (SMS) over their mobile devices. Added to this, Kim (2017) avowed that "the short message service (SMS) supported by mobile phones facilitated student learning of new vocabulary as it was fast, immediate, and readily available". Thus, mobile devices serve as an effective tool for vocabulary learning. This indicates that the impact of technology or mobile devices steers individuals to apply some terms in English language during conversations in their mother tongue and hence, the occurrence of code-switching is recorded. In brief, technology generally represents the key and contributing factor in the application of code-switching among these recent generations and Iraqis in particular.

DISCUSSION

The aim of using code-switching is to enable other people to grasp the speech easily. The participants in this study used code-switching in order to achieve their conversational objectives. The findings revealed that the students tended to employ CS in intra-sentential contexts within word boundaries such as with single nouns. The findings of this study are in agreement with the findings of some studies indicating that the most employed type is intra-sentential CS (Kebeya, 2013; Poplack, 1980; Scheu, 2000). Conversely, the findings of this study conflict with the findings of two studies conducted in two different contexts: Qian et al.'s (2009) study in China and Azlan and Narasuman's (2013) study in Malaysia. Their findings demonstrated that the most applied type of CS was inter-sentential

switching followed by intra-sentential switching and tag-switching.

Three motivating factors were demonstrated that led the EFL Iraqi students to employ code-switching in their conversations: linguistic, technological, and political factors. The current study agrees with Mohammed et al.'s (2015) study that linguistic, technological, and political factors were the motivations that drove the Iraqi EFL undergraduate students to apply code-switching.

Linguistic Factors

Linguistic competence is one of the factors that led the EFL Iraqi students to use code-switching. This study is obviously parallel with Cook's (2013), who disclosed that the linguistic factor signified a natural tendency whereby an individual made use of code-switching in the case of inability to place in proper words to describe particular objects, people, or events in the target language. In dealing with this gap, individuals will naturally 'borrow' words from a language in order to deliver their message.

In addition, the study corroborates the findings of Sert (2005), who described this kind of code-switching as an "equivalence function" by stating that code-switching was used to provide an opportunity for individuals to continue communicating to fill the gaps. In a related move, but in Malaysian context, Azlan and Narasuman (2013) labelled such behaviours of code-switching as a "Lack of Register." Their findings revealed that the occurrence of code-switching was recorded once an individual was unable to recall a certain term

and hence, they resorted to the use of the equivalent lexical terms. The next example presents such a kind of code-switching when an individual could not recall the term "تصميم" in Arabic language and then switched to the use of the equivalent word "*design*" in English language to bridge the gaps.

- شقتي تملك **ديزاين** جميل

- **T:** (My apartment has a nice *design*)

This example indicates that English words/terms are used to fill in the void in order to complete their utterances or exchanges. The findings of the present study are in agreement with studies that reported code-switching can be applied as a communication strategy (Chung, 2006; Mujiono et al., 2013; Then & Ting, 2009). Hence, this signifies that code-switching occurs as a strategy for individuals to accomplish their communication goals.

Technology Factors

The impact of technologies such as laptops, tablets, computers, and mobile phones have become part and parcel of everyday lives. By dealing with technological devices, many English words have been adopted as technological terms, for example, *click, file, save it, restart, update, folder, download, screen, earphones, handset, computer fan, external hard disk, cartridge,* and *printer*. This resulted in extensive use of these words in Iraqis' conversations. The following examples illustrate the use of technological terms:

- سوي **ابديت لكمبيوتر** مالتك بالغضط على **كليك ريستارت**
- **T:** (You might update your computer by clicking on restart)

- تكدر تسوي **فولدرين**
- **T:** (you can make two folders)

- شوف **الفيلم** مال احمد زكي على **تي في**
- **T:** (Watch the film of Ahmed Zaki on TV)

These findings are aligned with the findings of Sabti and Chaichan (2014), who revealed that the use of technology could help students to expand and increase their vocabulary knowledge. Also, the current study upholds the findings of some studies that technology provides an opportunity for individuals to take part in activities of language learning that steer to the rapid advancement of English language skills (i.e., speaking, listening, reading, and writing) (Ahn, 2018; Kim & Kwon, 2012; Rosell-Aguilar, 2017; Viberg & Grönlund, 2012). Hence, it is apparent that the use of vocabulary related to technology has encouraged the participants to apply code-switching. Besides that, findings of some prior studies revealed that the short message service (SMS) encouraged individuals to learn new terms by using mobile phones (Abdullah & Siraj, 2018; Kim, 2017). This implies that technological devices may enable individuals to utilise some words/terms in English language when communicating with others and thus, code-switching occurs.

Political Factors

The third motivation for code-switching is the political factor (the Western colonisation of Iraq). In recent years, Western powers represented by the USA occupied Iraq and deployed various military operations in the country. The presence of Americans and other Westerners in the country has encouraged the use of English words and terms in Iraq, which resulted in borrowing numerous words from the English language. Likewise, British colonisation of the South East Asian countries such as Malaysia (Tanah Melayu and Borneo) and Singapore in the 19th century brought many English terms into the local Malay language (e.g., Bahasa Melayu). The use of localised terms has created a huge impact on the Malay language (e.g., Bahasa Melayu), and loanwords are still being extensively used by Malaysians and have become part of the official and standard language. The findings of the present study are consistent with the findings of a study conducted by Albury (2017), which demonstrated that English language under British colonial rule was applied as a lingua franca between ethnic groups—including the Malays—and is still commonly used in interethnic communication.

The findings of this study are supportive of the findings of two prior studies in the Arab context carried out in Morocco by Ziamari (2007) and Algeria by Benabadji (2017). The findings of Ziamari's study (2007) showed how the French colonisation of Morocco influenced the Arabic language used by the Moroccan Arab speakers. The Moroccans have extensively switched between Arabic and French language. Similarly, Benabadji (2017) asserted that the primary reason for the many loanwords in

the Algerian Arabic dialect was the French colonization. Thus, the occurrence of code-switching among the Iraqis may belong to the Western colonizers of Iraq, particularly the Americans, who resided in Iraq during the Western military occupation of Iraq.

CONCLUSION

This study demonstrated the employment of code-switching between IID and English language among Iraqi post-graduate students at UPM. This employment of code-switching was relatively limited in daily conversations of the Iraqi post-graduate students on WM. The findings of this study divulged that the participants had a tendency to utilize code-switching within word boundaries such as with single nouns, which is defined as intra-sentential. Added to this, the findings of the qualitative data demonstrated three motivations behind employing code-switching among the subjects, which are the (1) linguistic factor, (2) technology factor, and (3) political factor. It can therefore be said that code-switching may be employed to minimize the miscomprehension or difficulties in understanding the message between two parties.

It can be concluded that codes-witching during conversations and in online social media in particular, i.e., WhatsApp Messenger, is a dynamic and interactive process between the participants whereby the second and subsequent speakers are necessarily influenced by the language choices made in the initial turn or utterance. In this case, an individual who employs code-switching is at the same time regarded as both influencer and influenced by the phenomena of code-switching.

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Developing an Automated Essay Scorer with Feedback (AESF) for Malaysian University English Test (MUET): A Design-based Research Approach

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ABSTRACT

This paper presents the development of an automated essay scoring mechanism based on the Malaysian University English Test essay marking criteria using the Design-based research (DBR). It is a learning intervention to facilitate students in their essay writing process and at the same time, serves as a tool for teachers to mark essay. DBR is the most commonly used method for conducting research in technological enhanced learning context especially for solving real classroom problem. The development of the automated scoring system is presented step by step following the four phases in DBR model. In each phase, data collection procedure, research instrument and the lessons learnt that lead to further iterations are discussed in order to produce a workable and effective automated essay grader. The outcome resulted from the five iterations lead to the present intervention, Automated Essay Scorer with Feedback (AESF). This system allows teachers to collect samples of marked essays to be trained to grade newly entered essays. Then the teacher can set task and keep track of students' progress and provide additional feedback as well as rectify the scores generated. For students, they can practice writing essays and demand for feedback at any point of their essays writing process for the system to provide scores by paragraph as well as the whole

essay. The system was tested by 24 teachers from 5 schools in real-classroom context with favorable comment.

INTRODUCTION

Writing is an important productive skills that students of all disciplines need to master (Graham, et al., 2013). This skill is often under-developed due to time constraints (Weigle, 2007). Writing an academic piece of writing involve time and similarly, more time is needed for the teachers to read, grade and provide feedback (Kellogg et al., 2010). It is necessary to provide timely feedback to let students to have better understanding of the given task before they forget or lose interest of the topic written (Ahmad & ul Hussnain, 2012; Lipnevich & Smith, 2009). A technology-based system, in this case the Automated Essay Scorer with Feedback presented in this study can help teacher score and provide immediate language feedback to students. At the same time, this automated essay scorer with feedback provides students a platform to write essays, get feedback on demand as well as access to immediate scores based on paragraph and complete essay as a whole.

In order to design a technologically rich teaching and learning experience, design-based research (DBR) approach has gained popularity as this research model calls for improving an intervention based on the context of occurrence by seeking help from expert as well as practitioners in reality (Reeves & McKenney, 2015). This is a pragmatic approach that utilises both the quantitative and qualitative data to solve a real classroom problem (Reeves & McKenney, 2015).

DBR is the most commonly used methodology when conducting research in technological enhanced learning context (Kennedy-Clark, 2013). In line with the pragmatic worldview, DBR "seeks to increase the impact, transfer and translation of education research into improved practice" (Anderson & Shattuck, 2012), a term synonym with developmental research that focuses on solving complex real world problem critical to education while at the same time leads to theory construction and explanation (Reeves, 2006).

Since learning is a complex phenomenon that cannot be solved by only one discipline, DBR allows researchers to derive important characteristics about the messiness of natural condition (Bell, 2004) so that we can systematically understand and predict how learning occurs, then attempt to create and sustain educational innovation in actual everyday classroom setting that is not merely workable in the laboratory (Barab & Squire, 2004). In terms of sustenance, it requires the understanding of how and why an innovation may have work and vice versa so that on-going improvement can be made over time and across setting (Joseph, 2004). It usually attempts to connect the relationship between the theory, designed innovation and practice where the innovation may even lead to new teaching

and learning theory (The Design-Based Research Collective, 2003)

The process in DBR does not stop at merely testing the innovation in a particular experiment. Its iterative nature requires cyclic processes where improvement is made at every level of testing from its prototype to actual testing grounds with teachers and students from various settings. The reflection on why the innovation works will strengthen the theory proposed while failures will indicate more rooms for improvement and the generation of more validated data (Reeves, 2006). In short, the fundamental principles of DBR are listed below:

- Addressing complex problem in real contexts in collaboration with practitioners;
- Integrating known and hypothetical design principles with technological advances to render plausible solutions to these complex problems; and
- Conducting rigorous and reflective inquiry to test and refine innovative learning environment as well as to define new design principles. (Reeves, 2006)

DBR serves as the main approach for the current study on designing and developing an Automated Essay Scorer with Feedback (AESF) environment to facilitates students essay writing and teachers essay marking because it is "a systematic but flexible methodology aimed to improve educational practice through iterative analysis, design, development and implementation based on collaboration among researchers and practitioners in a real-world setting and leading to contextual sensitive principles and theory." (Anderson & Shattuck, 2012).

The AESF is based on the behaviourist theory which espouses more practice leads to better performance (Mitchell, 2013) and the humanist theory that higher motivation leads to more the satisfaction in improving the targeted skills (Mitchell, 2013). It is believed that with this new innovation, the immediacy of feedback to the extent of paragraph by paragraph leads to new method in assessing writing in general, where commonly teachers will mark the finish product instead of unfinished paragraphs.

Figure 1 illustrates the DBR model methodology adopted for this study. It has 4 phases that is aimed at refinement of problem, solutions, methods and design principles. Each phase illustrates all the research procedures and instruments involved to suggest the next step for the refinement of AESF.

METHOD

This section illustrates the details in the design and development of AESF based closely to the DBR model.

Analysis of Practical Problems and Practitioners in Collaboration

The close collaboration between the practitioners as main informers, researcher as literature reviewer and mediator, and the technical support team for the technological invention, as shown in Figure 2, have successfully produced the first Automated

| Analysis of practical problems and practitioners in collaboration | → | Development of solutions informed by existing design principles and technological innovations | → | Iterative cycles of testing and refinement of solutions in practice | → | Refection to produce "design principles" and enhance solution implementation collaboration |

Refinement of problems, solutions, methods and design principles

Figure 1. Design research approaches in educational principles (Reeves, 2006)

Researcher
- literature reviews
- research instruments
- maintain interaction and communicate needs

Practitioners
- experience in teaching and learning
- students' syllabus and teachers' needs
- main informers

Technical Expert
- develop intervention as requested
- provide technical platform
- maintain and improve intervention based on researcher's information
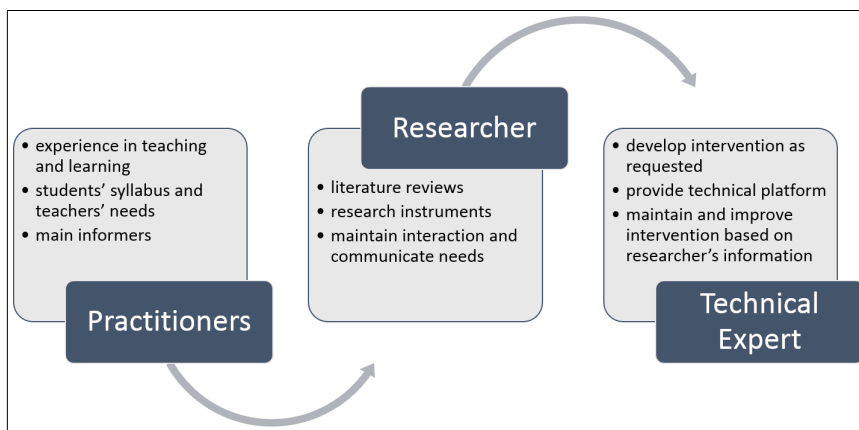
Figure 2. Design research approaches in educational principles

Essay Scorer with Feedback (AESF) prototype.

In this phase, the analysis of practical problems was carried out in eight upper secondary schools, selected purposively where there were Malaysian University English Test (MUET) markers/examiners. By collaborating with these expert markers, the most crucial problem in language teaching and learning, the writing lessons, were scrutinised by means of observation and interviews. Need analysis was done based on three major aspects of content, conduct and context. In terms of content, the writing component is seen as requiring

immediate attention because this component of the language skills is least focused or practised (Weigle, 2007), ironically, the most important medium of communication in the academic arena (Johari, 2004). In terms of conduct, students are normally given an essay question to be attempted, probably after a thorough discussion as practice or as a test without guidance. The essays are eventually collected and marked by the teacher and returned after sometimes. Finally, the context in which this study takes place is the Malaysian upper secondary classroom. In most Malaysian classroom, application of technology is deemed lacking

(Md Yunus, 2007; Yunus et al., 2013). Despite the increasing use of technological innovation in education reported worldwide, the Malaysian schools context are generally lacking in the integration of such advancement (Yunus et al., 2013). They are probably not provided with such facilities or some may have underutilised such provision (Yunus et al., 2013).

In order to suggest a workable solution, eight qualified and experienced MUET examiners, sampled purposively, regarded as subject matter experts were interviewed to identify marking conventions and derive the functionality of AESF based on their perception and expectation of a technological intervention. Analysis of the interviews suggested that AESF had to be reliable, valid in scoring, useful, easy to use, immediate in giving feedback, as well as having easy accessibility (Ng et al., 2015).

Through the findings obtained from literature reviews and practitioners, technological experts in programming and computing were involved to discuss and derived the most possible working and layout of AESF.

Development of Solutions Informed by Existing Design Principles and Technological Innovations

It is necessary to note the development of AESF is based on essays compiled using home grown corpus where essays used for training are essays written by actual students and marked by real expert human grader based on standardised MUET marking scheme, unlike commercially available AES that are trained using first language user that

may not be the same as the local context and the grade provided may not be the same as the MUET marking requirements. In addition, essay topics used to collect gold standard were actual past year MUET questions that were validated. Therefore, AESF resulted from the local context is the solution to assist the actual MUET teaching and learning classrooms.

In this phase, eight schools with 6th form students were approached to collect essays as gold standards. These schools were selected purposively where there were actual experienced examiners trained by the Malaysian Examination Council to ensure validity and reliability in scoring. Apart from being scored by the examiners in school, each essay collected was graded by two other experienced MUET markers hired independently to increase reliability and validity of scoring. A double-blind method was used to overcome biasness and the marks awarded were averaged to calculate the final score obtained by the essays. These scored essays were then typed exactly as written by students into the Notepad programme so that they become machine readable and compiled into a corpus to train the AESF scoring accuracy. Since it is modelled using home-grown corpus it is representative of the cultural and localised marking standard of MUET as mentioned before.

AESF consists of essay management system which enables the user to collect and train essay marking based on the essays feed into the system. Subsequently, from the trained topic, teacher can set task and

monitor progress as well as verify scores generated by AESF.

The core component in AESF is the grading module (GM) which can derive a band between one to six, if given an essay. The GM facilitated the state-of-the-art feature engineering to extract significant indicators in the essay. For the study we facilitated 17 features extracted from essay using natural language processing technologies, which are listed in the followings:

- Total word count
- Unique vocabulary count
- Lexical richness
- Number of sentences
- Average word in a sentence
- Number of spelling error
- Spelling error ratio (against total word count)
- Number of grammatical mistakes
- Grammatical mistakes ratio (against total word count)
- Part of speech count ratio (against total word count)
- Number of high-level part of speech: adverb, adjective, adjective superlative, verb gerund or present participles etc
- Ratio of high-level part of speech (against total word count)
- Number of parameter
- Number of punctuation
- Number of Type 1 conjugate
- Number of Type 2 conjugate
- Number of Type 3 conjugate

We named the above 17 features as surface features, they are used to represent the essays' technical properties. To score an essay, the features are used to construct scoring model with Support Vector Machine (SVM). The model includes different topics of essay of the gold standard with band one to six. To date, we have constructed a database of about 143 gold standard consisting of essays collected from secondary schools in Sarawak. To provide feedback for each essay, all the features listed above 6-17 were also being used to indicate area of improvement of student essay in according to the gold standard. We also relied on Language Tool, mainly helping identifying spelling error and identify syntactic structure of the sentences. Figure 3 shows a screenshot of the AESF during an essay writing session.

In addition, one of the uniqueness of the AESF over others is it facilitated the state-of-the-art computational semantics technology to detect coherency of the essay. The semantic engine, which was derived from Latent Semantic Analysis (LSA) (Landauer, 2007), is used to compute the semantic similarity within opening, body and closing paragraphs. LSA refers to a "theory and method for extracting and representing the contextual-usage meaning of words by statistical computations applied to a large corpus of text" (Landauer et al, 1998) while NLP is the use of statistical method by means of annotation of language for analysis (Collobert et al., 2011). The idea for developing AESF originated from the potential seen in general AES to score essays automatically hence could be combined with feedback to be utilised for classroom teaching and learning purposes (Warschauer & Grimes, 2008). If the AES system can

Figure 3. Screen snapshot of the AESF

score essays reliably and validly, it can be used to assist students in the writing process as an indicator on how well their essays are written and to ease teachers' marking process because the essays are being pre-scored and fundamental language errors are being eliminated by the students based on the automated language feedback provided. Thus, AESF is believed to be the solution to the common problem faced in writing and marking essays. The measure is used to detect at paragraph level if the context of the different paragraphs is coherence within the essay and between the gold standard, even if different words are used in the sentences. Lastly, the matrix is not only used for band, but displays it on at the essay editor as a feedback indicator.

For our study, the essay band is predicted through averaging 17 surface features score from the SVM. Our preliminary result has shown that the method could predict the grade correctly (compared to human graders) at accuracy of 75.7%.

Overall, we want to realize an essay management system which is not only able to grade the essay, but also provide constructive feedbacks such as spelling mistakes, incorrect use of punctuation, sentence syntactic structure as well as coherency within an essay.

Iterative Cycles of Testing and Refinement of Solutions in Practise

The first prototype started with a mock design/story board that was presented by the researcher to the technical expert so that the exact need and features could be communicated and implemented. The system has a login page which is shown in Figure 4 and a student page that allows individual students to login and write their essay in either the full essay or the paragraph by paragraph framework based on only one topic.

This prototype was tested by 15 foundation year students at a public
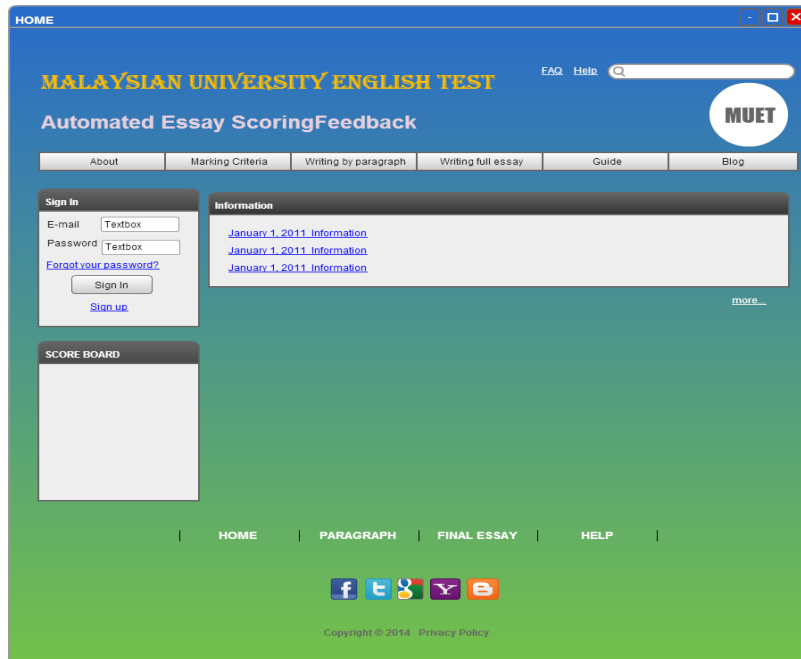
Figure 4. Login page of prototype 1

university who had experienced and sat for MUET before so that they could provide more relevant comments for the next iteration. These students were randomly selected using random number method from the Faculty of Cognitive Sciences and Human Development. Simple elicitation of ideas was conducted verbally because the main reason for this initial testing was for ensuring the stability, authentication as well as a general feel of using AESF. From this first iteration, the issue about authentication and possible login errors were identified. The stability of the system was determined, and the accuracy of the scoring engine was tested.

The outcome of iteration one led to a serious discussion between the researcher and the technical experts to produce the second prototype. This prototype had

added a teacher module to allow teachers to be in control and in charge of their students writing progress and provided teachers with the final decision in approving students' achievement. Besides, it could score more accurately with more detailed annotation and emphasis on discourse markers and with an improved user interface that is straightforward and a welcoming note as shown in Figure 5, minus all the authentication errors identified earlier.

This stage was tested by the same eight expert markers who had contributed in the earlier need analysis stage. Their user experiences were recorded and potential areas for improvement were derived.

This iteration identified some failures when the experts used mobile devices to access the system. The initial design was not
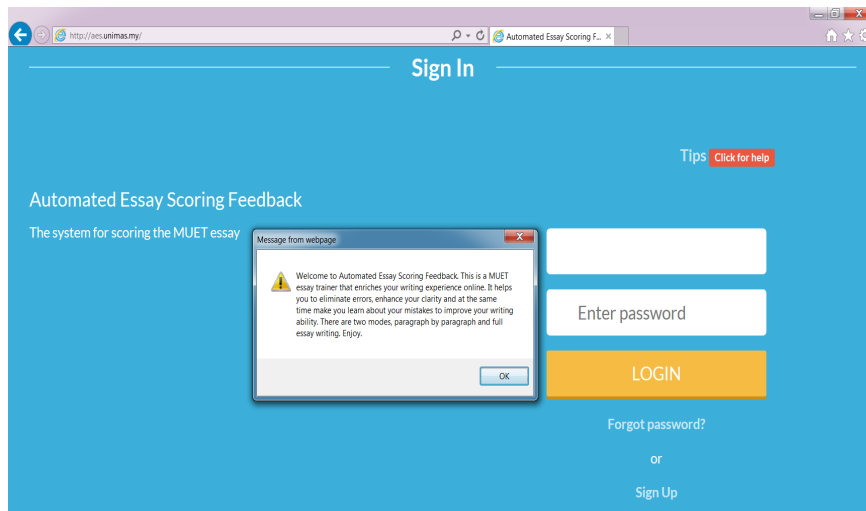
Figure 5. AESF login page

mobile friendly and meant for desktop view. When mobile devices were used, part of the layout went missing and this caused users to feel uneasy. Since most people would use mobile devices like smart phone, phablet and tablet to go online, it is necessary to improve on this area for the next prototype.

In addition, teachers also complained that one topic was not enough, and they would like to have more control like setting multiple tasks and for multiple classes and training more topics to enrich the system.

Reflection to Produce "design principles" and Enhance Solution

In the third iteration, the third prototype witnessed a more complete system with two modules as shown in Figure 6, the teacher module and student module where they could just register themselves by indicating their own status i.e., teacher or student, and start using the system.

The third prototype was used in a pilot study to identify any other possible problems when the system was implemented in actual classroom context with a myriad of users (teachers and students) who might or might not be interested in using the system. This pilot study in the DBR phase was carried out in an upper secondary school with 80 students and four teachers using a quasi-experimental research design where division of classes was set by the school which ranges from 10 to 24 students in each class, students were randomly put in two groups; the controlled and the experimental group. This school was selected because four out of six MUET teachers in this school had experiences in the actual marking of MUET essays, trained by the Malaysian Examinations Council.

A pre-test was conducted to gauge students' initial level in essay writing for both the controlled and experimental group.
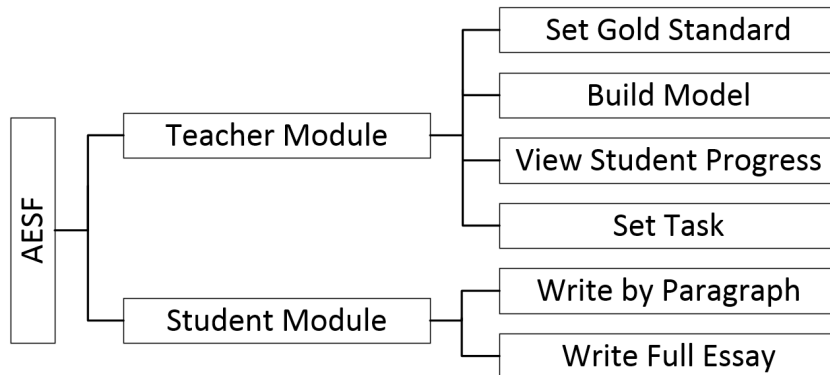
Figure 6. The modules in AESF

The pre-test was an open-ended opinion based essay derived from past year paper to ensure validity and reliability of the test. This was done using the conventional paper and pen method to provide equal grounds for both groups. Then, a common writing lesson was carried out based on the topic in AESF where half of the class (randomly assigned) used AESF and the others used the conventional paper and pen method to attempt the essays. This process was repeated for both essay topics with an interval of two weeks. A post-test, which was the same as the pre-test was conducted to measure students' achievement. The exact essay will allow students to write on similar topic area, but the structuring of the essay would be different, and their language achievement can be assessed.

The pilot test also included a questionnaire combining Instructional Material Motivation Survey (IMMS) developed by Keller (2010) to measure student's motivation level towards using AESF and a Technology Acceptance Model (TAM) survey developed by Davis and Venkatesh (1996) to measure students'

acceptance of AESF. These questionnaires have obtained written approval from the copyrighted owners. The findings of the questionnaire, as shown in Table 1, indicated that the Cronbach alpha coefficient calculated using SPSS showed that the questionnaire was reliable with overall alpha values of 0.94, exceeding 0.7 the criteria seen as appropriate for research purposes (Nunnally, 1978).

This pilot test had ensured that the questionnaire and the general working of AESF were well accepted by teachers and students while on the other hand, some practical problems surfaced. With mass usage, the server could not support the large amount of data entered and this led to server down or loss of link while students were using the system or when students tried to logon to the page. This caused frustration in users when they could not achieve what they wanted. In addition, this phase also detected other possible drawbacks such as students pretending to be teachers and went into the teacher's module to mess up setting of task and other possible functions in the teacher's module.

Table 1

Cronbach alpha coefficients for motivation and acceptance scale

Scale	Number of Items	Cronbach Alpha ($n = 41$)
Attention	11	0.73
Relevance	8	0.77
Confidence	9	0.63
Satisfaction	6	0.74
Total Overall Motivation	34	0.91
Perceived usefulness	6	0.87
Perceived ease of use	6	0.89
Total Overall acceptance	12	0.92
Overall Questionnaire	46	0.94
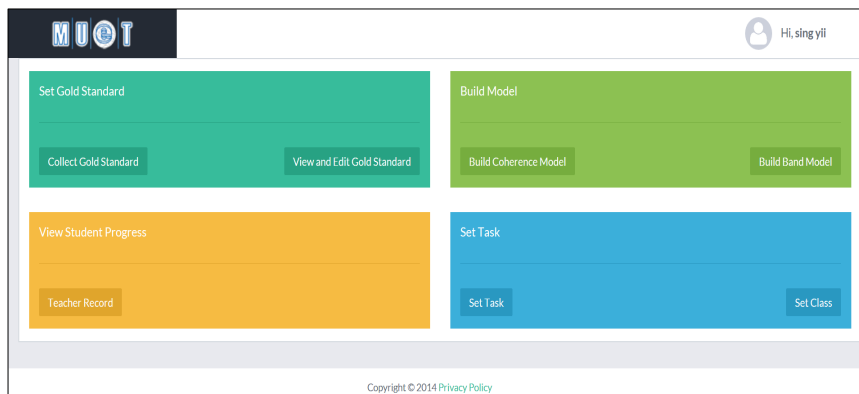
Figure 7. Teacher module

In line with the findings from the pilot study, it was indicated that AESF had to go back to phase two of the DBR to redesign and restructure the working and functionality of AESF to ensure smoother administration in context.

The fourth prototype had an improved server capacity and classified user permission so that 'super user' or the administrator can monitor all progress made by teachers and students. While teachers could build grading database, train new essays, set multiple tasks, view students' progress, and remark students' essays as shown in Figure 7.

Students on the other hand could write essay in the paragraph mode or full essay mode (refer Figure 8) where they could keep getting the system to provide marks and comments about their essays over and over again before they submitted their essays online to their teachers.

Teachers registered themselves using a special link given to them while students registered themselves online using their valid email addresses following a simple instruction as shown in Figure 9. This overcomes problems identified in the testing of prototype 3.

Figure 8. Student module

Figure 9. Student registration page

The fourth prototype was tested by 40 computer science students from a public higher education institute to check the performance and stability of the server when the 40 students logged on, used and submitted essays at the same time. This group of students was selected because computer science students were more aware of the possible problems and ways to crack or hack the system in order to minimise problem of adventurous students in the actual testing ground. This phase

observed minimal challenge, a handful emails received to seek clarification ranging from how register to how to use the system. This iteration had indicated that the system can go through another round of phase 4 DBR in actual teaching and learning context if more guidance were provided.

The fifth prototype included a video walkabout to assist students on how to proceed with written instruction. They can click on the 'Tips button' on the login page if they required additional instructions. Moreover, this video guide as shown in Figure 10 can serve as an introduction to students before they register and logon to use the system.

This prototype was finally introduced to five upper secondary schools involving 24 MUET teachers and a total of 400 students. These were the same five out of eight schools where gold standards were collected but with a different batch of students. Human factor was identified as a vital obstacle in conducting research in real life context because not all teachers and students were willing to take up the extra effort and time to try out the prototype. Many indicated their willingness to take part but eventually pulled out citing various excuses. Hence, this cycle only secured the commitment and participation of 18 teachers and a total of 300 students where 150 students used the system and 150 in the controlled group with the quasi experimental research design method applied. The other steps taken were the same as testing of the third prototype during the pilot testing.

Moreover, the initial planned time was fixed to be 2 months where each essay from pre-test, topic 1, topic 2 to post test, would have an interval of 2 weeks. However, all schools did not complete the tasks in time due to various unforeseen circumstances like national level exam, school level exams, sports day, celebrations, and teachers or students on emergency sick leave.
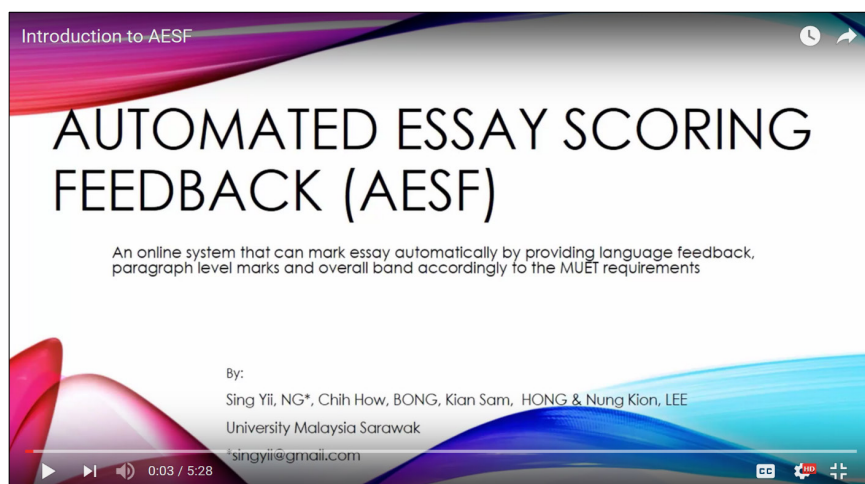
Figure 10. ASEF video guide
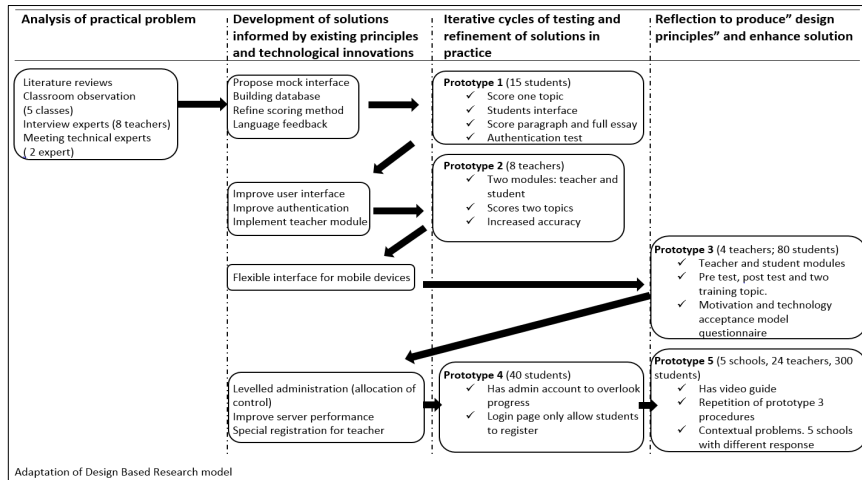
Figure 11. The design and development of AESF based on DBR model

RESULTS AND DISCUSSIONS

With the DBR approach used in suggesting, designing, developing and evaluating AESF as a technological intervention, it has allowed various iterations of refinement from scratch to the final workable AESF in classroom context. An effort made possible by the close cooperation between practitioners, researcher and technical experts to solve, not completely, but assist the most difficult problem in language teaching. The steps and iterations taken in realising AESF based closely on DBR is illustrated in Figure 11.

It can be derived that the process involved in producing the first to currently the fifth prototype is an uphill effort and is still subject to further exploration. DBR allows continuous improvement and introduction of new method, innovation and intervention to take place as recommended by users and experts. It is not as rigid as other research approaches that follow

strictly outlined hypothesis or framework. However, due to time constraint and limited resources, the achievement at the fifth prototype is considered sufficient to show the applicability of such an intervention in the writing classroom.

A quick review from Figure 12 indicated that all teachers accepted AESF intervention in their classroom though some faced problem implementing it, namely no internet access, no time to learn new system, students too busy with assignments and chasing syllabus. A teacher commented that if this system was introduced to them before the semester year started, then it would be easier for them to make way for it.

On the other hand, deriving from the TAM survey, student who used the system for essay writing perceived AESF as useful and easy to use. From Figure 13, most of the students scored the system positively, 3 and above suggesting that AESF could help them in their essay writing and operating it reasonably easy.
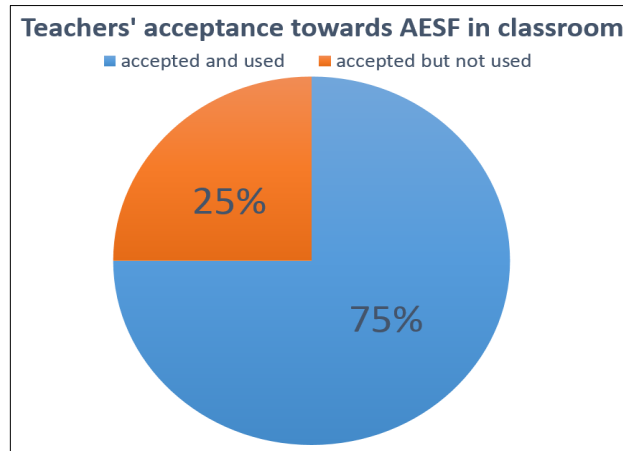
Figure 12. Teachers' acceptance towards AESF
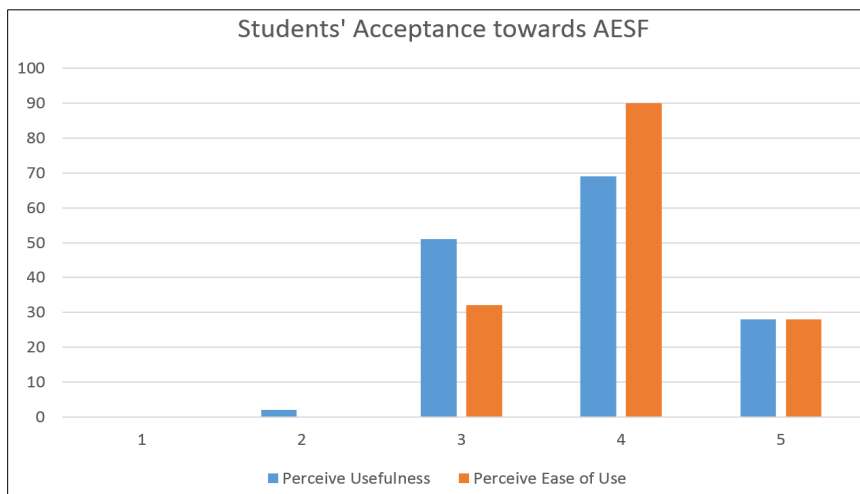
Figure 13. Students' acceptance towards AESF

The system is seen as accepted and is beneficial for both teachers and students despite some additional constructive criticisms that are useful for future iterations. One teacher particularly, confessed that she was initially sceptical about AESF but after she went through the system with her students, they were amazed by what the system can provide.

"…honestly, I was sceptical but after my students use it, I find it amazingly good. Well done." (Teacher 1)

This teacher even made use of the system for her students to check their other English based subjects, for the system to comment and correct their language command. This kind of remarks definite assured the DBR researcher to further

enhance and improve the system to benefit real classroom.

On the negative note, the system is still limited to only two topics which is insufficient to be used extensively. To have more topics will demand too much time for a teacher to collect, score, digitise and train the system. It is suggested that teachers who are in the same area can cooperate to build on the database to score a wider repertoire of topic. Some teacher also requested that the system provide word count and have option for reading model essays or link to search engine, so students can look up for more resources to craft their writings. These are grass root request that aims at solving real world problems.

CONCLUSION

In conclusion, DBR is an approach that allows every change in the development and evaluation of an intervention to be documented and scrutinised in accordance to the actual learning context where realistic measures can be taken to make it workable as it intended to. The process is laborious and requires flexibility in searching for the right method by intertwining the qualitative and quantitative method in data collection and analysis to seek solution. It is a difficult and time-consuming process, but the outcome is rewarding and fulfilling. ASEF may not be the perfect system because it involves too much time to get enough gold standards to train a topic and it depends fully on the internet connection and server performance to be workable, but this effort gives hope to language teachers and

students to tackle the writing component more confidently. AESF allows teacher to train new topic for marking, set task, check progress and certify score generated while for students, this system provides students the platform to practise writing and improve their skills independently. At present the system can grade and provide on-going feedback to users based on two well-trained topics while on untrained topic AESF can still provide grammatical feedback. It is planned to expand the marking repertoire to more topics by getting more students and markers to help expand the corpus for the benefits of all. Our study shows that automated essay scoring using artificial intelligence techniques is a practical and feasible method to score MUET essays.

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Using Rasch Model to Assess Self-Assessment Speaking Skill Rubric for Non-Native Arabic Language Speakers

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ABSTRACT

This study was conducted to assess the quality of the self-assessment speaking rubric adapted by Montgomery from Bill Heller in 2000. The rubric consisted of six aspects with a four-point rating scale and was originally written in English and aimed to be used by the English language learners. As the respondents of this research were the Indonesian students who learn Arabic language as a foreign language, the rubric was therefore modified and translated into Indonesian language. Rasch measurement model approach provides various analyses with empirical evidence about the quality of instrument by looking at the rating scale analysis, summary statistics, item fit, principal component analysis and Wright map. About 43 Arabic language learners from a university in Salatiga, Indonesia, were involved in this study. The finding showed that the four rating options were clearly understood by the respondents. All six items in the rubric were also appropriately measure students' speaking skills. High value of person (0.84) and item reliability (0.94) indicated good quality of both respondents and instrument. The Cronbach alpha value 0.83 indicated high reliability. To sum up, the self-assessment speaking rubric has a good quality to measure speaking skills and is appropriate to be used by students to self-assess their Arabic speaking ability.

Keywords: Arabic language, Rasch measurement model, self-assessment, speaking

INTRODUCTION

Many types of assessment have been

used to measure speaking ability. The assessment itself could be done either by the foreign language teachers or the students themselves, which is called as self-assessment. According to Blanche and Merino (1989) the first research on self-assessment (SA) was published for the first time since a long time ago in 1976, and it has continued to be used in L2 learning and education as well.

Gardner (2000) defined three different types of SA; they are teacher-prepared assessment, generic assessment and learner-prepared assessment. For the teacher-prepared assessment, all the criteria, content and instructions are prepared by the teacher, while students only need to do the assessment. Generic assessment means that the teacher stated only the criteria, while the content and assessment are done by the student. In student-prepared assessment, all work is done by students. Teachers give all autonomy to students to think about what criteria and content to be assessed; and at the end, students themselves are required to do their self-assessment.

Szyszka (2011) argued that there was a critical need to develop self-evaluation abilities among teacher trainees so that they would be able to use these abilities later when they became language teachers. Leger (2009) suggested that using self-assessment in the teaching and learning process would enable both learners and teachers to reflect on the learning process besides enabling mutual feedback. Gardner (2000) also encouraged foreign language learners to be equipped with good self-assessment skills.

It might help them to monitor their progress toward specific learning objective like speaking skill. Through self-assessment, learners would discover more about the specific aspects they need to improve then asking for help from their teachers.

Teacher-Prepared Self-Assessment Speaking Skills Rubric

Several established teacher-prepared assessment rubrics could be used to assess speaking skills in the classroom. Among them is the speaking self-assessment rubric adapted by Cherice Montgomery in 2000 from Bill Heller. This rubric was intended to be used by foreign language learners to assess their own ability in speaking. The rubric was developed to measure six aspects of speaking skill, namely: 1) pronunciation (Aspect1), 2) fluency (Aspect2), 3) vocabulary and circumlocution (Aspect3), 4) accuracy and comprehensibility (Aspect4), 5) content (Aspect5), 6) comprehension and strategy competence (Aspect6).

Fluency in speaking occurs when a speaker engages in a meaningful interaction with other people and he or she is able to maintain comprehensible conversation and keep the communication ongoing in spite of her or his lack of communicative competence (Richards, 2006). Students with good fluency in speaking will be able to speak in a foreign language well in front of their teachers and peers without many pauses which may interrupt the communication process.

The next aspect is accuracy, which means the ability to speak using grammatically correct sentences. Learners should not only

know the correct grammatical rules of the language but also be able to speak accurately (Srivastava, 2014). When people intend to communicate orally, they have to master the grammatical rules so that the listeners will not misunderstand the conversation.

Pronunciation deals with how to pronounce the language while speaking (Montgomery, 2000). The ability of speaking is the combination of correct pronunciation and intonation and directly affects the appropriate communication in conversation (Zhang & Yin, 2009). Someone with good pronunciation may sound like a native speaker. On the contrary, people with poor pronunciation may lead others to misunderstand what they are saying.

Good speakers should be able to correctly use a wide range of vocabulary. Montgomery (2000), in her rubric, measured students' capability in speaking by considering the vocabulary used by the students. Students who mastered a wide range of vocabulary would be more expressive in speaking a foreign language. To assess the content of speaking, she stated that someone with good mastery of the content would be able to explain something with detailed description.

The last criteria that will be assessed in speaking are comprehension and strategic competence. This deals with how someone is able to make good conversation in any kind of situation with other people (Montgomery, 2000). Montgomery added that students with good strategic competence will be able to manage their concentration while speaking though interrupted in the middle of speaking.

Some issues regarding self-assessment still exist in the teaching and learning process. Gardner (2000) stated that the issue was about validity and reliability, because assessments were only useful if they were accepted as valid and reliable. Some researchers have found learner self-assessment to be valid and reliable. Bachman and Palmer (1989), for instance, developed an instrument for English language learners to measure their communicative language ability and proved that self-ratings were reliable and valid. On the other hand, Dickinson (1987) stated that assessment performed by teachers and other specialists was likely more reliable than those by the learners.

To prove that the self-assessment speaking rubric is appropriate to be used and the data collected from it can be used by both teachers and leaners, further analysis is required. The empirical evidence of validity and reliability analysis of an instrument will help to determine the quality of data collected from the respondents.

Validity has been defined as the development of sound evidence to demonstrate that the test interpretation matches its proposed use (Creswell, 2012), while reliabilityrefers tothe degree of consistency with which the instrument measures what it is intended to measure (Ary et al., 2006). Rasch measurement model approach provides further analysis to assessthe validity and reliability of an instrument. As Bond and Fox (2015) stated, the Rasch measurement model

helps researchers to determine the extent to which the instrument actually measures the construct or latent trait under examination. While for the reliability, Rasch measurement model will produce the Cronbach's alpha value as well as item and person reliability. The item and person strata will also be described. Item strata is the number of item or person which reflects the measurably distinct groups of items or persons from the Rasch analysis (Bond & Fox, 2015).

This study was aimed at assessing the quality of self-assessment speaking skill rubric by providing empirical evidence about its validity and reliability using the Rasch measurement model approach. The objectives of the study are as follows: 1) to investigate the function of rating scale categories of the instrument, 2) to test the reliability of rubric items using Rasch measurement model, 3) to investigate the item fit of six aspects of speaking as stated in the rubric, 4) to investigate the unidimensionality of the rubric, and 5) to identify the distribution of both person and item in the map.

MATERIALS AND METHODS

Participants

This study was carried out in order to collect quantitative data from the respondents by distributing the self-assessment speaking rubric. A total of 43 Arabic language education students were purposively chosen to participate in this study since they were attending the Arabic speaking class or also known as *muhadatsah* class at the State Islamic University in Salatiga.

Instrument

The self-assessment speaking rubric used in this research was the one from Montgomery (2000). This instrument has undergone many changes for improvement. This self-assessment speaking rubric consists of six aspects of speaking skill and each aspect has four competence levels, namely memorized, guided, responsively adapted and spontaneously improvised. The rubric was originally written in English and was aimed to be used by foreign language learners. The researcher decided to use this rubric because Arabic language had also been learnt as a foreign language in Indonesia and the aspects of speaking skill being assessed were identical. In order to meet the objective of this research, the rubric was translated into Indonesian language and some modifications were made. Two experts were selected to check the translation and decide whether or not the students could understand it. Some words were changed based on the suggestions from the experts to make it more understandable by the students.

Data Analysis

All the data collected from the respondents were analysed using the Rasch measurement model approach by using the Winstep version 3.73. Rasch model provides a set of analyses to test the validity and reliability of the self-assessment speaking rubric. The Rasch analysis was conducted in 5 stages, they are 1) rating scale analysis, 2) summary statistics, 3) item fit, 4) principal component analysis, and 5) Wright map.

RESULTS

Rating Scale Analysis

To check the instrument validity and reliability is very important before conducting the real study because the quality of the data collected would also depend on it. Anyone who develops an instrument would also consider what type of scale or response option would be the most suitable for the objective of the instrument. Some might often use a simple "yes/no" response, while others use frequency scale "never/sometimes/often/always" and some others might consider using a Likert type scale from "strongly agree to strongly disagree". Thus, the rating scale or response option used in the instrument must be tested empirically to check whether the response options are unambiguous and whether respondents could differentiate between the options given (Bond & Fox, 2015).

Linacre (1999) had explained that the initial stage needed to be done before doing further analysis about instrument in investigating the function of rating scale categories used in the instrument. The Rasch measurement model approach provided empirical analysis of rating scale. Figure 1 illustrated the rating scale analysis of self-assessment speaking rubric that puts four rating scales in every item.

Rasch measurement model enabled us to check whether the four rating scales used in the rubric should be collapsed or separated as well as whether these four rating scales were understood by the respondents. The value of the observed average that increased monotonically from -4.46 which was negative value to 3.63 which was positive value indicated normal response from the respondents.

The value of the Andrich Threshold calibration appeared in the next column also needs to be taken into consideration. The s values or distance between two categories as written in the column Andrich Threshold must be in the acceptable range of $1.4 < s < 5.0$ (Aziz et al., 2013). The gap from one scale to another scale was still in the acceptable range, and it could be concluded that the four rating scales were clearly understood by the respondents. The figure above also showed that all the rating scales peak above 60% (red line) showing that respondents understood fully the different choices of rating.

Fit statistics also offered another criterion for examining the quality of the rating scale. The value of outfit mean-square bigger than 2 means that the particular category is introducing more unexpected noise than the expected noise into measurement process (Linacre, 1999). Table 1 shows that all the outfit mean square values were less than 2, indicating that the quality of four rating scales of the rubric is good.

Summary Statistics of the Rubric

Table 2 describes the summary statistic of the rubric:

The table shows that the mean was -1.07, which was below the mean of item (0.00), indicating that many students assumed their ability in speaking Arabic language according to the given criteria

Table 1

Rating scale analysis

Score & Rating	Observed count (%)	Observed Average	Andrich Threshold	Outfit MNSQ
1 = memorized	42 (16%)	-4.46	None	0.89
2 = guided	114 (44%)	-1.75	-3.98	0.96
3 = responsively adapted	89 (34%)	0.72	-0.47	0.96
4 = Spontaneously Improvised	13 (5%)	3.63	4.45	1.13
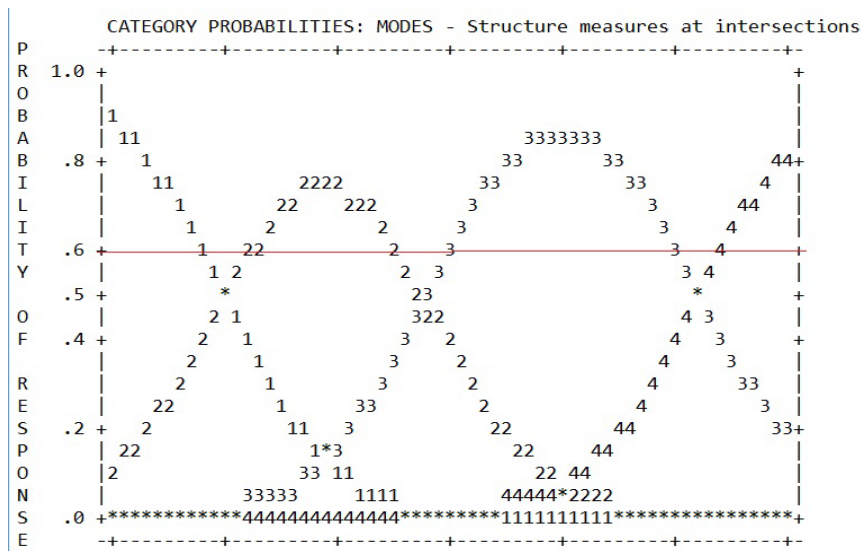
Figure 1. The item response probability of the instrument.

Table 2

Summary statistics of self-assessment speaking rubric

	Mean	Standard Deviation	Strata	Reliability	Cronbach's Alpha Value
Person	-1.07	2.33	3.41	0.84	0.83
Item	0.00	1.27	5.45	0.94	

was slightly low. The person strata (3.41) was categorized as good while the item strata 5.45 was excellent. The bigger value of person and item strata indicated good quality of instrument because it could measure various groups of respondents and items (Sumintono & Widhiarso, 2015). The value of person strata (3.41) enables us to categorise the respondents into three groups of low, average and high ability students.

The person and item reliability as shown in Table 2 was 0.84 and 0.94 respectively, implying that the respondents' responses were consistent and the rubric items were

highly reliable. Cronbach's alpha value of the self-assessment was 0.83 indicating that the overall interaction between respondents and items was highly reliable (Cohen et al., 2007).

Item Fit

The following Table 3 describes the item fit of the six items in the self-assessment speaking skill rubric:

Table 3 shows the Outfit Mean Square (MNSQ), Outfit Z Standard (ZSTD) and also Point Measure Correlation (Pt Meas Corr) of the items in the self-assessment speaking rubric. These three criteria can be used to examine whether or not the items are fit with the model with the value of the Outfit MNSQ that should be in the range 0.5<MNSQ<1.5, Outfit ZSTD value must be between -2.0<ZSTD<+2.0 and the Pt Measure Corr which must be in the range of 0.4<Pt Measure Corr<0.085 (Boone et al., 2014).

The value of items' Outfit MNSQ are all acceptable according to the above mentioned criteria, as well as the value of Outfit ZSTD.

There were no items with nearly zero or negative value of Point Measure Correlation indicating there was no item polarity in the rubric or no problematic item which was inconsistent with the construct (Bond & Fox, 2015). Those results showed that all items in the self-assessment speaking rubric were good. It means that all items were valid and could be understood by the respondents.

Principal Component Analysis

The following Table 4 describes the unidimensionality of the rubric:

Unidimensionality, which can be assessed using the principal component analysis, is one among many important aspects in the Rasch model approach that is aimed at examining whether or not the instrument measures only a single underlying attribute (Bond & Fox, 2015) because a good instrument is an instrument which only measures one single variable. The mentioned attribute intended to be measured in this context is students' speaking skill.

Table 3

Item fit

Item	Measure	Standard Error	Outfit MNSQ	Outfit ZSTD	Pt Measure Corr
4	-0.66	0.30	1.14	0.7	0.71
6	-0.48	0.30	1.16	0.8	0.71
1	-0.57	0.30	1.11	0.6	0.64
2	-0.57	0.30	1.00	0.1	0.72
3	2.84	0.34	0.67	-0.8	0.83
5	-0.57	0.30	0.68	-1.6	0.80

Table 4

Principal component analysis of the rubric

```
TABLE 23.0 Rubric.sav                    ZOU527WS.TXT  Sep  4 16:15 2017
INPUT: 43 PERSON  6 ITEM  REPORTED: 43 PERSON  6 ITEM  4 CATS    WINSTEPS 3.73
--------------------------------------------------------------------------------

     Table of STANDARDIZED RESIDUAL variance (in Eigenvalue units)
                                                -- Empirical --    Modeled
Total raw variance in observations     =      15.8 100.0%          100.0%
  Raw variance explained by measures   =       9.8  62.1%           61.4%
    Raw variance explained by persons  =       5.8  36.9%           36.5%
    Raw Variance explained by items    =       4.0  25.2%           24.9%
  Raw unexplained variance (total)     =       6.0  37.9% 100.0%    38.6%
    Unexplned variance in 1st contrast =       2.0  12.6%  33.3%
    Unexplned variance in 2nd contrast =       1.3   8.2%  21.7%
    Unexplned variance in 3rd contrast =       1.1   7.2%  19.1%
    Unexplned variance in 4th contrast =       0.9   5.5%  14.5%
    Unexplned variance in 5th contrast =       0.7   4.3%  11.3%
```

Note: The recommended font to be used in the original output table from Rasch analysis is Lucida Console 8.

Table 4 shows the value of both raw variance explained by measures and unexplained variance in the 1st contrast. The value of raw variance explained by measures of the self-assessment rubric (62.1%) has exceeded the minimum requirement of 40% while the unexplained variance in the 1st contrast (12.6%) is less than the maximum value of 15%. It can be said that all the items are going to the same direction which is measuring only one variable as it is intended, and that is speaking skill.

The Wright Map

The following Figure 2 described the distribution of both items of rubric and respondents of the study. The left side of the map shows the distribution of the measured ability of students from high ability students (students number 41 and 42) at the top to low ability students at the bottom of the map (student number 35); whereas the right side

of the map shows the item distribution in descending order of difficulty.

Wright and Stone (1999) explained that the arrangement of items corresponded to the arrangement of person. Low ability students were below those high ability students; besides that, the easiest items were placed below the most difficult items. According to the students' opinion on their self-assessment about their own skill in speaking, the most difficult aspect of speaking was vocabulary (Aspect3) whilst the easiest aspect was accuracy (Aspect4).

It could be seen that there are many students (on the left side) who have been placed below the lowest item (on the right), implying that many students rated their speaking ability as low.

DISCUSSION

Examining the validity and reliability of the instrument before conducting the

Figure 2. The Wright Map for the instrument

study and collecting the data is very important (Arasinah et al., 2015). The Rasch measurement model approach provided the empirical evidence to prove the quality of the instrument by providing the empirical evidence. The quality of the self-assessment speaking rubric developed by Montgomery in 2000 was examined over several stages. The rubric consists of six items with a four-point rating for each item.

The rating scale analysis showed that respondents were able to clearly differentiate all four rating scales as provided in the rubric by looking at several criteria such as value of observed count and average, Andrich Threshold, Outfit Mean Square and the rating scale peak that exceeded 60% meaning that there is no rating scale needed to be collapsed. To sum up, the four-rating scale category could be continuously used in this rubric.

Person reliability showed high value which indicated the consistency of respondents in giving the response or answer

to the items given. At the same time, the item reliability was also high which indicated good quality of items. The bigger value of person strata showed that the instrument could measure various different groups of respondents. The person strata could also be used to divide the respondents into three different ability levels, namely high ability, average ability and low ability students. It could also be used to classify the items difficulty, such as difficult items and easy items.

Item fit explained whether or not the items carry its function to measure the variable (Sumintono & Widhiarso, 2015) by referring to the Outfit Mean Square, Outfit ZSTD and Point Measure Correlation of items. The result showed that all the values of each item fell in the accepted range of Outfit Mean Square, Outfit ZSTD and Point Measure Correlation, meaning that all items were fitted to the model and those six items successfully carried its function as to measure the speaking skill. It could be concluded there is no misconception with the items and all the items could be understood by the respondents.

Meanwhile, the principal component analysis showed that the value of raw variance explained by measure (62.1%) had exceeded the minimum requirement of 40% and the value of unexplained variance in the 1st contrast did not exceed 15%. This indicated that all the items in the rubric had successfully measured the same variable, as it was intended to measure, which was speaking skill (Aziz et al., 2013).

The last one was the analysis of the Wright map which illustrated the distribution of students' ability in speaking Arabic language based on some certain criteria as stated in the rubric as well as the difficulty level of each aspect of speaking skills. The most difficult aspect of speaking was vocabulary, whereas the easiest one was accuracy. Many students rated themselves as average and low level in speaking, because more students were put at the bottom of the map compared to those who were placed at the top of it. The distribution of items at the right side of the map showed that the items were not evenly spread from the top to bottom. This indicated that the items were slightly too difficult to be mastered according to the students' perception.

The findings of this study might help the teachers to identify how learners assess their own ability. This might give important information to the foreign language teachers as well about what is needed to be improved in the teaching and learning of speaking skill. Giving authority to the learners to assess their ability would give them responsibility for their learning besides preparing them to be the future language teachers who have good judgment skills to assess their students' speaking skills.

CONCLUSION

It could be concluded that the four-point rating scale categories used in this rubric were clearly understood by the respondents by looking at its calibration. The rubric has a good quality to measure speaking

skill by referring to the summary statistics, item fit and principal component analysis. The Cronbach's alpha value as well as the item and person reliability indicated high reliability which means that the rubric was appropriate for use by learners to assess their own speaking ability. Foreign language teachers may also consider to employ this self-assessment speaking rubric in their teaching and learning in order to identify the students' perception about their ability. Furthermore, both teachers and students will be able to discover what should be improved in their teaching and learning process in order to achieve the learning goals.

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Students' Perceptions on the Use of Mobile Learning to Improve Writing Proficiency in the MUET

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ABSTRACT

The Malaysian University English Test (MUET) has been used as a tool to measure students' proficiency in the English language. It serves as a prerequisite for entry to tertiary education, as well as a requirement for graduating students, particularly those pursuing a non ESL programme. Students' continuous poor performances in the writing component in MUET resulted in the revamp by the Malaysian Examination Council. In analysing the cause for such poor performances, this study aims to investigate pre-university students' perceptions on the use of mobile learning (e.g., learning via smartphone, iPad, tablet computer and Personal Digital Assistant) for writing. A total of 157 pre-university students from five national secondary schools in Betong, Sarawak were involved in this study. This study employed a mixed-method approach. The findings indicated that a majority of the students had positive perceptions on the use of mobile learning. The use of mobile learning could enhance the students' proficiency in English language. This is crucial because having excellent proficiency helps to improve students' writing skills and performance. By integrating the elements of ICT in learning, it also meets the Malaysian Education Blueprint necessity to maximise the use of ICT in the classroom; in line with the twenty-first century learning.

Keywords: Malaysian University English Test, mobile learning, pre-university students, proficiency, writing.

INTRODUCTION

The essential role of English language in schools and tertiary institutions has been acknowledged long before Malaysia gained independence in 1957. Proficiency and competency in the language seem to be the passport to better academic achievement, career and life (Rethinasamy & Kee, 2011). With greater demand on the use of English in various arenas, it is a must to master the language. Realising this importance, various means are taken by local universities in the hope of assisting students to improve their proficiency in the English language. One of these means is through offering a series of English language exams namely, the International English Language Testing System (IELTS) and The Test of English as a Foreign Language (TOEFL). These are the compulsory tests for graduation requirements. In Malaysia, where English is officially taught as a second language, the Malaysian University English Test (MUET) is widely used as a benchmark to determine a student's proficiency in English. It also serves as a prerequisite to admission for tertiary education, as well as a condition for graduation. In schools, MUET is a compulsory test for sixth formers, currently known as pre-university students. However, MUET can be onerous especially in writing. This difficulty arises due to the first language interference and lexical weaknesses (Ponnudurai & De Rycker, 2012).

In the Malaysian English Language curriculum, writing is a fundamental skill that needs to be acquired and mastered by all students (Ministry of Education Malaysia, 2013). In spite of being exposed to English since primary level, many pre-university students remain poor in the language. This factor affects their ability to write well. It has always been a daunting task for them. The interference of the first language and their lack in academic vocabulary are very perceptible to Malaysian students. Due to these factors, it not only reduces the pleasure of reading, but also discourages students from writing (Tan et al., 2011). A report by the Malaysian Examination Council shows that 33.15% of 72701 candidates who sat for the November 2013 MUET paper only scored Band 3, classifying them as 'Modest User' (Bernama, 2014). This result is a cause of worry among both educators and parents. At the pre-university level, much credit is given to the writing component.

Today, the major advancement of technology has rapidly affected all areas of lives, particularly in the field of education. The traditional English language classroom has been transformed and diversified as technology has enabled the teachers to use various methodological and pedagogical strategies to conduct a fruitful teaching and learning process. Berk (2009) claimed that traditional classroom settings demotivated and disconnected almost 50% of high school students from their learning process. Under these circumstances, it is vital that teachers integrate information and communication technology (ICT) elements in their teaching and learning in order to cultivate students' interests in their writing lessons.

ICTs appear in various forms. Thus, the mobile device is seen as the right tool for fostering education because 90% of students below the age of 18 have access to mobile technology (Valk et al., 2010). Thus, integrating mobile learning with the teaching of writing is sound. Mobile learning is not foreign to educational technology and it can be applied for various subjects. It has been effectively proven to improve language skills (Azar & Nasiri, 2014). This revelation supports the claim made by Zaki and Md Yunus (2015) that stated the potential for learning writing using mobile learning was high. Therefore, it is of utmost importance to better understand the pre-university students' perceptions on the use of mobile learning using devices such as the smartphone, iPad, tablet computer and Personal Digital Assistant in the learning of writing skills for MUET.

LITERATURE REVIEW

Malaysian University English Test (MUET)

The Malaysian University English Test (MUET) was first introduced in 1999 by the Ministry of Education and it is largely recognised in Malaysia and Singapore. The full implementation of the exam was in 2000. The Malaysian Examination Council is the national body responsible for overseeing and administering the exam. In Malaysian national schools, pre-university students, consisting of Lower Six and Upper Six students, have to sit for the MUET. It is a prerequisite requirement for Malaysian public university admission (Rethinasamy & Kee, 2011).

Having a full mandate on the implementation of MUET, the Malaysian Examination Council (2005) stated that the MUET aimed to gauge pre-university students' proficiency in English and bridged the gap between language and communication needs especially between secondary and tertiary education. Integrating the MUET into the pre-university syllabus is one of many ways to help students improve their language competence as well as foster their higher order thinking skills. This is in line with the aspiration of the Malaysia Education Blueprint to develop first class human capital (Ministry of Education Malaysia, 2013).

The MUET assesses students' competence in the four language skills of listening, speaking, reading and writing. In 2008, the Malaysian Examination Council revamped the format for MUET so that it would be aligned with the specification emphasised by the Ministry of Higher Education, Malaysia. The first test based on the new MUET specifications was administered in November 2008. Since 2012, the exam has been conducted thrice a year, in March, July and November (Kok et al., 2013).

Students' Writing Performance in MUET

The rapid decline in the English language in Malaysian schools is a cause for worry for everyone concerned. Left unchecked, the country would lose its competitiveness in the field of technology and industry. In the Malaysian Education Blueprint 2013-2025, the Ministry of Education

Malaysia (2013) is committed to equip young Malaysians with knowledge, who utilise higher order thinking skills, possess leadership skills and most importantly, have the ability to communicate in English. Thus, it is essential for pre-university students to achieve a good score in the MUET to fulfill those aspirations. However, researches have shown that pre-university students encounter problems in the writing component in English in the MUET.

Kaur and Nordin (2006) had stated that the achievement of students in the MUET writing component had been unsatisfactory. The finding from their study showed that 29.2% of the 120,000 graduates managed to score Bands One and Two in their MUET, categorising them as 'Extremely Limited User' and 'Limited User' respectively. The researchers also found that language incompetence was the main factor that contributed to the poor performance in writing.

Other researchers, Lee Allen and Lee (2011) carried out a research on the involvement of higher order thinking skills in the MUET among 55 pre-university students. They were provided with a comprehensive questionnaire, a detailed interview with an expert and an assessment of the syllabus specifically selected for the MUET preparation course. The study revealed that students had low synthesis skill. This skill is vital in writing as it enables students to generate ideas in order to be a critical and creative thinker for writing (Langan, 2005).

The study by Tan et al. (2011) on the effects of reciprocal teaching strategies on reading comprehension also revealed that students who had a low proficiency in English could not comprehend the reading texts in the MUET. As the students could not read or comprehend the texts independently, they also could not extract and process the information effectively. This skill is linked to writing. Hence, it can be concluded that students must possess good reading skills in order to write fluently.

Similarly, a study done by Omar et al. (2013) revealed that a majority of the pre-university students had yet to master the writing skills demanded in the MUET. Additionally, the analysis of the open-ended responses given by the students showed that a lack of vocabulary was the main reason for poor report writing. Based on these researches, there is an urgent need to improve writing proficiency among pre-university students.

Benefits of Using Mobile Learning in Enhancing Writing

In the twenty first century learning, the use of ICT in classrooms is not a strange phenomenon. The Ministry of Education Malaysia (2013) reported that they had spent more than RM6 billion on ICT over the past decade for educational purposes. Through this investment, it is hoped that students will benefit from its impact as they will have unlimited access to educational contents that are not only current but also more engaging and interactive in nature. ICT facilities will be ever present in schools. There will be no

disparity between urban and rural schools, and all teachers and students alike would be equipped with the required and essential technological skills. There are many forms of ICT and one of the most popular is the mobile device. According to Valk et al. (2010), a mobile device can be a beneficial tool for education advancement. Zaki and Md Yunus (2015) who shared the same view, added that mobile learning had great potential for use in academic writing.

There are numerous benefits to using a mobile to improve writing skills. First, learning using mobile devices can sustain a high level of student's engagement in the teaching and learning process. Current mobile devices are usually equipped with high resolution digital production features like the camera, video and audio recorder. Apart from that, there is the availability of applications that are educational in nature. These interactive multimedia tools can improve students' engagement in the teaching and learning process (Hlodan, 2010; Liu et al., 2014). When students are actively engaged in the learning process, it will motivate them to complete the tasks, leading to a positive impact in their writing performance (Embi et al., 2013).

Secondly, learning a language using mobile devices also promotes interactive and interesting writing activities. Studies by Yovanoff et al. (2005) and Ashrafzadeh and Nimehchisalem (2015) showed that the core problems faced by ESL learners in their mastering of writing skills in English were a lack of vocabulary and poor grammar. The integration of mobile learning in the teaching of writing, as suggested by Zhang (2015), could help to solve these problems. Nowadays, mobile devices are designed with many good and up-to-date applications which could help students practise their writing and grammar skills while offering them opportunities for fun learning. This will make the writing process more stimulating.

Thirdly, mobile learning provides sufficient learning materials and supports the writing process. Students usually need to search for a lot of information during the planning and drafting stages before they can write a good piece. With the help of mobile technology, students can effectively access various online resources which could help them to generate more ideas and gain information on the topic (Zhang, 2015). It is less time consuming as students can easily access online dictionary and thesaurus which provide additional support for writing (Liu et al., 2014).

Last but not least, mobile learning saves time. With the rapid advancement of technology, students will find it easier to complete their writing task. Chang and Hsu (2011) explained that mobile learning enabled students to initiate their learning process without the constraints of time. Today, the growth of mobile devices with advanced features places the learning process in the students' hands. Hence, mobile learning is considered to be flexible which will provide more opportunities for the students to improve their writing skills at their own pace. In short, it can be said that mobile learning facilitates students'

acquisition of knowledge that in turn, facilitates the writing skills.

RESEARCH QUESTIONS

The key objective of the study is to investigate pre-university students' perceptions on the use of mobile learning in the writing component of the MUET. The fundamental questions addressed in this study are:

- what are pre-university students' perceptions on the use of mobile learning to learn writing skills for the MUET?
- how mobile learning can be fully utilised by pre-university students as an effective tool in learning writing skills for the MUET?

METHODOLOGY

The research design of this study is a mixed-method design. One hundred and fifty seven (157) pre-university students from five national secondary schools in Betong, the eleventh administrative division in Sarawak, participated in the study. The English language proficiency of these students differed and their selection was based on convenience sampling. Questionnaire and open-ended questions were used as the main instruments of this study. Some items in the questionnaire were adopted from the two studies entitled 'Students' Perceptions of Edmodo and Mobile Learning and Their Real Barriers Towards Them' by Al-Said (2015) and 'Language Learners Perceptions and Experiences on the Use of Mobile Applications for Independent Language Learning in Higher Education' by Nino

(2015). In order to obtain comprehensive and required data, students were also required to answer four open-ended questions stated in the questionnaire. The questions were viewed and commented by the subject experts; a lecturer from a public university and a School Improvement Specialist Coach from the district education office. The assessment from these experts is of utmost importance in order to ensure the reliability and validity of the questions used in this study.

FINDINGS AND DISCUSSIONS

The findings are divided into three parts; general background of the respondents, pre-university students' perceptions on the use of mobile learning and the utilisation of mobile learning in MUET writing. A frequency distribution of data obtained from the Likert-style items questionnaire is presented in a table and only the relevant findings are highlighted.

General Background of the Respondents

One hundred and fifty seven (157) respondents from the Science and Arts streams participated in this study. They have already undertaken the Malaysian Certificate of Education, which is a national examination taken by Form Five students. A frequency data was used to analyse the results of the study.

Based on Table 1, it can be concluded that students' English proficiency level was mostly of average level. 38.2% of the students were in favour of reading. In

Table 1

General background of respondents

	Classification	Frequency	Percentage
Gender	Male	71	45.2
	Female	86	54.8
	Total	157	100
English language proficiency	Excellent	2	1.3
	Good	26	16.6
	Average	79	50.3
	Fair	31	19.7
	Poor	19	12.1
	Total	157	100
Favourite MUET component	Reading	60	38.2
	Writing	26	16.6
	Listening	14	8.9
	Speaking	57	36.3
	Total	157	100

MUET, the reading assessment format only requires students to answer multiple-choice test items. The listening component was least favoured among the respondents (8.9%) probably because of its little weightage in MUET.

Pre-university Students' Perceptions on the Use of Mobile Learning

This section presents students' perceptions on the use of mobiles for the learning of writing skills for MUET. A total of six items were asked to the respondents and the results are presented in Table 2.

Based on the Table depicted above (Table 2), the students showed positive perceptions towards the use of mobile learning in the learning of writing skills for

the MUET. A total of 82.8% of the students agreed that they had knowledge of mobile learning. This finding is in accordance to the study conducted by Valk et al. (2010) which stated that 90 percent of students had access to mobile technology. Thus, it is no surprise that the students had the ability to make efficient use of mobile for learning. The findings also revealed that 79.6% of the students agreed that the use of mobile learning was relevant. Mobile device could be seen as a convenient tool to replace the use of computer or laptop in learning writing skills. The result was supported by two students, who said:

The use of mobile learning is relevant because all students have their own mobile. We can do learning anytime and anywhere

Table 2

Pre-university students' perceptions on the use of mobile learning

Statement	Strongly Disagree and Disagree N (%)	Uncertain N (%)	Agree and Strongly Agree N (%)
Relevance		32 (20.4)	125 (79.6)
Knowledge on mobile learning	2 (1.3)	25 (15.9)	130 (82.8)
Effectiveness	3 (1.9)	67 (42.7)	87 (55.4)
Enjoyment		54 (34.4)	103 (65.6)
Easiness		38 (24.2)	119 (75.8)
Searching for different writing apps	6 (3.8)	60 (38.2)	91 (57.9)

because it is easier to bring mobile than textbook or dictionary.

(Respondent 7)

I don't have to bring a lot of stuff such as books, pen or any examination sheets for writing to school every day. I just need only my smartphone to accomplish all the tasks. I strongly agree on the use of mobile learning in learning writing for MUET.

(Respondent 89)

Despite having knowledge on the use of mobile learning, only 55.4% of the students opined that using mobile learning increased the effectiveness of learning writing for MUET. The students probably did not have enough knowledge on the yardstick for gauging its effectiveness.

Overall, the findings in Table 2 may be interpreted positively as the majority of students had a positive perception of mobile learning. This is apparent because the range was from 55% to 83%. The fact that students had knowledge of mobile learning simply shows that they fully maximised the use of ICT in their learning. This is in line with the twenty-first century learning skills suggested by the Ministry of Education Malaysia (2013). It is also undeniable that using mobile to learn writing skill is relevant to the students. This could lead to the betterment of students' performance in the writing component in MUET. This had been verified by Azar and Nasiri (2014) who pointed out that mobile learning could boost writing skills.

The Utilisation of Mobile Learning

This section presents some aspects of how mobile learning can be fully utilised as an effective tool in learning writing for MUET. The results are shown in Table 3.

Table 3

The utilisation of mobile learning

Statements	Strongly Disagree and Disagree N (%)	Uncertain N (%)	Agree and Strongly Agree N (%)
Writing development	1 (0.6)	34 (21.7)	122 (77.7)
Creating enjoyable learning environment		23 (14.6)	134 (85.3)
Generating interest to learn writing	1 (0.6)	29 (18.5)	127 (80.9)
Improving English language proficiency	1 (0.6)	19 (12.1)	137 (87.2)

The table above shows that a majority of the students (87.2%) was in agreement with the use of mobile to help improve their English language proficiency. As English is widely used in all mobile learning applications, it provided ample opportunities for the students to learn the language. These findings were supported by two of the respondents, who said:

The use of mobile learning helps me to improve my English. This is because I can download many types of learning applications to improve my English.

(Respondent 24)

Mobile learning can help me to search for writing materials for MUET. In my opinion, I can install Webster dictionary to help me translate or know the meaning some of the unfamiliar words to improve my English language. For that reason, it can make me good in learning writing for MUET.

(Respondent 88)

The students (85.3%) also held strong belief that the use of mobile learning creates an enjoyable learning environment for writing activities in the classroom. This finding coincides with Zhang's (2015) study which reported that many good applications were designed for mobile devices to promote fun learning. Additionally, 80.9% of the students was also in favour of applying mobile learning to help them increase their interest in writing. This finding supports Hlodan's (2010) view on the role of mobile devices as an interactive multimedia tool to engage students in the teaching and learning process.

On the other hand, only 77.7% of the students agreed and strongly agreed that the use of mobile learning contributes to the development of their MUET writing. One of the respondents commented:

Sometimes, it's difficult to draft my writing using mobile device because the screen is smaller than the computer's screen. Besides, I don't feel comfortable reading academic journals or long information using mobile because it's hard to read it.

(Respondent 117)

It can be said that the range of 77.7% to 87.2% obviously showed that the students perceived that mobile learning can be fully utilised as an effective learning tool in MUET for writing skills. Its ability to help in improving students' English language proficiency can be described as nothing short of excellent.

IMPLICATIONS

The findings of the study are not only beneficial to pre-university students in secondary schools, but also to other students in teacher training institutes, colleges, universities, polytechnics or any other educational institutes. The study is a booster to the implementation of the current twenty-first century learning strategies in the English language classroom. Traditional teaching methods such as the "chalk and talk" no longer conforms to the needs of the today's students. Learning writing skills through the use of mobile for instance, encourages the students to be interactively engaged in their learning task.

Other than that, the study also serves as the touchstone of the learner-centred approach for the MUET writing class. Since students these days are IT-savvy, they only need to be taught how to explore their own learning. The teachers only play the role of facilitators. Changing the teaching method once in a while allows teachers to have more time to explore new teaching materials. Furthermore, mobile learning is proven to be less time consuming. Consequently, both teachers and students would benefit from its implementation. Teachers will have ample time to prepare an enjoyable and interactive lesson. Students too, will be motivated to learn.

CONCLUSION

The findings of this study match the results of many previous studies on the use of mobile learning. The findings on students' perceptions on the use of mobile learning, with regard to its relevance and having knowledge of mobile learning match the findings of the study conducted by Valk et al. (2010). It also meets the needs of the Ministry of Education Malaysia (2013). The findings on the utilisation of mobile learning tallied with the expert's opinion like Hlodan (2010) and the studies done by Zhang (2015).

Overall, the study managed to gain positive responses among the students regarding the use of mobile learning to master writing skills for the MUET. The data from the survey and open-ended questions revealed that the students had good knowledge on the use of mobile for learning. It is thus proven there is a significant relevance in using mobile learning for mastering writing skills. This indeed supports Zaki and Md Yunus's (2015) views on the high potentiality of applying mobile learning to teach writing skills. It is apparent too that the utilisation of mobile learning could enhance students' English language proficiency. Consequently, this can be an excellent medium for cultivating students' interest to learn the English language.

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The Immediate and Delayed Effects of Explicit and Implicit Corrective Feedback Types on EFL Learners' Phonological Errors

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ABSTRACT

Error treatment is one of the crucial factors in successful language learning; however, it is an important question if the feedback for error treatment should be provided implicitly or explicitly. The existing problems in the students' pronunciation motivated the researchers to compare two types of corrective feedback, explicit vs. implicit, in treating learners' phonological errors in terms of their immediate and delayed effects. For this purpose, the researchers selected 32 female participants in the upper-intermediate level English classes in Talash language institute located in Ghir out of 50 students through administration of The Certificate of Proficiency in English Speaking Test. The selected participants were randomly assigned into two groups. Both groups took a pronunciation pre-test and then one of the groups received explicit feedback; whereas the other group got implicit feedback. The participants' probable progress was measured immediately after the treatment and one more time after a four-week delay. The collected data were analyzed by running independent samples t-tests on the pre-test and post-test scores. The results of the data analysis revealed that corrective feedback types, explicit and implicit, differ from each other in terms of their immediate and delayed effects on treating the participants' phonological errors in favor of the explicit one. The results of this study could help language teachers, EFL learners, and also material developers in providing better

conditions through selecting the best type of feedback on errors for learning English pronunciation and treating phonological errors.

Keywords: Corrective feedback, delayed effect, immediate effect, phonological errors

INTRODUCTION

Error treatment is among the major factors necessary for providing a successful learning atmosphere especially in a communicatively oriented classroom. In fact, learners' errors should not be considered as sins but rather treated as developmental signals. Regarding this issue, errors can be classified into three major types as grammatical, lexical, and phonological. In the case of treating these errors despite their great importance, phonological errors are the least attractive ones for the teachers and the roots of such attitude toward phonological errors lie in the fact that low level of stress is always put on this skill (Dalton, 1997).

To Engwall (2006), in traditional teaching methods based on behavioral theories, like audiolingual method, errors were corrected immediately since these methods followed the idea that individuals were totally receptive animals, whose activities were found by inside or outside forces to gain reward or avoid punishment.

Nowadays, within academic settings, English is extensively used for different purposes (Kashefian-Naeeini, et al., 2018) in different international conferences, in tertiary education and for internet education (Mousavi & Kashefian-Naeeini, 2011).

People from different social and economic classes or from different age groups and with different educational backgrounds are intended to take some English courses as their evening classes. There is one common fever among all these different groups of learners: becoming a fluent and a fast speaker of English with a native-like accent, as soon as possible. And exactly because of this fever, language teachers observe somehow exaggerated forms of pronunciation in their classes by these enthusiastic learners. Sometimes this kind of pronunciation can totally hinder the perception of the meaning of the utterance and intention of the speaker.

Despite the importance of treating the grammatical and lexical errors that cannot be denied, it seems that one of the main obstacles in oral communication on the way of understanding and being understood is mispronunciation. Sometimes the learners are not able to produce the correct form of the words, nor to receive it. Thus, this failure causes lots of problems in listening comprehension. Applying an efficient method for treating such errors is inevitable, so one of the most important duties of the teachers is to implement acceptable methods of error treatment in response to these phonological errors which are efficient enough, not offensive though.

Two major categories of corrective feedback in the area of second or foreign language learning are implicit and explicit, and the efficiency of each one of these corrective feedbacks can be observed through learners' uptakes. To present a

critical analysis of the effectiveness of each type of these corrective feedbacks, learners' uptakes can be controlled in both immediate and delayed context of error correction. By delayed uptake, one can study the efficiency of the corrective feedbacks in the long-term. Learners are more probable to use true target language forms in contexts and conditions that need a careful style (i.e., reading aloud a list of isolated words), and more probable to apply convertible learning forms in their local style (i.e., reading aloud the same words in another context such as a paragraph or within a conversation).

According to Richards and Renandya (2002), pronunciation (also going by the name of phonology) involves features at the segmental level, like sounds and sound segments, in addition to suprasegmental features like stress, rhythm, and intonation. Holm and Dodd (1999) asserted that pronunciation errors originated from the interference between second- and native-language phoneme sets. To Peterson (1997, as cited in Kevin & Walker, 2002), weak pronunciation could lead to severe problems for learners, including communication failures, anxiety, discrimination, and stereotyping. For example, mispronunciation can result in some difficulties in oral communication. L2 learners often talk about their unsavory experiences, of having a conversation with a foreigner and complaining about being unable to convey their message fluently not because of lack of grammatical or lexical knowledge but just because of bad pronunciation. On the other hand, they are displeased at their failure to receive the intended message from a native speaker or original movies because of his fast pace – in fact, because of the disability in recognizing functional words which are mostly reduced and unstressed in native accents.

On one hand, as a result of mispronunciation teachers are not able to get the learners' question or message and just after checking the spelling of that specific word they understand the question. Thus, neglecting such errors gradually will result in fossilization and those mispronunciations will be untreatable. On the other hand, as Dalton (1997) described pronunciation was "the Cinderella of language teaching". By this, he referred to the usual low level of stress put on this very significant language skill. He believed that teachers did not face any problem in teaching listening, reading, writing and to a large extent, general oral skills, but regarding pronunciation, they usually did not have the primary knowledge of articulatory phonetics to provide their learners something more than repetitive and often not useful advice like, "it sounds like this; uuuh" (Dalton, 1997).

According to Engwall (2006), in some cases, mispronunciation can give another meaning to the word, so the learners require to be reminded of attributes that they are usually not aware of. Despite the fundamental role of feedback, not many studies have been performed on its usefulness for the learning of L2 phonology (Neri et al., 2002).

Zohrabi and Ehsani (2014) studied 60 Iranian pre-intermediate learners through a

quasi-experimental research. They divided the learners into implicit and explicit groups. They asked the learners to write English equivalent of simple present and simple past Persian sentences. The aim was to identify the effects of different feedback types on learners' grammar accuracy and their awareness. The results showed that accuracy and awareness improved in both groups although explicit group outperformed the implicit one significantly. In another study, an experimental study, Hosseiny (2014) divided 60 Iranian pre-intermediate learners in Ardabil, Iran into three groups including direct, indirect, and control group. TOEFL tests of definite and indefinite articles were materials used in the study. One-way ANOVA showed that both direct and indirect groups outperformed the control group while indirect feedback type was found more effective than the direct one.

As it was seen, the studies showed different results about the effectiveness of different types of corrective feedback; however, most of the studies reviewed by the researcher showed that both types significantly improve and speed up the learning for the learners (Cepti, 2016; Fazilatfar et al., 2014; Hosseiny, 2014; Marzban & Arabahmadi, 2013; Zohrabi & Ehsani, 2014).

It is necessary to mention that most of the previous studies only explored the short-term effect of corrective feedback and in this study, a part of attention will be concentrated on the long-term effectiveness of such feedbacks. Thus, the goal of the present study is to compare two types of corrective

feedback, explicit vs. implicit, in treating learners' phonological errors in terms of their immediate and delayed effects.

Based on the objectives of the study, the following research questions were proposed; a) Is there any significant difference between the immediate effects of explicit and implicit corrective feedback types on EFL learners' phonological errors? b) Is there any significant difference between the delayed effects of explicit and implicit corrective feedback types on EFL learners' phonological errors?

According to the above-stated research questions the following research hypotheses were formulated: a) There is not any significant difference between the immediate effects of explicit and implicit corrective feedback types on EFL learners' phonological errors; b) There is not any significant difference between the delayed effects of explicit and implicit corrective feedback types on EFL learners' phonological errors.

MATERIALS AND METHOD

Design

The design of the study was quasi-experimental. The students were divided into two groups, one of them was randomly chosen as Explicit Group (EFG) in which explicit feedback types were applied for correcting the learners' phonological errors, while in the other group, Implicit Group (IFG), the participants' phonological errors were treated using implicit corrective feedback. So, the independent variables in the present study were explicit and implicit

corrective feedback types whereas the dependent variables were the immediate and delayed uptake of the learners.

Participants

The data needed for this study was gained through convenience sampling from English classes in Talash language institute located in Ghir, Fars province, Iran. The participants of the study were 50 students in the upper-intermediate level who were reduced to 32 through the administration of The Certificate of Proficiency in English Speaking Test (CPE Speaking Test) to ensure the homogeneity of the participants of the study. The students of these classes were all female due to sex segregation in language institutes. Their age range was between 15 and 26, and most of them were high school students from different majors and fields. As one of the researchers was both the owner of and a teacher in Talash language institute, she had an exact familiarity with all the students and knew that the intended participants were sociable enough to communicate in the classroom and because of their economic status they had access to newly-developed educational and communicative technologies.

Instruments

Seven instruments were used to carry out the present study. The first instrument was the Certificate of Proficiency in English Speaking Test (CPE Speaking Test). The researchers used it to select a homogeneous sample for the study while two independent raters scores it and the average of the scores was considered as each participant's score. According to the manual of CPE, the raters took grammar, vocabulary, discourse management, pronunciation, and interactive communication as the points to be considered. The second instrument was a voice recorder to record the feedback sessions. In addition, it was used in recording the students' voice while they were taking pronunciation pre-test, immediate post-test, and delayed post-test while reading them aloud.

The third instrument was a self-made pronunciation test which was used three times as a pre-test, immediate posttest, and delayed post-test to test the pronunciation level of the participants before and after the treatment. Through the pilot study as elucidated in Procedure section, 40 most common mispronounced content words were extracted and listed. Then 40 sentences including 40 most common mispronounced words were constructed. These sentences were used as pronunciation tests and the researchers checked how the learners pronounced the words based on stress, accent, and intonation. For example, one of the most common mispronounced words was 'aroma' so the sentence 'I love the aroma of the fresh coffee' was formulated. The reliability of the test was checked through the KR-21 formula and returned the reliability index of 0.81 that is considered acceptable. The validity of the test was consulted with two experienced teachers of the field. The teachers provided some oral advice that was applied and the final test was made.

The fourth instrument was routine classroom materials that were used in the implicit group. The fifth one was a handout including separate charts for consonants, vowels, and diphthongs with familiar examples for each sound. Oxford Advanced Learners Dictionary and its CD-ROM including the audio program for pronouncing the words with both American and British accents were other useful instruments that were used for helping the learners with the correct pronunciation of the words. The last instruments were Whiteboard and colorful markers for giving the students clear and focused information about different phonemes, their sound, phonetic symbol, word stress, etc.

Procedure

The first step of this study was choosing two homogeneous groups of language learners who had almost the same proficiency level in their pronunciation skill. For meeting this condition, since the focus of the study was on phonological errors, a speaking proficiency test named Certificate of Proficiency in English Speaking Test (CPE Speaking Test) was administered to the students in two upper-intermediate classes, and the scale accompanied the test itself was applied to calculate their pronunciation proficiency score. The students who gained scores within the range of one standard deviation above and below the mean were selected and randomly divided into two groups.

Having chosen two homogenous groups, the researchers randomly labeled the classes as explicit feedback group (EFG) and implicit feedback group (IFG). For the sake of eliciting as natural data as possible, the students in both groups were not told about the purpose of the study. Then, a four-session pilot study preceded the treatments in order to provide a valid pre-test. Thus, for the first four sessions, two classes followed their normal instructional program (i.e., no treatment was provided for correcting learners' phonological errors). Through listening to the recording of these four sessions, most common mispronounced words were selected and pre-test was developed and validated as explained earlier.

Before starting the treatments, students were asked to take the pre-test exam by reading aloud the sentences and words while their voices were being recorded. For eliminating students' anxiety and of course for preventing their pronunciation from being affected by others' pronunciation, they were asked to take the test one by one in an empty classroom in which just the teacher attended. It should be mentioned that throughout this study, all given pronunciation tests were rated by two scorers. The mean of the two scores was taken as each student's score on that test.

After administrating the pre-test, the treatment started in the 5th session. Teaching material in both implicit and explicit group was Top Notch 1A series that is used for upper-intermediate learners. The communicative approach was used in teaching Top Notch, so the students involved in teaching and learning process and were motivated to participate in oral discussions and questions and answers. The treatment

in the implicit feedback group (IFG) was in the form of the recast for learners' phonological errors. It means that the teacher reformulated each student's errors implicitly without directly indicating that his/her utterance is incorrect. In the present study, after encountering a phonological error, the teacher repeated the same utterance providing the correct pronunciation of the mispronounced word.

In the explicit feedback group (EFG), the learners' phonological errors were corrected using explicit corrective feedback. Providing the corrective feedback in reaction to learners' pronunciation errors were postponed for the sake of not interrupting the smooth flow of the communication. In this group, one of the responsibilities of the teacher was observing the learners' activities during completing a task and of course taking notes about their errors in order to treat them later on through giving explicit explanations about.

Different techniques were used in the EFG. For example, in some cases, students were directed to consult their dictionaries for comparing their own pronunciation with the one in dictionaries and eliciting the correct pronunciation. Another supplementary device was the Oxford Advanced Learners Dictionary's CD-ROM which was used when students still had problems in producing the word even after checking them in their dictionaries.

At the end of the treatment sessions, the same pronunciation test was given to the participants in both groups two times; one immediately after finishing the treatment period and the other with a four-week delay. As the interval between different administrations of the test was more than two weeks, the practical effect of taking the same test several times was ignored (Dornyei, 2007).

Data Analysis. Data analysis was done by SPSS 17 software. At the first stage, descriptive statistics (i.e., mean and standard deviation), as well as an independent samples t-test, was run to examine the homogeneity of the two classes. Having been ensured of the homogeneity of the two classes, after treatment, the researchers ran two other independent samples t-tests to compare the post-test scores of the two groups in order to find possible significant differences in terms of both immediate and delayed effects of explicit and implicit feedback.

RESULTS AND DISCUSSION

Homogeneity of Two Groups Before Treatment

Before answering the questions, the researchers ran an independent sample t-test to double check homogeneity of two groups by considering their performance in pretest as follows:

In Table 1, as the *Sig.* value in the Levene's test for equality of variances is greater than the level of significance selected for the present study ($0.811 > \alpha = 0.05$), variability in the two conditions is not significantly different. Hence, the results in the first row of the table should be

considered. By looking to the first row of the *Sig. (2-tailed)* column, it becomes clear that the means for the two groups were not statistically different (p=0.881> α=0.05) and they were relatively the same at the outset of the study.

The Results Regarding the First Research Question

The first research hypothesis addressed the comparison of the immediate effects of explicit and implicit corrective feedback types on the EFL learners' phonological errors. The researchers performed descriptive statistics and independent samples t-test on the immediate post-test scores of the participants in the two groups to investigate this hypothesis. Table 1 and Table 2 display the results of this analysis.

As depicted in Table 2, the immediate effect of explicit feedback (Mean=29.44)

is greater than implicit feedback (mean= 23.75). To ensure this difference is statistically significant, independent sample t-test was run as follows:

In Table 3, as the *Sig.* value in the Levene's test for equality of variances is greater than the level of significance selected for the present study (0.164>α=0.05), variability in the two conditions is not significantly different. Therefore, the results in the first row of the table should be taken into account. The first row of the *Sig. (2-tailed)* column indicates that the means for the two groups were significantly different (0.000< α=0.05).

Accordingly, the first null hypothesis of the study was rejected and it was concluded that the explicit and implicit corrective feedback types had a significantly different immediate effect on the phonological

Table 1

The participants' pretest scores differences in the two groups

	Levene's Test for Equality of Variances		t-test for equality of means				
	F	Sig	T	Df	Sig. (2-tailed)	Mean difference	SD Error differences
Equal variances assumed	0.58	0.811	0.151	30	0.88	0.063	0.414
Equal variances not assumed			0.151	29.95	0.88	0.063	0.414

Table 2

The immediate effect of implicit and explicit feedback

Feedback type	N	Mean	Minimum	Maximum	SD
Implicit	16	23.75	19	32	3.35
Explicit	16	29.44	24	37	4.01

Table 3

The participants' immediate post-test scores in the two groups

	Levene's Test for Equality of Variances				t-test for equality of means		
	F	Sig	T	Df	Sig. (2-tailed)	Mean difference	SD Error differences
Equal variances assumed	2.04	0.164	4.34	30	0.000	5.68	1.30
Equal variances not assumed			4.34	29.08	0.000	5.68	1.30

errors of the EFL learners. The comparison of the immediate test mean scores in the two groups reveals that explicit feedback had a better immediate effect than implicit feedback on the phonological errors of the EFL learners.

The Results Regarding the Second Research Question

The second research question attempted to compare the delayed effects of explicit and implicit corrective feedback types on the EFL learners' phonological errors. For this purpose, the mean score of delayed effect of implicit and explicit feedback was measured through descriptive statistics as shown in the following table.

As shown in Table 4, the delayed effect of explicit feedback (Mean=28.13) is greater than implicit feedback (Mean=22.75). To ensure this difference is statistically significant, independent sample t-test was run as follows:

In Table 5, as the *Sig.* value in the Levene's test for equality of variances is greater than the level of significance selected for the present study (0.539>α=0.05), variability in the two conditions is not significantly different. It means that the results in the first row of the table should be considered. The first row of the *Sig. (2-tailed)* column displays that the means for the two groups in the delayed post-test were significantly different (0.000< α=0.05). Therefore, the second null hypothesis of the study was also rejected and it was concluded that the explicit and implicit corrective feedback types had a significantly different

Table 4

The delayed effect of implicit and explicit feedback

Feedback type	N	Mean	Maximum	Minimum	SD
Implicit	16	22.75	18	30	3.51
Explicit	16	28.13	22	34	3.79

Table 5

The participants' delayed post-test scores in the two groups

	Levene's Test for Equality of Variances				t-test for equality of means		
	F	Sig	T	Df	Sig. (2-tailed)	Mean difference	SD Error differences
Equal variances assumed	0.38	0.53	4.16	30	0.000	5.37	1.29
Equal variances not assumed			4.16	29.82	0.000	5.37	1.29

delayed effect on the phonological errors of the EFL learners. Comparison of the delayed test mean scores in the two groups reveals that explicit feedback had a better-delayed effect than implicit feedback on the phonological errors of the EFL learners.

Discussion

The present study compared the efficiency of two different corrective feedback types – explicit and implicit – in dealing with learners' pronunciation errors, considering their immediate and the delayed learning and retention. The first research question asked how learners' immediate learning was influenced by the provision of different corrective feedback types. The results of the data analysis indicated that the group that underwent the explicit corrective feedback outperformed the implicit group.

This finding can be interpreted by means of some theories proposed by different researchers defending the consciousness-raising dimension of the explicit corrective feedback in comparison to implicit corrections. According to Ellis (2002), consciousness-raising likely results in delayed acquisition as well as an immediate effect. He also mentioned that consciousness-raising helped the learner understand a specific linguistic feature to develop its declarative knowledge, which is considered as the main necessity for reaching the procedural level. The learners' mind, after receiving an explicit piece of information about a language feature, gets busy using that information for noticing and afterward bridging the gap between his/her own interlanguage and the target form. Therefore, instead of simply repeating the already provided correct linguistic feature in the form of the recast, he/she will experience a challenge for correcting that error which will result in needs-repair uptake rather than completely repaired uptake.

The results may propose that a simple correction of the wrongly pronounced utterance immediately after the error may be adequate to prosperously correct it (Lyster & Ranta, 1997). Nevertheless, it should be mentioned that the most studies only explored the short-term impacts of corrective feedback and almost completely neglected their delayed effects on the

learners' interlanguage construction and progress (Neri et al., 2002). Hence, the second research question of the current study addressed the delayed effects of explicit and implicit corrective feedback types on learners' phonological errors.

The results of the present study were in line with the findings of Lightbown and Spada (1990) who indicated that explicit corrective feedback enhanced linguistic preciseness both immediately after the treatment and with a five-week delay after finishing the treatment period. In a more general perspective, the study is congruent with a couple of studies done by other researchers who claimed that self-awareness of the most effective and applicable techniques, methods, and strategies in language learning and teaching can help both learners and teachers in gaining the utmost outcome (Jafari & Kafipour, 2013; Yazdi & Kafipour, 2014). On the other hand, the findings of the present study were in strict contrast with the results of the study carried out by Soleimani et al. (2014) in the context of Iran. They investigated the impacts of two major kinds of corrective feedback namely explicit and implicit ones on the phonological accuracy of learners of English as a Foreign Language (EFL) and found that the implicit group had a significantly better performance than the explicit and control groups on the post-test. This contradiction between the results may be due to the differences in the levels of the participants (intermediate vs. upper-intermediate) or even the teachers' personal characteristics in the two studies.

Moreover, the current study is in line with another study conducted by Nguyen et al. (2012). They investigated the effectiveness of implicit and explicit feedback on the development of Vietnamese L2 pragmatic competence. They found out that both groups, which received implicit and explicit feedback, outperformed the control group. In regard to the immediate and delayed effect. The higher immediate and delayed effect of explicit corrective feedback over implicit one is not surprising. It is believed that learners who discuss and hear the grammatical rules related to their errors can process the input quicker and deeper than those who will not hear any explanation about the rules and their errors (Takimoto, 2009). On the other hand, only noticing happens in the implicit group while the explicit group will engage in noticing and understanding at the same time since an explanation about the source of error and grammatical rules will be provided. Consequently, explicit correction might attract more attention to problematic forms and meaning in comparison with implicit correction, which may not be able to recognize the source of errors, particularly the errors happened due to differences between L1 and L2. Another study conducted by Ajabshir (2014) also confirmed that explicit group outperformed the implicit one in using all subcomponents of polite refusal strategy.

In line with the current study, Zohrabi and Ehsani (2014) found out that explicit and implicit corrective feedback were effective in increasing Iranian EFL learners'

awareness and their accuracy in English grammar; however, the explicit group outperformed the implicit one. They justified that one reason might be the reduction of learners' confusion about the errors and how the errors are corrected when explicit feedback is provided. However, some other studies (Hosseiny, 2014) found that implicit corrective feedback leads to long-term learning because it engages the learners in guided learning and problem-solving. Motlagh (2015) also found that teachers preferred implicit corrective feedback. Guenette (2007) stated that such different results might be due to problems in research design and methodology.

CONCLUSION

As stated earlier, the main objective of the current study was to find the appropriate way of solving the EFL students' phonological errors. In language learning process, dealing with learners' phonological errors is considered as one of the most challenging tasks for both teachers and students; however, training language users with acceptable pronunciation is one of the most important responsibilities of language teachers (Hebert, 2002).

Among all issues concerning the above-mentioned problem, being aware of the possible sources of the learners' phonological errors is of great importance since it would help the teachers to predict the potential phonological problems of their learners; as a result, they will be able to include suitable feedback types for treating each error in their lesson plan. The nature

and the purpose of the applied tasks in the classrooms have a crucial role in deciding on the type of feedback. Recast can be freely used in all stages of the teaching and learning due to its non-interrupting feature (Chung, 2005). Nevertheless, the outcome of the present study revealed that recast as a type of implicit corrective feedback was not adequately powerful in order to influence the learners' interlanguage.

Instead, the results of this study showed that explicit feedback types targeting the learners' phonological errors could enhance the learners' interlanguage in a positive manner. By postponing the provision of such corrective feedback types until finishing the task, they could even be benefitted in the classrooms in which the main purpose of the instruction was focused on fluency and the teachers were not willing to interrupt the smooth flow of communication for the sake of correcting the learners' errors. In this study, delayed uptake of the learners was considered which gave a clearer image of the efficiency of implicit and explicit corrective feedback types targeting learners' phonological errors compared to their immediate uptake. Results of this study revealed that although implicit corrective feedback in the form of the recast, based on the pre-test and post-test mean differences, resulted in some amount of progress in treating the participants' pronunciation errors, the explicit corrective feedback, in comparison to immediate feedback, demonstrated a noticeable development in both immediate and delayed retention. As the authors

examined female learners' phonological errors, further research including gender-equal sample is required. Moreover, learners' cognitive style satisfaction is one of the key roles in learning (Shahsavar & Tan, 2011); therefore, undertaking further research in this area is recommended.

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An Investigation of Communication Skills Required by Employers from the Fresh Graduates

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ABSTRACT

Effective communication skills are shown to foster the relationship and collaboration in professional interactions. Particularly in job interviews, communication skills play an important role since it turns out to be of the major criteria of employability ever since the 20th century. This is apparent as many university graduates are unable to secure a job within 3-6 months after graduation due to poor communication skills. This paper aims to investigate the importance of communication skills for employment and by adopting theory of communication, it wishes to address in detail employer's expectations. Five fresh graduates from local and private universities and two human resource officers (HR) from one organisation participated in this study. A semi-structured questionnaire was utilized as a tool to collect the data. The findings show that a majority of fresh graduates were weak in communication skills in relation to clarity, completeness, conciseness, and correctness. The inaccurate vocabulary (clarity), incomplete sentences (conciseness), unable to provide detailed answers (completeness), and error in grammar in the utterances and sentences (correctness) were found in the communication skills by these graduates. The study suggests the integration of 4Cs (clarity, conciseness, completeness and

correctness) into the current communication skills course modules, facilitation of simulated interviews to assist undergraduates enhance their communication skills prior to attending any actual job interviews.

Keywords: Communication skills, employability skills, Malaysian graduates

INTRODUCTION

Graduates' proficiency in English language are keenly sought after by employers to help drive their organisations to compete successfully in the era of globalisation and competitiveness (Hamid et al., 2014). Realising this fact, employers of various industries actively search and screen for potential employees who are well equipped with communication skills and language proficiency so that they are able to perform better globally. Among the most sought-after skills that employers seek in potential employees is the skill of effective communication in English language. It is apparent that the proficiency to communicate effectively in the English language has been acknowledged as a key factor in getting employed since the 20th century and has a part in boosting a company's market share and performance.

In every organisation, communication serves two imperative roles. It is used by employees to disseminate the information needed and to create a sense of trust and commitment (Optum, 2015). In a workplace, the communication transpired refers to exchanging information, both verbal and non-verbal communication

ques and it plays an important role as it assists in the organisation work activities, avoiding missed deadlines which could affect the organisation production and growth. Good communication skills support employees to coordinate well in their tasks, within the team especially where the employees come from different parts of the society with varied cultures and background. Poor communication skills will hamper productivity and may even cause misunderstanding within the employees. According to Karim (2016) solving people problems such as trust issues and poor communication takes up more than half of a manager's working time, so they believe that effective communication will help to cut down on the amount of management time used on resolving employee conflicts. Effective workplace communication ensures that all the organizational objectives are achieved (Ergen, 2010). This is tremendously important to organisations because it increases productivity and efficiency, and misunderstanding can be avoided.

Another important aspect needed for having effective workplace communication is taking into consideration the different backgrounds of employees. "While diversity enriches the environment, it can also cause communication barriers" (Guo et al., 2009). Difficulties arise when a co-worker's cultural background leads him or her to think differently than another. It is for this reason that knowing about intercultural communication at work and learning how to treat others without offending them can bring several benefits to the company (Stacks

& Salwen, 2009). Having an effective communication model or framework for authorities of various fields and expertise as a basis is particularly crucial, and although it can be done from scratch through a specific need assessment study, we can actually look at existing general models which assist us in bringing awareness and enhancing our communication skills (Wilson, 2014).

In a job interview, communication skills play an important role, where it provides opportunity for the candidate to showcase their ideas, knowledge and skills. When the candidate able to display their language proficiency, critical thinking skills, and problem-solving skills in a job interview, it is more likely that he or she will be employed or known to have employability skills. Employability skills play a significant role in whether a candidate gets hired by the desired company because the attributes are highly sought after by employers (Lowden et al., 2011). Most employers and fresh graduates agree that more emphasis should be given to the development of a student's skills and attributes, including communication, team-working, problem-solving skills, critical thinking, and leadership, otherwise known as employability skills (Lowden et al., 2011).

Problem Statement

Moving to Industry 4.0, communication skills, adaptability skills, and critical thinking skills are some of the key attributes Malaysian graduates should enhanced on as they are required to work with advanced technologies e.g. cloud computing (Peck, 2018). Among these attributes, communication skills with good proficiency in English is also found to play an important role in embracing industry 4.0 (Christina, 2018; Peck, 2018). With these in mind, it is expected that a fresh graduate should be competent in communication skills and be ready for workforce. However, the cause of the employability rate among fresh graduates has brought great attention to the media and the public. 'English skills vital for all' (Karim, 2016), 'Poor command, fewer career opportunities' (Rahman, 2015), 'Poor English eroding Malaysian graduates' self-belief' (Zahiid, 2015 'Poor English a major handicap' (Yuen, 2015) were some of the headlines that stood out either in hard-copy or electronic news. The headlines clearly indicate the importance of English language as a communication tool, especially in entering the workforce, the focal point of which in this case, is the job interview. According to Rebecca (2016), about 25% of graduates were unemployed because of poor proficiency in English, which was based on a sample of about 20,000 graduates. This number is huge since our universities produce 20,000 graduates annually, and about 5,000 of them were unemployed because of poor command of English (Malaysian Employers Federation, 2016). It seems that the level of proficiency has deteriorated far below expectations to the point that some graduates cannot distinguish between 'price' and 'prize' (MEF, 2016).

This poor communication skill is also due to the tendency of translating mother tongue into English before interacting

(Rahman, 2015), when that happens the sentence structure produced by these graduates seems to be dysfunctional to the employers and causes miscommunication, requiring the employers to ask the same questions multiple times, either by repeating or rephrasing the question. Some employers may just give up and move on to subsequent interview questions. From these interactions, employers may thus observe incompetence in communication skills among fresh graduates, eventually rejecting their employment applications.

Therefore, the findings of this study would actually assist future university graduates in the aspects on building their communication skills, confidence and appeal to employers.

Literature Review

The Malaysian Ministry of Higher Education (MOHE) (2015) implemented a web-based tracer study for tracing graduate's employability rate. The ministry was able to gather information on the statistics of graduates produced by local and public universities as well as gauging graduates' their employability rate. This particular tool has been helping the government to identify the gaps for employability. Through this survey, they are able to identify the attributes which are lacking or needed in order for the graduates to be employed. From the survey, they managed to narrow down the major contributor or attributes that are essential for successful employment; however, which are found to be lacking amongst the unemployed graduates. Those are language

competency, communication skills, critical and analytical thinking, presentation skills, general knowledge, IT skills, and problem-solving skills. Most of these attributes are considered as soft skills in employability skills.

A similar survey was conducted in UK where Harvey et al. (1997) reviewed these factors and concluded that graduates not gaining employment during the first six months was due to poor communication skills. The findings have also raised great concern for the relevant stakeholders. The graduates failed to realise the importance of communication skills for themselves as well as to others. In the findings, it was revealed that most common gaps were found in the area of expressing oneself. The graduates were not able to construct proper sentences, had weak command of grammar, and limited vocabulary. They found it very difficult to comprehend the questions asked by interviewers and provide complete answers fluently. If graduates display such weaknesses in their communication during their face to face meetings with potential employers, then the chances are very slim for them being employed. To an organization or for a successful business, communication skills are a prime requirement for enhancing smooth and productive operation. Almost all employers prefer their employees to be well equipped with relevant technical knowledge for job functions and also have adequate communication skills.

Both studies (MOHE, 2006 & Harvey et al., 1997) indeed have shown similarities in their findings that graduates displayed poor

communication skills in their interviews irrespective whether they are native speakers (UK) or non-native speakers in English (Malaysian). Therefore, the need to address this matter is necessary not only to bring awareness to the graduates but also to the academic institution and stakeholders.

Employers' Expectation. According to Harvey et al. (1997) most employers expected their employees to be more pre-emptive, having the ability to imply higher level skills and multi-layered communication to support their teamwork in achieving organization goals. This view was also further supported by Mason et al. (2006) in that the conception of employability very much depended on the development of communication. A report generated by Confederation of British Industry (CBI) (2007) found that, among eight skills, communication and literacy were required for employability. According to CBI, this shows the great importance for graduates to possess communication skills, which act as key factors for employability. They point out that employers prefer candidates who can demonstrate readiness to work and contribute bold entrepreneurial approaches.

Archer and Davison (2008) also conducted a study regarding employer perspectives on graduate employability. They found that the employer's perspective was in contrast to how the universities were grooming and promoting their graduates. In actual fact, employers considered that soft skills such as communication skills and teamwork are more essential than technical knowledge. These are the important skills which they want to see from graduates because these soft skills provide more weight for evaluation than technical knowledge which they may bring over from their learning institution. On the other hand, according to a case study conducted by Glass et al. (2008), only a small ratio of employers wishes to recruit individuals who are good at technical skills, hoping that they would bring new ideas and development to their organisations. In support of universities, Hugenberg and Hvizdos (1984) established some details in cultivating employability skills which could be deployed by educators to prepare their students for their interviews. Employability skills would enhance young graduates in getting prepared for employment. Furthermore, Rynes et al. (1991) pointed out that employers, especially in the service industry, prefered to evaluate their applicants according to their interpersonal skills, goal orientation, and physical attractiveness rather than their previous or background experience. This is because they are able to communicate and understand their customer's demands more easily.

Unemployment Rate in Malaysia The Malaysian Employers Federation (MEF), a central organisation where private sectors receive consultation and discussion on employee's rights, human resource practices, industrial information, advice, and training, provides feedback on graduates' employability, JobStreet is another organisation that conducts surveys

and provides feedback on employers' perception on graduates' employability. In a survey by JobStreet (2013), it was found that the highest percentages of graduates were not getting employed because of asking for unrealistic amounts for remuneration. In other words, graduates were demanding higher salaries that were far above the usual benchmarks. The statistic revealed for this was 68%. This was followed by poor command of English language (64%), being choosy about jobs (60%), poor communication skills (60%), and poor character, attitude, or personality (59%). The survey reported that poor command of English language was ranked number two and poor communication skills were ranked number three in causing many graduates to be unemployed.

English Language Assists Fresh Graduates. A good command of the English language is believed to assist graduates to have better communication as they are able to deal with various challenges (Zhang et al., 2012). This notion was derived based on the results from a study which showed graduates with a good level of language proficiency will have the flexibility to handle matters. However, being able to speak a language well is not fully sufficient, and graduates should know how to use the language carefully while interacting among co-workers or their subordinates. Graduates should not only be contented with learning to speak a language well but should remember that their main aim is to improve their communicative competence and abilities (Dornyei, 2005; Fallah, 2014).

In real scenarios, fresh graduates prepare a lot prior to their interviews. They review various subjects, current affairs, general knowledge, company background etc.; however, all the hard work becomes futile when they fail to communicate effectively. Good communication skills are of paramount importance in order to create a good impression which will lead to a successful employment. The performance of these communication skills by the fresh graduates sometimes determines the future of their lives. Effective communication is determined by clarity of speech in conveying views and ensures others understand thoughts being conveyed. By having these abilities, candidates are preferred over those who may have excellent results but could not express themselves clearly.

Conceptual Framework. This study adopts Truman (2011) theory of communication which consists of clarity, conciseness, completeness, correctness, consideration, courtesy and concreteness. Truman's theory was tested in a study of Krishnan (2014) on interaction in professional discourse in job interviews, where only four Cs were selected. A questionnaire was developed and had been tested in this study (See Appendix A).

For effective communication, it is pointed out that the 4Cs referred to in this study seem to have more impact for the graduates to consider. These 4Cs are Clarity, Conciseness, Completeness, and Correctness. These aspects of

communication are important because, during an interview, an interviewee needs to give clear answers and explanations on the related ideas or topics. Conciseness will ensure that only the essential message is delivered accurately and to the point. A complete answer will consist of all the enquired information from the interviewee, and there would not be many back-and-forth questions, thus avoiding any waste of effort and time by both parties. Using appropriate language, vocabulary, and grammar will demonstrate that the interviewee has a good command of language, which will create a good impression.

Therefore, the main notion of this research is to reveal factors that influence communication skills used during job interviews by using Truman's (2011) Communication Skills. The conceptual framework underpinning the present study was adopted to investigate which communication skills are required by employers from fresh graduates. Figure 1 shows the conceptual framework of the study.

METHODOLOGY

Participants

The participants involved in this study were five fresh graduates (candidates) from local public and private universities. They obtained their degree qualifications in various disciplines, which included marketing, management, business administration, and chemistry. Consent was obtained from the participants and they were purposive samples selected by the organisation to participate in the study. There were also two Human Resources (HR) officers involved in the study from one organisation.

Data Collection

The data was collected through job interviews and content analysis was used to analyse the data by using Truman (2011)'s framework and semi-structured interview questionnaires administered by the HR
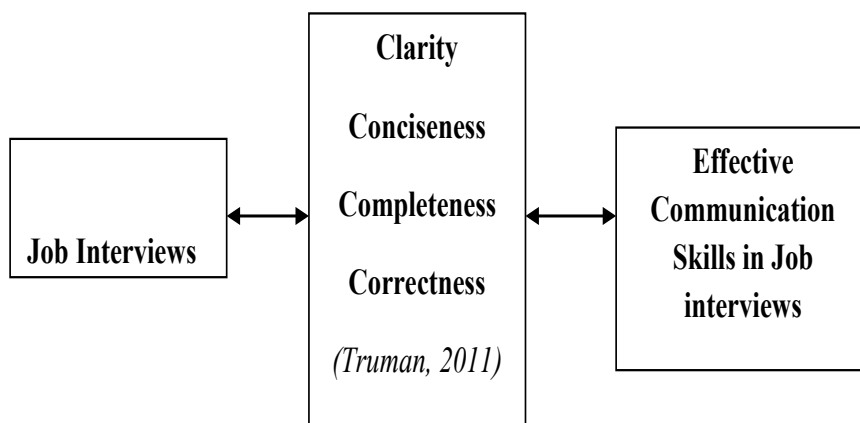
Figure 1. Conceptual Framework

officers. A semi-structured interview was used to probe further information by the HR officers to identify the successful and unsuccessful interviews (Pathak & Charatdao, 2012). The job interviews were recorded in the organisation by the two HR officers. This was because the organisation did not allow the researcher to observe, record, or to have further discussions with their interviewees due to their data protection and privacy rule.

The recorded data was transcribed using an adaptation of Jefferson (2004) transcriptions conventions to obtain information from the interaction in the job interviews. The transcriptions were also verified by two postgraduate students to ensure the accuracy of the transcriptions. The organisation provided standard interview questions which they had been using for past interview sessions. The data was analysed based on selected interview questions based on the suitability of the interviewees (See Appendix B) by the HR officers to determine the differences in the answering of questions to ensure effective communication skills as defined by Truman (2011).

RESULTS AND DISCUSSIONS

This paper utilized Truman's (2011) theory of communication skills to analyse the transcribed data obtained from the interview process. According to Truman's framework, there are 7Cs to demonstrate effective communication: Completeness, Conciseness, Consideration, Clarity, Concreteness, Courtesy, and Correctness.

For this study, only 4Cs were applied to analyse the data: Completeness, Clarity, Conciseness, and Correctness, which are more appropriate for spoken communication.

Five job interview interactions were recorded, transcribed, and labelled. The interview was for the position of Customer Care or Customer Service. Therefore, the questions asked were suitable for customer service, handling customers, and time management. Based on the results, it was found that the graduates who underwent the interviews displayed poor communication skills in relation to the 4Cs of effective communication. For example, when the interviewer asked a question, the answer provided by the interviewee utilised vague vocabulary, and an unclear direct answer was uttered. This relates to 'Clarity' in Truman's (2011) framework. Examples of this are provided in the excerpts shown below.

Clarity in Effective Communication

The findings reveal that the candidate answered in an ambiguous manner which can be seen in Excerpt 1. It was not a straightforward answer to the question, and it was a mere statement. The question "Why is service essential?" is about why customer service is important for a business. For this question, the interviewer was expecting the candidate to express the importance of service for the industry and how a happy and satisfied customer would generate repeated business and be a regular customer.

Excerpt 1:

Interviewer **Why** *is service essential?*

Candidate 1	***Customer satisfaction as customers is always right.***

Excerpt 2:

Interviewer	*Tell me what you know about this company and **what have you learned in customer service?***
Candidate 2	*This is a customer service company…I mean the recruitment and advertisement…my simple answer is…**Customer is always right.***

Excerpt 3:

Interviewer	***Why*** *do you like to work here?*
Candidate 3	***I would say my desire and I am qualified for the position****…*

The same style of answer was seen in Excerpts 2 and 3 where no clarity was found in the answers provided by the candidates. In Excerpt 2, the question asked was "What have you learned in customer service?" This question refers to the experience the candidate previously underwent in the customer service industry. It requires an in-depth answer to convince the interviewer that he or she has made some review on the company's background and his scope of work as to how their past knowledge or experience can be a benefit to the organization. In Excerpt 3, the interviewer asked "Why do you like to work here?" as in reasons of choosing the company. Instead of expressing his desire or interest to work in the company due to his qualification, it would be more appropriate to explain the benefits he might gain or look for which eventually would benefit both parties.

The findings also reveal one of the candidates was able to show clarity in his/her answer. A good of example of clarity in communication skills is found in Excerpt 4, below, which shows the candidate, answered the question with clarity and precision. The question "Why would you like to apply here?" seeks reasons for wanting to work in the company. Candidate 4 provided a concrete answer by starting with the word "Because" as the interviewer asked for "Why," and the candidate also incorporated the company's background, which showed that he had done some background research prior to the interview. The answer also showed that the candidate had confident in the company due to its history and perhaps could gain experience and knowledge if was appointed there. By having some knowledge of the organization and making it the main reason of interest indicates 'clarity' in candidate's answer.

Excerpt 4:

Interviewer	***Why*** *would you like to apply here?*
Candidate 4	Because I think it is one of the largest company in Malaysia and worldwide and it is also a multinational company.

Conciseness of Effective Communication

Next, 'concisenesses of effective

communication. 'Conciseness' in this study refers to complete sentences uttered that are comprehensible to the listener, in this case to the interviewer. The findings revealed most candidates in the interview failed to provide or utter complete sentences, and this could have resulted from low confidence levels while facing the interviewer or in some cases, anxiety or nervousness that led a tendency of poor enunciation where the essential points were unheard. In this study, the candidates preferred to provide short answers, as in limited utterances. Perhaps at that moment, their main aim was to answer the question immediately without having further thoughts on elaborating their answer. The awareness of their utterance caused inconciseness in their communication skills as shown in Excerpts 5 and 6, below.

Excerpt 5:

| Interviewer | Wow! That's so interesting, **what type of boutique is it**? |
| Candidate 5 | hmmm...**cloth boutique**... |

Excerpt 6:

| Interviewer | **What do you do during your free time**? |
| Candidate 5 | ahhh...this is hmm...**go outside**... |

The above excerpts show candidate's inability to produce complete sentences in the answers. Two different questions were asked and both answers were given with two-word utterances. Especially in excerpt 6, the interviewer asked 'What do you do

during your free time?', the answer given was 'go outside', a two-word utterance that obviously incomplete, without having any expression of his/her activities in free time. This indicates the lack of conciseness in the communication. Such kinds of answer may cause interviewers to refrain from further inquiry on the related topic as the candidate does not project his ideas interestingly. An example of conciseness in communication is shown in the following excerpt.

Excerpt 7:

Interviewer	What are your strengths?
Candidate 4	Well, I have a very good interpersonal skill and I can win people's heart easily.
Interviewer	What is your biggest weakness?

The above excerpt clearly shows conciseness is found in the candidate's answer. The candidate managed to give a complete sentence in response to the question asked that was comprehensible for the interviewer, which led to a natural flow for the interview in further inquiry on the interviewee's answer. Given that, the candidate then had the chance to highlight his traits in more depth.

Completeness of Effective Communication

The following results presented are for the 'Completeness' of effective communication. 'Completeness' in this study refers to adequate details provided in the interaction. In other words, the interviewer need not

rephrase the question in order to get more details from the candidate. In this study, however, candidates were shown to have a lack of completeness in communication. The findings revealed the interviewers made attempts to rephrase questions in order to get more details from the candidates. Example excerpts showing lack of completeness are presented below.

Excerpt 8:

Interviewer	*What is your **long-term objective**?*
Candidate 5	*My long-term objective is I can get my own house.*
Interviewer	*That's personal... your **long-term career objective**?*
Candidate 5	*I can put myself in a good company and contribute good productivity for the company*
Interviewer	*10 years from now, what is **your career objective**?*
Candidate 5	*10 years, if I stay here... maybe...I will...*

Excerpt 9:

Interviewer	*What would you like to do **during your free time**?*
Candidate 1	Ermmm, sometimes I would take a short nap or maybe…
Interviewer	*Can you please tell me **what is your hobby?***

Candidate 1	*Sure...ahhh...actually I got a lot of hobbies, like swimming, playing video games, listen music and watch movie at cinema...*
Interviewer	*Ok. I see…*

The interviewer in Excerpts 8 and 9 shown to rephrase the question in order to elicit answers from the candidate. For example, in Excerpt 8, the interviewer makes several attempts at rephrasing the question, adding the word 'career' to prompt the candidate for more details. The initial question "What is your long-term objective?" was not answered satisfactorily for the interviewer. 'Career' was added in the following question to seek more detail from the candidate. Yet, the answer provided was unsatisfactory and not in detail. Finally, the interviewer emphasized by asking, "10 years from now, what is your career objective?" This was the third attempt, and the candidate managed to provide the answer with 'completeness'. In the above case, first of all, the candidate was required to always provide an answer in favour of the interviewer of the organization, and then could narrow that down to personal benefit. As shown in Excerpt 8, the objective of purchasing a house could be a personal objective, which would be a by-product of career achievement. However, in this scenario, the interviewer wanted to know the candidate's objective, which should be in alignment with the organization's goals.

Similarly, in Excerpt 9 two attempts were made by the interviewer to seek for more details. The first attempt was with the question "What would you like to do during your free time?" In this attempt, the answer was inadequate, which led to another attempt "Can you please tell me what your hobby is?" Although both questions proved to have similar meanings, the question was rephrased and the word "hobby" seemed to give the candidate the opportunity to answer in detail. To achieve 'completeness', few attempts of questioning were shown to be made by the interviewer. In this situation, the interviewer may reach the evaluation that the candidate could not grasp the essence of the communication easily, hence much time and energy would be wasted in making the candidate understand a topic. There was also 'completeness' found in the findings as shown in the following excerpt.

Excerpt 10:

Interviewer	Do you believe you are **over qualified** for this position?
Candidate 4	Not at all. My experience and qualifications make me do my job only better. And in my opinion, my skills help to sell the products. I'm able to attract better freelance talents. My qualifications are better for your company too since you will get better return for your investment.
Interviewer	Last question for you…

A much elaborated and detailed answer was found in the Excerpt 10 that clearly demonstrated 'completeness' of effective communication. With only one attempt, the candidate had managed to answer not only the question also to explain that his/her qualification and experience would be an added asset to the company. Besides the candidate further elaborated his/her skills would expediate future tasks which would benefit the company. Such answer was easily understood which led to the flow of the interview. Thus, excerpt is considered to be a good example of 'completeness' of effective communication.

Correctness of Effective Communication

According to Truman (2011), 'correctness' for effective communication refers to no grammatical errors found in the utterances. The sentence structure produced would have a positive effect on the hearer, as in the use of appropriate language, accurate facts and figures, and good timing. For this study, four of the candidates were shown to have a lack of 'correctness' in their utterances during the interviews, while one candidate proved to have correctness in communication.

The following two excerpts clearly demonstrate there were grammatical errors in the candidates' utterances. In Excerpt 11, the interviewer said, "Based on your resume, we found that you are over qualified for applying for this position. What do you say?" This particular statement actually wanted the candidate to express his or her interest in the job regardless of the qualification. The candidate managed to give his views

but not in a complete sentence. "Utilise my working experience and qualification for your company's growth" does not yield a positive impact or provide a convincing factor. The answer seems to be a point that might be found in a bulleted list in a resume.

Excerpt 11:

| Interviewer | Based on your resume, we found that you are over qualified for applying for this position. What do you say? |
| Candidate 2 | Well, this is a **critique question**. **Utilize my working experience and qualification for your company's growth**. |

Excerpt 12:

| Interviewer | Do you know how to create a good conversation? |
| Candidate 3 | errr...I know but...you want me to do it now? I can but it takes a long time. **I do not touch with it for quite sometimes.** ...I certainly believe...if you give me the opportunity ...but...hmmm...I am not good at contents. |

Similarly, in Excerpt 12, errors were found. The interviewer utilized the auxiliary verb 'do' to begin the question "Do you know how to create a good conversation?" and expects a simple and confident answer. However, the answer received kind of perplexing. The candidate began with "I know but you want me to do it now?",

expresses uncertainty and anxiousness. Followed by "I can but it takes a long time" surely sound confusing to the interviewer also indicates the inappropriate of language. The greater impact of utterance came from the statement "I do not touch it for quite some time" which had grammatical error. The statement simply meant "I have lost touch with it". Perhaps the candidate was trying to express that he/she was used to create good conversation and somehow have lost touch with it. Such utterance indeed showed the lack of correctness which gave a negative expression to the interviewer on candidate's communication skills. Apart from the lack of correctness, there are also examples of correctness that can be found in Excerpt 13 and 14.

Excerpt 13:

Interviewer	The last question for you, if your customer buys a total RM35.00, and he or she gave you 3 Rm10.00 notes and 2 Rm5.00 notes, how much you should give back or...
Candidate 4	hmmm...RM5.00, sir.
Interviewer	Wow, it is fast! Within 3 seconds you can answer it.
Candidate 4	I think my mathematic is okay compared to my other subjects in secondary school.

In Excerpt 13, the answer provided by the candidate was fast, factual, and with a correct figure, thus giving a positive

impact to the interviewer. This was evident when the interviewer responded to the candidate's answer by saying, "Wow, it is fast! within 3 seconds you can answer it.", a form of praise. This was followed by the utterance of "I think my mathematic is okay compared to my other subjects in secondary school" clearly shows the use of appropriate language and good grammatical structure that matches the definition of correctness by Truman (2011).

In Excerpt 14, candidate 4 uttered "I always manage my stress by listening to soft music…It's a great way to reduce stress in my life…." to answer to the question "May I know how do you handle your stress?" The answer indeed has shown the characteristics of correctness of effective communication. There were no grammatical errors in the sentence structure, and the answer was given with appropriate language and was well timed.

Excerpt 14:

Interviewer	*May I know how do you handle your stress?*
Candidate 4	*I always manage my stress by listening to soft music. it's a great way to reduce stress in my life...*
Interviewer	*Well, how do you spend your time when you are free…*

In sum, the findings presented above were the excerpts from the interaction between the interviewer and the interviewees. Based on Truman's (2011) theory of effective communication, the interviewees in the present study, the fresh graduates, were found to be incompetent in communication skills in relation to the 4Cs—Clarity, Completeness, Conciseness, and Correctness. These categories (4Cs) proved to have an impact on the interviewer whether it was a positive or negative impact. If the candidate possesses all the 4Cs of effective communication, a positive impact may be given to the interviewer. Moreover, if the candidate does not possess the 4Cs of effective communication, a negative impact may result. Thus, this study aimed to provide a detailed understanding of the critical areas of communication skills in a job interview setting.

CONCLUSION

This study has highlighted the areas of effective communication in job interviews. The transcribed data in this study has helped to distinguish the areas of positive and negative impact given to interviewers during interviews. The findings also highlighted the awareness of the importance of communication skills and framing a curriculum based on the 4Cs for effective communication. As this is a preliminary study, a further investigation would be worthwhile, examining interviews with job candidates and the interviewers. For this study, permission to interview the candidates and interviewers was not granted, which was a limitation of this study. The number of the candidates interviewed was only 5, which was a minimal number which could not represent the graduates' population, thus another limitation of the study. Although

the findings presented in the results section indicates the relevance of the 4Cs of Truman's theory (Clarity, Conciseness, Completeness, and Correctness) in a job interview could enhance and help graduates to build their communication skills. The findings could not be corroborated or supported with other studies. This is because there were no studies so far conducted recently.

In conclusion, the interviewer expects a candidate to use appropriate language, to construct complete sentences, to be precise in providing details, and to be aware of their grammar while communicating. Roderick (1985) stressed that fresh graduates should pay attention to the importance of creating first impressions. They should be on time and well prepared for the interview, which includes dressing professionally, greeting, and shaking hand with the interviewer, while maintaining good eye contact and portraying a high confidence level. Conversely, negative behaviour such as a low confidence level, excessive talkativeness, failure to provide a comprehensive reply, or being nervous in mannerisms prompt interviewers to rate job candidates unfavourably (Vaughn & Darsey, 1987).

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APPENDIX A

Communication Skills.

Completeness	The communication must be complete. It should convey all facts required by the audience. The sender of the message must take into consideration the receiver's mind set and convey the message accordingly.
Conciseness	Conciseness means wordiness, i.e., communicating what you want to convey with the least possible words without forgoing communication and it is a necessity for effective communication.
Clarity	Clarity implies emphasizing on a specific message or goal at a time, rather than trying to achieve too much at once.
Correctness	Correctness in communication implies being particular and clearer rather than fuzzy and general. Concreteness strengthens the confidence.

Source: *Truman (2011)*

APPENDIX B

Standard Interview Questions

1. Tell me about yourself.
2. What were your responsibilities?
3. What did you like or dislike about your previous job?
4. What were your starting and final levels of compensation?
5. What major challenges and problems did you face? How did you handle them?
6. What is your greatest strength?
7. What is your greatest weakness?
8. How do you handle stress and pressure?
9. Describe a difficult work situation / project and how you overcame it.
10. What was the biggest accomplishment / failure in this position?
11. How do you evaluate success?
12. Why are you leaving or have left your job?
13. Why do you want this job?
14. Why should we hire you?
15. What are your goals for the future?
16. What are your salary requirements?
17. Tell me about yourself.
18. Who was your best boss and who was the worst?
19. What are you passionate about?
20. Questions about your supervisors and co-workers.
21. Questions about your career goals.

Non-native and Native Speakers' Casual Conversations: A Comparative Study of Involvement and Humour

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ABSTRACT

Research on spoken language has mainly focused on spoken discourses in settings such as classroom and workplace. Another important use of speech, casual conversation, has received much less attention. Casual conversation is a functional and semantic activity. It is a site for the establishment and development of social identity and interpersonal relationships; a way of conveying who we are and of interacting with others in different contexts. This paper reports a comparative study on two casual conversations, which naturally occurred in two different settings; between international students from different language backgrounds and between native speakers of English. The texts were constructed in everyday social settings and reflected the role of language in the construction of social identities and interpersonal relations. The two settings displayed different uses of language to construct solidarity, intimacy and affiliation. The study used a functional and semiotic theoretical framework for analysing casual conversation, in order to describe and explain two aspects of casual talk; namely involvement and humour. Using a bottom-up approach, the conversations were analysed to look at the use of naming, technicality, swearing and slang for the purpose of involvement. Humour in each conversation was analysed through language devices that triggered laughter from participants. Situational and

cultural influences on meaning-making were explored and compared in the analysis of involvement and humour in the two different settings.

INTRODUCTION

Casual conversation often refers to naturally occurring talks motivated simply for the sake of talking itself (Eggins & Slade, 1997). It is critical in the social construction of reality through which "shared meanings, mutual understandings, and the coordination of human conduct are achieved" (Goodwin & Heritage, 1990). The extensiveness of this type of spoken discourse in daily life has made it an exciting domain of study for researchers from different disciplines. Anthropologists are interested in casual talks as they see it as "an omnipresent communicative practice through which sociocultural norms and values are articulated and passed on from experts to novices" (He, 2000). Yet detailed descriptions regarding conversation structures as well as the structuring of language use in the construction of these talks have mainly come from sociologists and linguists. While sociologists take casual conversation to be the primordial site for the accomplishment of sociality, linguists are fascinated about how language is structured and used as a semiotic resource that enables us to *do* conversation, to be social beings and do social life Eggins and Slade (1997). Considered as a semantic activity, casual conversation is a rich linguistic site for

analysis to explore how language is used in different ways for the construction of the conversation, and how patterns of interaction reveal the shared values, social identities and interpersonal relations among interactants.

This paper provides a comparative study on two casual conversations which were naturally occurred in two different settings: one between international students from different language and cultural backgrounds, and another between native speakers of English who share the same language and cultural background. Intercultural conversation, compared to conversation between native speakers, often depends "more heavily on the shared responsibility and collaboration of the culturally divergent speakers in converging their communicative behaviour to that of the interlocutor in order to negotiate common, shared grounds" (Cheng, 2003). As casual conversation is doing to construct and maintain culture, interactants' beliefs, values and perceptions of meaning will be conveyed through communication process (Krippendorff, 1993). In this study, our aim was to explore how different users of English use the language in their casual talks to construct solidarity, intimacy and affiliation. Situational and cultural influences on meaning making were also explored and compared in the analysis of the two casual conversations.

The study used Eggins and Slade's (1997) functional and semiotic theoretical framework for analysing casual conversation. As casual conversation is

mostly motivated by interpersonal needs in order to establish and maintain personal identities and social relationships, this study described and explained two interpersonal aspects of casual talks at the semantic level, namely *involvement* and *humour*. For the purpose of understanding involvement created by interactants, the conversations were analysed in terms of the lexical selection of naming, technicality, swearing and slang. Humour in each conversation was analysed through language devices that trigger laughter from participants.

THEORETICAL FRAMEWORK

Casual Conversation

Interacting with other people is part of our lives as socialized individuals. In this process of exchanging meanings, our interactions are not only functionally motivated to accomplish certain tasks, but also inspired by our interpersonal needs to establish and maintain contact with one another. Very often, in everyday encounter situations we engage in a variety of chats, either voluntarily or accidentally, with friends, family members or workmates. In this kind of talks, we often feel most relaxed, spontaneous and most ourselves. These informal encounters are usually labelled *casual conversation*.

As defined by Thornbury and Slade (2006), casual conversation is primarily spoken, planned and produced spontaneously in real time. It often refers to interactions which display informality and have no clear pragmatic motivations Eggins and Slade (1997). It differs from other pragmatic-oriented interactions (i.e. buying a bus ticket, or making an appointment with a family doctor) in that these pragmatically oriented interactions are motivated by clear purposes and tend to be ended after achieving the goals. Casual talks, on the other hand, can be fairly long without reaching a specific informative level (Ventola, 1979). Another point making casual conversation distinctive to other spoken discourses is that it is not necessarily always fully developed. Its subject-matters, or topics of talks, are normally non-technical, trivial, and can be often overlapped and changeable. The topics of these casual encounters are also highly context-dependent and culture-bound. Another typical nature of these casual talks concerns the social role of the participants, which is typically non-hierarchic even though participants involved can be friends or strangers.

From linguistic point of view, casual conversation is a semantic activity, a meaning-making process. According to Halliday (1978), it is "the spontaneous interchange of meaning in ordinary, everyday interaction". In spite of its sometimes aimless appearance and apparently unstructured content, casual conversation plays a critical role in the social construction of reality. As we gossip, we are not only transmitting our messages, but also enacting our social identities, establishing and sustaining interpersonal relationship. Therefore, Eggins and Slade (1997) argued that the motivation of casual conversation was interpersonal that revealed the positioning of participants in relation

to each other. Casual conversation is a rich linguistic site to not only see how language is used in different ways as a meaning-making resource to enable us to construct the conversation, but also to explore how patterns of interaction reveal social identities, interpersonal relations and cultural backgrounds among conversationalists. Although casual conversation occurs in a relaxed social setting in which interactants feel most themselves and comfortable, it would be interesting to observe how people from different cultural and language backgrounds make linguistic choices to express their positioning during the negotiation of solidarity and differences.

In spite of its centrality in daily lives, casual conversation has generally received less analytical attention compared to written discourse. Despite a large number of written corpora, which comprised of millions or billions of words, there have been a much smaller number of spoken corpora made up of a few hundred thousand words (Raso & Mello, 2014). However, corpus linguistics has made a significant contribution to the study of informal spoken texts with much of the evidence for the description of its nature drawn from findings of corpus linguistics. One of the pioneering work on this domain was in McCarthy & Carter (1995)'s study of spoken grammar of informal and conversational language drawn from the Cambridge and Nottingham Corpus of Discourse which was one of the first corpora to target only spoken language. Miller and Weinert (1998) explored the syntactic structures across languages from three

sets of corpora compiled of spontaneous conversation produced by speakers of Scottish English, German and Russian. The corpora of C-Oral Brazil, Nordic Dialect Corpus and Brazilian and American Sign Language Corpora are the multiplicity of spoken corpus which were used in Raso & Mello (2014)'s for the study of information structure, syntactic variation and sign language acquisition. Significant studies on casual conversation also include Eggins (1990), Thornbury and Slade (2006), Ventola (1979), addressing features of casual talks such as lexical and grammatical features, discourse and genres. Other research has been into other aspects, such as listener back-channel expressions in Japanese and American English conversations (Maynard, 1986), non-verbal elements in Japanese casual conversation (Maynard, 1987), morphological errors in casual talks (Bond, 1999), and role structure and dimensions of social identifies among interactants (Banda, 2005). These studies analyse casual conversation from a number of perspectives and aspects, making significant contributions towards understanding the nature of casual conversation.

Systemic Functional Linguistics: a functional-semantic interpretation of casual conversation

In this paper Systemic Functional Linguistics (SFL) was adopted as the approach to analysing casual conversation. SFL provides a functional-semantic approach to language description which views language as a social semiotic system, a resource for individuals to make meanings by exercising linguistic

choices in close relation to contexts of language use. SFL's development is largely contributed to the work of MAK Halliday from the 1960s, with major contributions from Hasan (1979, 1980, 1984, 1992) Halliday and Matthiessen (2008, 2014), Martin (1984, 1992), Martin and Rose (2007), and Martin and White (2005), to name just a few.

This functional model of language is relevant to casual conversation analysis in several respects. With an emphasis on functions of language, SFL argues that all human languages are internally organised to serve three major functions simultaneously: to represent our experiences (ideational metafunction), to enact our social relationships (interpersonal metafunction), and to organise our representation and enactment into coherent texts (textual metafunction). Therefore, from SFL perspective, language is a resource for making three strands of meanings at the same time corresponding to the functions it serves. In casual conversation, ideational meaning is expressed through the negotiation of a shared ideational world, which can be analysed by looking at the topics of talk, and topic transition and closure. Simultaneously, the interpersonal strand of meaning runs through the conversation, which reveals the roles and relationships among interactants. Textual meaning helps to organise the ideational and interpersonal actualities into a piece of speech, which can be explored by looking at different types of cohesion used to tie chunks of talk together.

As all three strands of meanings being enacted, casual conversation can be analysed and interpreted by different analytical techniques to uncover each strand of meaning. However, this paper placed the main focus on interpersonal meaning because it was argued that casual conversation is driven by interpersonal, rather than ideational and textual meanings. With the absence of pragmatic purposes and outcomes, it can be seen that the primary task of casual conversations concerns the negotiation of social identities and relationships. Furthermore, the topics of talk can be anything (e.g. the weather, health, holiday plans or current news), and can be constantly transitioned, which suggests that casual conversation is not motivated by ideational meanings. Rather, these topics serve as "a means of establishing and maintaining social relationship" (Ventola, 1979).

Another fundamental premise of SFL significant to casual conversation analysis is the interconnectedness between the language use and the social contexts. The immediate social context, called context of situation, constrains the linguistic choices that individuals can choose to make appropriate meanings (Christie & Unsworth, 2000). Each context of situation is characterised by a particular register of language, which is a combination of three variables: field, tenor and mode. Field refers to the topic or what is going on in an interaction (i.e. about childcare, or the weather). Tenor is about the interactants and their role relationships (i.e. mothers to children, friends to friends, or specialists to general audience), while

mode refers to the role of language plays in an interaction (i.e. interactive face-to-face or written). Field is realised through ideational metafunction, tenor through interpersonal metafunction, and mode through textual metafunction. However, the way language is structured for use is not only influenced by the context of situation, but also by the context of culture which involves a full range of situational contexts that the culture embodies. According to Martin and Rose (2007), each interaction is an instance of the speaker's culture, and the text can be used to interpret aspects of the culture it manifests. Therefore, both of these contexts have "a significant and predictable impacts on language use" (Eggins, 2004).

Given the key focus on interpersonal semantics, tenor and patterns of interpersonal meaning running through casual conversation were analysed to see how linguistic choices contribute to the realisation and construction of role relations between participants. Two main areas of interpersonal semantics were explored, concerning involvement and humour.

Involvement

Involvement refers to how interpersonal worlds are shared by conversationalists. It comprises a range of semantic systems that participants can use for the realization, construction and maintenance of intimacy and affiliation. These interpersonal alignments are largely expressed at the semantic level through lexical selections. The choice of one word other than another reveals the speakers' identities and their cultural backgrounds. According to Eggins and Slade (1997), in casual conversation involvement includes the use of lexical items which can be categorised into naming, technicality, swearing, slang or anti-language.

Naming involves the use of vocatives to get attention or to control the turn-taking system by targeting the next preferred speaker. Vocatives are an important resource to analyse multiparty conversations which speakers can use to control, manipulate, divide or align the other interactants. Vocatives include titles, surnames, first names in full or modified form, nicknames or other terms of address. Names of other people who are mentioned in the talk are also in this category. Technicality concerns technical and common-sense lexis which are used and understood by most interactants without special background in the particular field. Generally, technicality is closely related to the topics of the conversation. Swearing in casual conversation includes swear words and expletives, which give some indication of casualness or formality of the talk. The frequency of swearing is very much dependent on status and preference of interactants. Eggins and Slade (1997) suggested that there was some association between swearing and group membership, which could reveal the positioning of the speaker in the group. Involvement can be also expressed by the use of slang or anti-language. Anti-language involves the creation of an extensive vocabulary which gives new meanings to things.

For the case of international students

from different language and cultural background, despite their effortless participation in casual conversation with their peers, their involvement in talks also reveals their emergence into the new community of practice. Through their engagement in a number of casual talks, these students move from peripheral to full participation in their community of practice (Lave & Wenger, 1991). It is noted that the linguistic choices when involving in casual conversation that those students make from their repertoire are greatly influenced by their language and cultural backgrounds.

Humour

Humour and lightheartedness are consistently used in casual conversation to achieve serious social work as a semantic resource related to Appraisal, one of which is developed to include Involvement (Eggins & Slade, 1997). There is a variety of research on humour from different perspectives. Rogerson-Revell (2007) studied humour in business meetings and found shifts in style of humour from formality to greater informality. Similarly interesting, Bell (2005) explored how humour was negotiated and constructed by non-native speakers of English, indicating a correlation between level of language proficiency and the ability to use language resources to be humorous. Some other studies of humour have focused on laughter since it is the most explicit cue of identifying humour; however, not all humour is indicated by laughter (Eggins & Slade, 1997).

Teasing, telling funning stories, dirty jokes, exaggerating or minimizing things are typical devices of presenting humour in casual conversation. Eggins and Slade (1997) outlined four claims about humour in casual conversation: 1) Humour is used in casual conversation to make it possible for interactants to do social work, while being able to distance themselves from it; 2) Humour not only provides distance, but it also disguises the serious work that is being achieved through talk. In addition, participants of casual conversation are positioned and socialized through laughter; 3) Humour, like other linguistics resources, constructs meanings through differences; and 4) Humour connects the interpersonal contexts of private life with the social contexts of public life.

METHODOLOGY

Data

The data used in this investigation is drawn from two sets of casual conversations occurred in two different settings. The first data is a casual conversation participated by a group of international students from different cultural backgrounds: three Chinese and one Indonesian with age ranging from 28 and 34 years old. These participants are mutual friends who are familiar to each other. Two participants, however, met for the first time on that day. It was set on a casual outing during lunchtime at a restaurant. Due to different language background, English was used in the conversation to cater for the language gap among participants. The second data is a conversation among a group of Australian native speakers which

occurred in a pub. The participants in this conversation are between 28 and 29 years old, consisting of two couples: the first couple have been together for four years and the other have been together since high school. The participants were recruited on a voluntary basis with informal consent. All the participants agreed with the audio recording process and the use of the conversation for the study while their identities remained anonymous.

Analytical procedure

Both conversations were audio recorded. The recordings were then fully transcribed following Eggins and Slade's transcription conventions. Eggins and Slade's (1997) transcription is made to conform the spontaneity and informality in the conversation, but still understandable for common readers. The transcription was then analysed using colour coding for the recognition of: turn and speaker number, naming, technicality, swearing, slang/anti-

language, and humour as in Table 1.

Subsequently, the turns that contained the relevant analytical points were categorised into naming, technicality, swearing, slang/anti-language, and humour were categorised. The sample of each analytical points were presented at the discussion section.

In relation to the aims and objective of the paper, the data analysis in the study is focused on how language in casual conversation constructs solidarity among familiar participants as a part of interpersonal semantics. More specifically, the study looks at how solidarity is enacted through involvement and humour. Involvement is a system which 'offers interactants ways to realise, construct and vary the level of intimacy of an interaction'. Another aspect to analyse from the data is the realisation of humour through the devices such as teasing, telling jokes or funny stories, and other resources that provide resources of 'otherness' and 'in-ness'.

Table 1

Colour coding analysis of the lexical items to indicate involvement and humour

Convention	Coding and Colour Coding	Use
Turn	Number	To indicate the turn of the speakers
Speaker number	Initials	To indicate the speaker's name
Naming	Green	To indicate vocatives spoken by the speakers
Technicality	Blue	To indicate the technical terms used by the speakers
Swearing	Red	To indicate swear words used by the speakers
Slang/anti-language	Yellow	To indicate slang used by the speakers
Humour	Underline	To indicate words, moves or exchanges that trigger laughter

RESULTS AND DISCUSSIONS

This study has found that evidences of involvement and humour are realised differently in the two casual conversations under study. This section presents in more details the realisation of Involvement and Humour expressed by the interlocutors in the conversations.

Casual Conversation in International Setting

The conversation in the first setting is a good example of the initial stage in relationship construction. From the total of four participants in this casual conversation, one person is a new inclusion to the group, while the rest have known each other for less than a year. The conversation occurred while waiting for being served at a restaurant. The talk reflects how language is used to build relationship among the interactants.

The particular selection of the recording was the 8-minute exchange in the conversation. Within this length, the conversation reflected a comprehensive content and showed a constant transition of topics. Three prominent topics were found: housing, relationship/marriage, and age. Typical to any first-time encounters in any conversations, it was started with asking names and where they lived. Then, the topic moved on to the types of housing where the participants lived. When the recording started, the participants were discussing J's plan to move to a new place. The coverage of the topic was reflected in the use of technicality such as: *units, apartments, rental fee, house, furniture, bills*, *bed*, and *wardrobe*.

In the subsequent part, the conversation developed into more personal topic such as relationship. Two participants in the conversation are married, one has a boyfriend and one is single. The topic became an interest as B, who was single, was in disbelief to know that J was married. She was keen on knowing why such young-looking girl was actually married. She brought about her disbelief explicitly:

B　: You are too young to be married.

J, Y, Z:　Laugh

J　: No. I'm not that young. I have been married for almost five years.

B　: I don't believe you.

The talk became more interesting as Z expressed her similar disbelief knowing the length of J's marriage.

Z　: 5 years?

J　: When I …Yea, almost five years.

From this point, the topic changed into the discussion of age. An ample amount of time was spent on talking about age. This was realised in exchanges such as:

B　: No…I think you are…you are married? You must be younger than me. How old are you?

J　: No.

Z　: She's younger than you, she's not married, and…she doesn't have a baby.

All : [Laugh]

Y　: Oh, thank you. And I'm only 23 years old.

B　: Yea, you are.

All : [Laugh]

Y　: I'm 34.

B　:You look like thirty something. 30, maybe 30.

All : [Laugh]

Y : You make my day! Thank you.

All : [Laugh]

B : I look 18, right?

Y : Yes.

J : 16! You look 16! You're not adult.

B : Oh, thank you.

This topic was interrupted by a joke. But after the joke was told, they were back at discussing J's age again before she finally told her actual age.

J : I'm 30, seriously…

B : No, twenty ... uhm ...twenty three ... but no sorry

J : I told you, I'm 30, I'm 30, I'm 30, okay!

Y, B, Z : [Laugh]

Y : ID card, make her believe

Y : I don't bring my ID card, next time I will bring my ID card

B : Really? Thirty?

It can be noticed that naming was rarely used for the purpose of naming. Rather, paralinguistic features, i.e. gesture and gaze, might be used to indicate turn taking. Instances can be found all over the script, for example at the first topic about J's plan to move out. All other participants are looking at her, raising questions or suggestions hoping to get response from her. In the next topic when B was surprised that J was married, B raised her intonation to express her disbelief. One clear example was found at almost the end of the script, although no naming was used, it is clear that J was responding to Y's question with a prompt answer.

Y : Your fan, your fan, your fan!

J : Which one? Stupid one?

Z, B, Y : [Laugh]

J : Crazy boy

Y : She's got a lot of fan

J : [Laugh]

All : [Laugh]

B : I'm gonna be nice to you

Generally, each participant in the conversation took their turn by personal initiative. Turn taking was indicated by other paralinguistic features, i.e. gaze, to indicate the next speaker. Due to the limitation of the audio recording, this feature was not evident. However, the promptness of the responses revealed that every participant knew when the question was addressed to them and hence responded accordingly. The only naming that can be seen in the talk was an interjection. Y said J's name in surprise as she commented on herself negatively.

Z : She's doing her PhD, how old do you think she is? She's doing her PhD.

B : Uhm but if she just finished the

Z : Master's degree

B : Uhm undergraduate and do PhD exactly

J : I'm not that smart

Y, B, Z : [Laugh]

J : I'm not that smart

All : [Laugh]

Y : J! [Laugh]

Regarding to swearing, it has been noticed in the study that international students do not use swear words in their casual conversations. This may occur for several reasons. First of all, the participants in the study are paying respect to each other. They are familiar to each other but

they have not been friends for too long. Not using swear words is a cautious act to avoid misunderstanding. Also, they are colleagues in an academic institution. It is important to maintain their good relationship by being careful of the words they use in conversation. Secondly, English is an additional language for these students. Limited vocabulary repertoire of swear words and limited understanding of the semantic levels of a number of swear words in English might hinder them from using swear lexis in the talk. Finally and more importantly, swearing is cultural. Some swear words are highly emotional and involve cultural beliefs. Swear words are usually originated from derogatory associated with negative values in particular culture.

The only derogatory is observed in the data is a label given to a subject at the end of the talk. The lexis chosen as the labels are *stupid one, crazy one*, and *crazy boy* (previous excerpt) spoken by a participant showing her attitude about a subject. These lexis choices are not purely categorised as swear words as they are quite acceptable and non-offensive. In some sense, however, these can be included in derogatory. The participant used them to invite empathy from the other participants on the way she felt about the subject being talked about.

If there is any lexis close to derogatory but used to refer to something else, it is at the beginning of the talk. This form is recognizable as a form of anti-language.

Y   : So when you got in the house, you bought your own bed?

J   : No. They purchased them for me.

Y   : Oh

[B and Z looked at J]

J   : My roommates.

B, Z: [Laugh]

J   : Two sloths.

Y   : Very kind of them.

J   : They are rich.

It can be seen from the excerpt that the term *sloths* is not used to talk about the animal. The term was coined by J to refer to her roommates. She explained that the term came from another friend who thought that the roommates' characteristics were like sloths. Sloths are well known of their characteristics as slow animals. The use of the term *sloths* can be distinguished from naming as the use of the words are to refer to people who have quality like the animals.

As the topic changes, laughter highlights the conversation. Laughter in the conversation is triggered by the shared humour among the participants. In a conversation among people who have shared commonalities, laughter can be triggered even by the smallest, corniest and most trivial cause. The notable humour in the conversation is the response from J towards her disbelief in the fact that she is married. The fact that J, Z and Y knew the fact while B didn't made the exchanges hilarious. The explicit humour is found when B retold a joke. She translated the joke from Chinese.

Z   : … Chinese mothers don't buy Chinese milk. However, they buy Australian products,   Australian formulas.

...

B   : Uhm, there is a joke, you know,

when China said that two-child policy instead of the one-child policy.

    J   : Yes, yes.

    B   : There is a joke saying us treating milk cows…be… I don't know how to say that: "da zhan", how do you say?

    Z   : "Da zhan"? Shaking.

    All : [Laugh]

Casual Conversation in Australian Setting

The participants in the second conversation setting have known each other for longer time. The two-minute recorded conversation was a part of the longer conversation. The lexis choices throughout the conversation reflect a lot about their involvement, not only in the current conversation, but as a member of small community of friendship.

Two considerations can be made to understand the lexis choices reflecting technicality in this setting: (1) the length of relationship among participants and (2) the length of the recorded data. The conversation was a two-minute cut from the hours spent in the pub. The data is not enough to see how the conversation opens and maintained. This conversation, however, shows the richness of the conversation, the degree of the relationship among the participants and the degree of involvement in the conversation. Instead of talking about some superficial things, i.e. where the member live, the participants planned another event to spend together i.e. bread party. This is indicated by the use of technical lexis such as *knead , plait, Pretzels, loaf, rise and grow, pound, brioche, Jew bread, Ukrainian/Easter bread, Potato bread, dense,* and *yummy*

Much similar to the first conversation, naming was not much used. Towards the ending of the conversation, naming is used as summary of who do what for the party plan:

    N   : E—is making a Ukrainian bread, T—'s making brioche, I'm making Jew bread.

In the context of the conversation, normally face-to-face recognition is allowed as the participants are in the same venue. This summary is spoken by N while referring to another participant, R, probably by means of gaze rather than the use of naming or any other vocatives. In this way, the unspoken name of R may be alternated by gaze, indicating the invitation for R to respond to the statement i.e. asking what he planned to make for the party.

Another naming was also found to refer to one participant to make some jokes:

    N : It's a bachelorette pad now.

    E : Yep. It's bread day at the bachelorette pad

    [Laughter]

    N : T—can be a bachelorette.

The fuse between naming and humour in this conversation is highly contextual. The inclusion of T in *T can be a bachelorette* is clearly a joke as T is a male participant in the conversation. The laughter that occurred during the emergence of these lines indicates that it is not an offensive matter for T or the rest members of the group. Instead, this is a matter that induce laughter for the group of close friends such as this one.

Towards the end of the talk, another naming was found to talk about a past event that included particular participant:

N : Do you know what R—said to me one time?

R : What?

N : He only hangs… This was before we started going out. He only hangs out with me so he can, like, get the fruity cocktails and not look gay.

[All laugh]

These turns are another example of naming that fuse into humour. The fact that R was one of the conversation participants who were present at the venue can be excluded by the use of naming. While saying *Do you know what* R *said to me one time,* N's gaze was probably turned away from R. Instead, she may look at E and T to refer the questions to. The laughter was triggered with the recount that N said to the other interactants that R approached N to *get the fruity cocktails and not look gay.*

A few swear word uses are found in the conversation, for example in the following lines:

R: Potato bread again.
N: Potato bread?
[laughter]
R: I like potato bread.
N: That was so **fricken'** dense!

Although the lexis *fricken* is not a strong swear word, the use in this context is to augment the meaning associated with *potato bread* in negative evaluation. Another example of swear word in the following lines is softened by the speaker's tone. The swear word was a response to a long string of joke in the previous line teasing R on her ability of making potato bread.

R : No… I'll go to work. You have your bread party. Get **fucked**.

E : [gasp] …It's alright.

As it was a friendly situation, the use of the swear word was not derogatory by any means. Instead, it shows the participants' closeness with the fact that even the swear word was not offensive to them. One last example of an anti-language is the use of the lexis 'Jew'. The use of this lexis or anything related to it, is potentially sensitive due to its relation to notorious religion/culture. In this setting, the lexis is used as a suggestion from T to N. T hesitated before N confirmed by saying 'Jew bread' confidently. With this, N indicates that mentioning 'Jew' is acceptable.

T : And you can make… you can make Jew bread.

N : Jew bread.

CONCLUSION

From both conversation settings, we can learn a few things. Turn taking in the conversation is not well-organised such as guided interviews. Naming is a crucial device to construct familiarity between interactants. While it is important to hint the turn taking in conversation, it is not always necessary. Casual conversation in a live setting, as opposed to online chat or telephone conversation, is conducted face-to-face. Therefore, naming is not always necessary due to the fact that the interlocutors see each other in real situation. Naming and other terms of addresses may be replaced by gaze and other gestures such as hand or chin movements.

Eggins and Slade (1997) suggested that swearing was an element of language to indicate involvement. While this is true for the conversation for the native speakers, the study indicates the opposite for the intercultural context. Even so, in the native speakers' talk, swear words are not used in derogatory terms. Rather, they are used to trigger humour. On the other hand, in the situation where a group of international students met for the first time, swear words are avoided as swear words used in the initial stage of friendship could give a bad impression. This will in turn risk being excluded from the circle of friendship. In real life, people do not always use 'four-letter words' in their casual conversation. Particular topics, such as emotional ones, may elicit swear words. Otherwise, they will be used sparingly as a part of jokes.

A group of participants in its early stage of community development is in the stage of constructing fundamental base of a relationship. Knowing each other, including personal information is necessary. When each member knows a general background of the other members, they would feel comfortable to open and build up stronger relations. Also, at this stage, humour is a good indication that a community of practice will be sustained or developed or not. Once the strong relationship is developed, sensitive issues will be less a problem within the community. Understanding towards each other will become base to respect each member of the community despite the differences. At some tolerable point, this can even be a subject of humour in the conversation.

Involvement and humour are two aspects of casual conversation that are expressed through the selection of the lexical resources used by the participants. While naming, technicality, swearing and slang in casual conversations are easily recognizable due to their distinguished characteristics, elements of humour are highly contextual. Humour can be realised by various expression, including naming, technicality, swearing and slang. This can be seen as the capability of language to fuse their functions in the context of casual conversation. Casual conversations, however varied by topics, interactants' relationship and setting of locations, are mostly conducted to achieve the purpose of building and sustaining relationships.

The paper has attempted to describe the affordance of language to perform the function of building a bond among interlocutors in casual conversation through involvement and humour. The limitation of the discussion, however, lies in the exclusion of some important aspects of a spoken language use such as intonations and paralinguistic elements. The limitation occurs due to the data collection method that was carried through audio recording. A better method in collecting data will be using video recording. In such method, analysis can be undertaken more thoroughly by taking into account aspects such as facial expressions, gestures, and the situation surrounding the conversation.

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An Analysis of Cultural Contents Embedded in English Textbooks for the Upper Secondary Level in Vietnam

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ABSTRACT

The increasing frequency of international and intercultural communication has made English a top priority foreign language taught in Vietnam. Given that culture is inseparable from English language teaching, especially in the landscape of English as an international language (EIL), English teaching materials should integrate and reflect culture teaching perspectives under the EIL paradigm. The present study aimed at examining the extent to which the cultural contents in six English textbooks for the upper secondary level in Vietnam correspond with the EIL paradigm. A content analysis of these textbooks was conducted. The findings reveal signs of EIL paradigm influence in the set of investigated English textbooks. Firstly, the 'source culture' and the 'international target culture' appeared more frequently than the 'target culture'. Secondly, the 'international target culture' covered a diversity of cultures in the world with a noticeable emphasis on ASEAN countries. The 'interactional culture' which is used to examine the reflection of source culture on other cultures is also found in a relatively large number of units. Finally, the 'global culture' is presented throughout the set of textbooks as topics of units.

Keywords: Cultural contents, English as an international language, textbook analysis

INTRODUCTION

The correlation between culture and language in English language teaching (ELT) has been debated among scholars over the last century. Many scholars (e.g. Corbett, 2003; Hinkel, 1999; Kramsch, 1993; Nault, 2006; Valdes, 1990) have come to agree on the indispensably complementary role of culture in language acquisition. Kramsch (1993), for instance, claimed that culture was the core of ELT, enabling learners to reach language proficiency and functioning as an outcome of language proficiency itself. Presently, the English language expands itself geographically and functionally to become an international lingua franca, i.e. the main medium of international communication. The growth of the English language can be envisaged in the fact that the number of non-native English speakers has grown massively (McKay, 2003). It is estimated that roughly 80% of conversations in English these days are among non-native English speakers (Marlina, 2014). This means that, in many contextual settings, non-native English speakers will converse with each other without reference to native speakers and their cultures. The international status of the English language is also confirmed due to its "special role that is recognized in every country" (Crystal, 2003). By this, English either functions as the official second language in educational and political institutions, and the media of some countries such as Hong Kong, Singapore, the Philippines and India, albeit the existence of a variety of local languages; or the top-priority foreign language in other

countries. The spread of English signifies the end of English as a 'property' of native English speakers and marks the emerging essence of local and international norms. Therefore, the native-speakersim which idolizes linguistics and cultures from native countries in the practice of ELT (Holliday, 2006) is now challenged.

The special growth of the English language challenges the tenet that native-speaker's norm is a valid standard and leads to the promotion of a paradigm shift in ELT (Saraceni, 2009; Sharifian, 2009), from native-centeredness to an EIL paradigm. In the light of this new paradigm, the teaching of culture has become ever more important. McKay (2002) argued that cultural content should be integrated in teaching EIL because learners encountered intercultural conversations when using EIL. It is impossible that there are people in the world who share the same world view and culture (Atkinson, 1999). Therefore, if EIL learners use English to interact with their foreign interlocutors, they should acquire some understanding of the cultural norms and values of those people. As a result, the new paradigm requires a serious revision of cultural content in ELT (Jenkins, 2006; Nault, 2006; Matsuda & Friedrich, 2011; McKay, 2000, 2002, 2003). According to Canagarajah (2005), learners who earlier acquire English language to gain access to native speaking countries should obtain the ability to shuttle between different communities in the context of EIL. Learning a language is not only about developing linguistic skills "but more importantly

intercultural communication skills, in a systematic way, which are necessary for successful communication between users from various cultural backgrounds" (Sharifian, 2014). Under the scope of the EIL paradigm, the cultures from native nations should not be overly emphasized (Alptekin, 2002; Kirkpatrick, 2014; McKay, 2002; Nault, 2006), rather, the diversity of cultures from bilingual / multilingual users should be included (Alptekin, 2002; Kirkpatrick, 2014; Wandel, 2002). The learner's own cultural background is also acutely essential in the EIL paradigm because "[o]ne of the primary functions of English, as in case with any international language, is to enable speakers to share their ideas and cultures" (McKay, 2002). However, as the purpose of learning culture in EIL context is for learners to communicate in intercultural settings, the sole presentation of local cultural knowledge is not adequate for them to function well in many of these settings. McKay (2002) also suggests that English learners should be encouraged to reflect on their own culture through exposure to other cultures in order to create the sphere of interculturality, and states that "understanding one's own culture in relation to that of others is paramount".

The EIL paradigm has influenced the practice of ELT worldwide, and Vietnam is no exception. The policy and curricula in ELT settings in Vietnam have indicated the consciousness of and the shift towards the EIL paradigm. From 2008, Vietnam's Ministry of Education and Training (MOET) issued Decision No. 1400/ QD-TTg initializing the National Project for teaching and learning Foreign Languages in the National Formal Educational System in the Period of 2008-2020. The general objective of the project is to enable learners to communicate and function well in integrative, multilingual and multicultural working environments. Also in this project, the Common European Framework of Reference (CEFR) is adopted as the base for textbook and curriculum designs as well as learner assessment, which means that the new English language policy addresses both language and culture. CEFR highlights plurilingualism which respects the diversity of the English language in the world, and develops learners' communicative competence via their experience in their own language and other languages in diverse cultural contexts. English teaching and learning, therefore, aims at improving learners' plurilingualism and interculturality (Council of Europe, 2001). In addition, in Decision No. 5209/QDBGDĐT (2012) concerning the design and publishing of English textbooks for the upper secondary level, English is regarded as a significant tool for economic development, regional and international integration, as well as a tool to gain knowledge about cultures in the world. Also, through English textbooks, the students are expected to appreciate the diversity of cultures in the world, understand Vietnamese culture and improve their critical thinking about global issues which they can apply to authentic situations. In short, the attention to culture in ELT explicitly makes its own position in ELT policy and real settings in Vietnam, which

inspires this study to see how cultural contents are depicted in English textbooks for the upper secondary level in Vietnam.

CULTURE IN ELT MATERIALS

Culture plays an essential role in an English classroom because it provides not only the background for discussion and guidelines for pragmatics (McKay, 2003), but also the diversity of cultural conceptualizations and worldviews in the world (Sharifian, 2015). In language teaching, materials function as the backbone for teaching practice. They play as a source of linguistic features and function as an essential provider of the target language's cultural knowledge (Zacharias, 2014). The shift of EIL paradigm has pushed the ELT teaching from the superiority of native English speakers' linguistics and culture to the appreciation of linguistic and cultural variety in the world. Therefore, the cultural content in ELT materials should match the change of this phenomenon (Matsuda & Friedrich, 2011).

In foreign language materials, Cortazzi and Jin (1999) classified cultural contents into three categories: source cultures, target cultures, and international target cultures, which were also discussed by McKay (2002) under the EIL paradigm.

The source culture refers to learner's own culture embedded in textbooks with the purpose of raising the awareness of their identity. This type of culture should be accompanied by other cultures because cultural identity is dynamic and "framed, negotiated, modified, confirmed, challenged through communication" and interaction

with others (Collier & Thomas, 1988). It means that the learners negotiate and realize their identity during conversations in different contexts, with other cultures. The target culture implies the cultural contents related to native English speaking countries. In authentic conversations, learners still have chance to interact with native speakers (Baker, 2009), therefore, involving the target culture in the EIL paradigm helps motivate learners, broaden their chance to reflect their own culture and enhance their intercultural communicative competence (McKay, 2002). However, this culture should be limited to the minimum because the interaction between native speakers and non-native speakers are no longer the majority in EIL settings (Alptekin, 2002). The international target culture indicates a wide variety of cultures in countries where English is spoken as a second, foreign or international language. English learners will interact in international situations where English is not their mother tongue, then textbooks designed with international culture will provide them with proper preparation for their intercultural interaction.

Matsuda and Friedrich (2011) also discussed the types of in EIL textbooks. They agreed that the learner's own culture was remarkably important in EIL and learning English was not only to know other cultures, but also to reflect upon and analyze one's own culture with others to create an equal and harmonious relationship between the cultures. Matsuda and Friedrich (2011) also argued that once English was perceived as an international language, it was essential

for students to acknowledge some global issues in the global society, which was across the boundaries of nations and Krachu's English concentric circles. Therefore, they believed that what they termed "global culture" should be integrated into classroom discussion and materials. Some examples of this term can be global warming, world peace and environment protection. Matsuda and Friedrich (2011) also mentioned another group of culture which should be taken into account, called "future interlocutors". By this, learners should be exposed to the cultures of their potential future interlocutors who can be from both native and non-native English speaking countries. However, it is impractical and unrealistic to cover all the national cultures in the world in teaching materials. Their recommendation is to cover a wide range of regions and countries in both native and non-native English speaking areas.

CONCEPTUAL FRAMEWORK

It is apparent that Cortazzi and Jin (1999) and Matsuda and Friedrich (2011) shared overlapping types of cultures. They both agreed on the importance of source culture while Matsuda's future interlocutor type of culture was a combination of Cortazzi and Jin's target and international target culture types. Moreover, Cortazzi and Jin (1999), McKay (2002) and Matsuda and Friedrich (2011) also emphasized that the sole presentation of the source culture was not adequate for learners to develop the intercultural communicative competence which was essential in an EIL paradigm.

They recommended the importance of giving opportunities for learners to reflect their own cultures with other cultures in the world to found intercultural sensitivity.

The shift to the EIL paradigm made English teaching materials become a fertile field for researchers. These studies examined both commercial textbooks written by native speakers and locally produced textbooks in various contexts.

The very first convincible place to start with is commercial textbooks. A variety of studies on commercial textbooks were investigated in various contexts such as Asian countries (Shin et al., 2011), Taiwan (Chao, 2011), Hong Kong (Yuen, 2011) and Iran (Dehbozorgi et al., 2014). The findings from these studies, to some extent, reflected a similar trend in commercial English textbooks that the target culture or Inner-circle-related cultural contents dominated the cultural contents while little attention was paid to local and Asian countries.

Many studies were also conducted in locally published textbooks. The current study reviewed studies conducted in Turkey (Kirkgoz & Agcam, 2011), Indonesia (Mukhamirudin et al., 2017), and Korea (Kim & Paek, 2015). In short, these studies showed various patterns of cultural categories in the textbooks. However, the researchers of these studies concluded that these textbooks still failed to meet the requirements of English teaching materials in the new context of ELT, the paradigm of EIL.

Generally speaking, the researchers of these studies employ a range of conceptual

frameworks. Firstly, three categories of culture as proposed by Cortazzi and Jin (1999) were frequently employed as the theoretical framework, (e.g. Celik & Erbay, 2013; Faris, 2016; Syahri and Susanti, 2016). Secondly, some other studies used Krachu's concentric circles (including Inner circle, Outer circle and Expanding circle) as the primary theoretical framework, (e.g. Ookawa, 2016; Shin et al., 2011). These studies contribute significantly to the literature of the EIL paradigm. However, in these studies, the discussion on the interaction between the source culture and other cultures as well as the global culture is not paid much attention. As aforementioned, the reflection of the source culture on other cultures is paramount in the EIL paradigm (McKay, 2002). Additionally, global culture which covers cross cultural issues is a vital element in the era of globalization and intercultural communication. Therefore, the current study devotes more space for these two types of culture. The study modifies the framework from Cortazzi and Jin (1999), McKay (2002) and Matsuda and Friedrich (2011), analyzing the cultural contents in English textbooks for the upper secondary level in Vietnam. Combining these perspectives, the researcher establishes an instrument including five types of culture as follows:

Source culture: Refers to Vietnamese culture

Target culture: Refers to cultural content related to native English-speaking countries (US, Britain, Australia, New Zealand, Ireland, Canada)

International target culture: Refers to cultural content related to other countries and territories in the world (e.g. Asia, Europe, Africa…), except for Vietnamese and native English speaking countries

Global culture: Refers to global issues and concerns which are commonly shared by all countries regardless boundaries (e.g. global warming, gender equality)

Interactional culture: Refers to comparison, reflection or awareness of the differences and similarities between source culture (Vietnamese culture) and target and international target cultures to help learners establish the sphere of interculturality.

In the context of Vietnam, teachers have positive attitudes towards teaching cultures in their English classroom (Tran & Dang, 2014). A number of studies have been conducted to investigate the cultural content in English textbooks. Le (2004) conducted a study examining the sociocultural information in an English textbook for the beginners of secondary level to find that the textbook paid little attention to culture awareness. Later, Dang and Seals (2016) evaluated English textbooks for primary school level revealed that the textbooks offered more space for the cultural content but still paid an inappropriate amount of attention to cross-cultural knowledge.

Among the educational levels in the formal education system in Vietnam, the upper secondary level is an important phase due to the fact that students will either pursue their academic work at universities or participate in the mainstream of job-hunting. It means that once graduating from

this education level, high school students should primarily be able to converse in cross-cultural communication. Therefore, this study is conducted to examine the extent to which the cultural content in English textbooks published locally in Vietnam for the upper secondary level satisfies the English as an international language paradigm.

RESEARCH QUESTION

Employing the above framework, the current study attempts to examine the correspondence of the cultural content in English textbooks for the upper secondary level in Vietnam with the EIL paradigm by answering the following research question:

To what extent do the types of culture in English textbooks for the upper secondary level in Vietnam correspond with the EIL paradigm?

METHODOLOGY

Research Design

In order to examine the cultural content in English textbooks for the upper secondary level in Vietnam in terms of types of culture, the content analysis would be employed as the current research design. Content analysis is "a research method that uses a set of procedures to make valid inferences from the text" (Weber, 1990). Miles and Huberman (1994) defined content analysis as archival strategies in which the research subject related to documents receiving no treatments from the researchers. Content analysis basically searches for meanings of the contents. This study aimed at gaining an insight into the cultural content of textbooks in Vietnam. Therefore, content analysis was employed to examine the nature of cultural types in English textbooks for the upper secondary level in Vietnam. Content analysis can be used to deal with materials of all types, including verbal discourse, written text and pictures (Krippendorff, 2012). In this study, content analysis covers dialogues, reading passages and tasks from the set of six English textbooks for the upper secondary schools in Vietnam. According to Cohen et al. (2013), content analysis is regarded as a reliable and objective approach in research due to the explicit rules in the process of data classification and arrangement.

Research Materials

In the context of Vietnam, students from state schools use the same textbooks published by Vietnam Education Publishing House, making it easy to choose the research materials. The material for this study was a set of six English textbooks for the upper secondary level in the general education system in Vietnam. It was published domestically by Vietnam Education Publishing House, incorporated with an international publisher, under the supervision of Vietnam's MOET. For the upper secondary level, the set of six English textbooks is mandatory for all students in grades 10, 11 and 12, two for each academic year. Each textbook contains five lesson units and two review units. In total, there are 42 units in this set of six textbooks. Each lesson unit comprises eight parts:

Vocabulary, Pronunciation, Grammar, Reading, Speaking, Listening, Writing, Communication and Culture, Looking Back and Project, which is taught in eight 45-minute period lessons. According to MOET's Decision No. 5209/QDBGDĐT (2012), the textbooks of the upper secondary level would cover four main themes: *our lives, our society, our environment* and *our future*. These four themes would be further developed into different topics in each unit. The titles of textbooks from grade 10 to grade 12 relatively are *Tieng Anh 10-1 (English 10-1), Tieng Anh 10-2 (English, 10-2), Tieng Anh 11-1 (English 11-1), Tieng Anh 11-2 (English 11-2), Tieng Anh 12-1 (English 12-1), Tieng Anh 12-2 (English 12-2)*.

Data Analysis

The cultural contents in each unit were investigated and categorized into appropriate types of culture. For instance, the lesson about Vietnamese weddings presented in Unit 7, p. 16, Tieng Anh 10-2 was counted as source culture; information about New York, US in Unit 5, p. 61, Tieng Anh 12-1 was collected as target culture; inventions in Asian countries in Unit 5, p. 55, Tieng Anh 10-1 was an example of the international target culture; comparing ways of raising children in Vietnam and US in Unit 3, p. 39, Tieng Anh 11-1 was counted as interactional culture; and global warming in Unit 6, p. 6, Tieng Anh 11-2 was categorized into global culture.

The content in each unit was divided into different tasks, dialogues and reading passages, which are called tokens, depending upon the context of cultural contents. For instance, a reading passage and its following questions were counted as one token; the speaking part which contained more than one activity, but discussed the same cultural content was counted as one token; different tasks in the grammar part with non-interrelated contents were counted as different tokens. In order to assure the reliability of the findings from the content analysis, an inter-rater reliability assessment was carried out. The researcher codified the data with an English teacher who had experience in teaching this set of textbooks.

RESULTS AND DISCUSSION

Generally speaking, the cultural aspect has been paid significant attention in the set of textbooks for the upper secondary level in Vietnam. In the introduction of the textbooks, the chief of writers refers to the fluidity of culture related contents and the diversity of culture in the globe. Culture is also treated as an important skill alongside Speaking, Reading, Writing, Listening and Grammar. In other words, there is a session in each unit of the textbooks devoted to cultural aspects from various nations in the world. Meanwhile, cultural contents are also integrated into other skills.

Table 1 presents the types of culture in the set of English textbooks for the upper secondary level in Vietnam by the number of units.

Regarding types of culture in investigated textbooks by units, global culture dominates the cultural contents in

Table 1

Types of culture in English textbooks for secondary level in Vietnam (by units)

Books	Source culture	Target culture	International target culture	Global culture	Interactional culture
Grade 10	12/14 (86%)	12/14 (86%)	11/14 (79%)	11/14 (79%)	8/14 (57%)
Grade 11	12/14 (86%)	10/14 (71%)	12/14 (86%)	11/14 (79%)	9/14 (64%)
Grade 12	11/14 (79%)	12/14 (86%)	10/14 (71%)	14/14 (100%)	8/14 (57%)
Total	35/42 (83%)	34/42 (81%)	33/42 (79%)	36/42 (86%)	25/42 (60%)

the textbooks. The frequency for this type of culture is equivalent in textbooks for grade 10 and 11, but peaks up significantly in grade 12, the last grade for this important educational level. The textbooks are written based on given themes and topics, and the central topic in each unit is mostly global culture. As a result, textbooks seem to be a medium for globally common and concerning issue provision such as gender equality, global warming, endangered species and preserving the environment. Cultural contents related to source culture, target culture and international target culture also account for high percentages in the investigated textbooks. Interactional culture which is employed to investigate the reflection of source culture on other cultures can be seen in more than half of total units (25/42, 60%). The reflections of source culture on other cultures can be viewed in several ways. On the one hand, the textbook writers put two similar cultural objects together in one reading passage so that the students can compare them. The following tasks of this reading passage also require students to compare the provided objects. For instance, Unit 3, Tieng Anh 10-1 (p. 33) provides information about the traditional music in Vietnam (Quan Ho) and Indonesia (Dangdut). After reading, students are required to compare these two types of music by completing a table. On the other hand, the writers provide information about another culture and require students to compare with the information they know in their culture. To illustrate, Tieng Anh 12-1 (p. 27) provides students with information about Bangkok, the capital city of Thailand. After reading, the students are required to compare Bangkok with Hanoi, the capital city of Vietnam. The interactional culture can also be seen in the way source culture are delivered in each unit with the integration of either international target culture or culture from native English speaking countries.

Since the difference among source culture, target culture and international target culture is not significant based on the units, which hinders the clear conclusion, the researcher continues to look at the distribution of cultural contents inside each unit. The tokens are divided in each unit, and then the type-of-culture related tokens will be counted. The result is presented in Table 2.

Gaining insight into units, it is apparent that the source culture by far prevails in

Table 2

Distribution of types of culture (by tokens)

Books	Source culture	Target culture	International target culture
Grade 10	46	28	22
Grade 11	59	25	47
Grade 12	33	32	33
Total	138	85	102

the number of tokens, following by the international target culture, despite the fact that the target culture is slightly higher than international target culture in grade 10. Counted by tokens, the target culture appears to be the least frequent among three. The cultural knowledge from target countries brings the insight into typical cultural products or practice of daily life and customs in these countries. For instance, in Review 1, Tieng Anh 10-1 (p. 37), folk music in America and Canada is introduced as a popular type of music in these countries while Unit 8 in Tieng Anh 10-2 (p. 33) introduces how US children learn with electronic devices. The source culture or Vietnamese culture provides students a great deal of information about their own country. This information covers many respects such as practice in daily life (e.g. family life in Vietnam Unit 1, Tieng Anh 10-1, p. 13); traditions and customs (e.g. superstitions in Vietnam Tieng Anh 10-2, p. 19); beliefs (e.g. Vietnamese beliefs in success, Tieng Anh 10-2, p. 24); ecotourism destinations (Unit 10, Tieng Anh 10-2, p. 52); food (e.g. Pho, Unit 7, Tieng Anh 10-2, p. 25); entertainment (e.g. TV shows such as Vietnamese Idols, Who Wants to be a

Millionaire (Unit3, Tieng Anh 10-1, p.30); great historical figures (Unit 1, Tieng Anh 12-1, p.13, 16); and festivals (e.g. Forest Worshipping and Elephant Racing Festival in Unit 5, Tieng Anh 12-1, p.67). The set of textbooks also raises awareness of the use of English as an international language by placing an emphasis on cultural identity in Unit 5, Tieng Anh 12-1. It provides students the information about what cultural identity is, the influence of globalization in cultural identity (p. 62, 65) and how to keep their identity (p. 63). The EIL paradigm is also promoted via the attention paid to integration as in Unit 5, Tieng Anh 11-1 "Being a part of ASEAN" implying the relationship of Vietnam with the regional association; and the consciousness of cultural diversity which is delivered in Unit 7, Tieng Anh 10-2 (p. 16-25). In a nutshell, source culture is not solely presented, but associates with other cultures and emphasizes on the integration issues.

Under the EIL paradigm, the diversity of culture is appropriated; therefore, the research also looked at the diversity of culture in international target culture. The result is presented in Table 3.

Table 3

Distribution of international target culture (by number of tokens)

Books	ASEAN	Other Asian countries	Europe
Grade 10	10(/22)	8(/22)	6(/22)
Grade 11	38 (/47)	15(/47)	9 (/47)
Grade 12	12 (/33)	16 (/33)	11 (/33)
Total	60/102	39/102	26/102

Apparently, cultures from a variety of regions around the globe are covered in the set of textbooks albeit the fact that cultures from ASEAN countries clearly predominate as more than half of tokens of the international target culture. The emphasis on the ASEAN region is highlighted in Unit 5 'Being a part of ASEAN' (p. 58) in Tieng Anh 11-1. This unit is devoted to describing the ASEAN association, charter, and intensively introducing cultures from ASEAN members. Cultures from other Asian countries are also paid considerable attention, which involves a wide variety of countries in this area. For instance, the textbooks introduce acupuncture from China (Unit 2, Tieng Anh 10-1, p. 19), Mahatma Gandhi from India (Unit 4, Tieng Anh 10-1, p. 45), inventions from China, Japan (Unit 5, Tieng Anh 10-1, p. 55), or customs in Korea and Japan (Review 3, Tieng Anh 10-2, p. 37). The emphasis placed on cultures from these regions is apparently not a coincidence. The statistics of countries investing to Vietnam via Foreign Direct Investment (FDI) projects implemented by Vietnam's Ministry of Planning and Investment in 2012 indicate that Asian countries occupy a large portion (Doan, 2014). Moreover, from 2008, it was decided that the working

language in ASEAN is English language (Secretariat ASEAN, 2008). Besides, the travelling among ASEAN nations has become more convenient with the absence of visa requirement. It can be assumed that the interaction between Vietnam and these countries is triggered to increase. Kirkpatrick (2012) also suggested that students in the ASEAN community should have the knowledge about cultures in ASEAN countries so that they could communicate and acquired their regional identity. It is safe to conclude that embedding a range of ASEAN and Asian cultures in the set of textbooks is a strategic step for students to gain an understanding about their highly interactive counterparts.

Cultures from European countries are also relatively significant. Cultures from this region focus on the practice of the daily life or the advance in living standard and technology. For instance, Unit 3, Tieng Anh 12-1 (p. 39) provides information about cities in Europe which are considered as green places in the world. Another example is from Unit 2, Tieng Anh 10-2 (p. 20). In the given reading passage, the traditions and customs of Russia such as popular drinks, dishes, sports or beliefs are provided, parallel with those in the UK. Africa and

South America, despite being the least frequent types of culture, are also mentioned quite intensively and explicitly. In Unit 10, Tieng Anh 10-2 (p. 55), the potential of ecotourism in Africa is introduced to compare to that in Vietnam. Meanwhile, the development of tourism and its effects in Costa Rica are discussed in the same books (Unit 10, Tieng Anh 10-2, p. 51).

CONCLUSION

The study attempts to find the correspondence between the cultural content in English textbooks for the upper secondary level in Vietnam and the EIL paradigm via different types of culture. Exploring the types of culture in this set of textbooks reveals some crucial findings. Firstly, global culture is integrated in almost all the units of the textbooks as general topics for further discussion. These topics inform students several issues of concern for the entire world such as global warming, pollution and environmental protection. Existing studies on culture in textbooks rarely paid adequate attention to this type of culture. For example, Xiao (2010) added 'free culture' category to Cortazzi and Jin (1999)'s framework to classify the cultural content not belonging to the existing types. However, this category was not fully analyzed. Noticeably, Chao (2011), Kim and Paek (2015) and Mukhamirudin et al. (2017) used a similar type of culture as Universal Culture (UC). However, UC is defined as the linguistic and teaching practices which do not belong to any particular culture. This differs from global culture

employed in this study which is defined as the common concerning issues regardless national boundaries. Target culture referring to cultures from native English speaking countries is still relatively high, which can be considered as a minus point from the perspective of the EIL paradigm. However, source culture is the dominant cultural aspect compared to target and international target culture in the textbooks. According to McKay (2002), source culture is acutely essential in teaching English because the goal of learning English is to share one's ideas and culture. The set of English textbooks functions as a medium to introduce students to various respects of culture in Vietnam, from history and artefacts to daily practice. International target culture, as an important factor in the EIL paradigm, also gains remarkable recognition in the set of textbooks. This type of culture covers a wide range of cultural diversity round the globe, which is beneficial for students who learn English as an international language. It is clear from the result that there is an apparent emphasis on ASEAN and Asian cultures. Earlier mentioned conditions confirm the lingua franca environment of Vietnam and other countries in these regions. Therefore, for Vietnam as a part of these regions, to place a focus on these cultures is highly reasonable. Cultures from far-flung areas such as Africa and South America can also be found in the set of English textbooks, though it is only touched upon. Furthermore, it is noticeable that there is no unit in the examined set of textbooks that presents cultures from one single type.

Instead, cultures from different types are integrated, implicitly or explicitly compared with each other. The interactional culture which represents the reflection of source culture on other cultures is also remarkable. In comparison with studies on commercial textbooks (e.g. Chao, 2011; Dehbozorgi et al., 2014; Shin et al., 2011; Yuen, 2011) which over presented the cultures from English native speaking countries, the textbooks in Vietnam represented more of the cultural diversity. As for the studies in locally published textbooks (e.g. Kim & Paek, 2015; Kirkgoz & Agcam, 2011; Mukhamirudin et al., 2017), even though divergent cultural types could be found, the interactional culture was either ignored or paid very less attention. The textbooks in Vietnam, to some extent, have embedded all types of culture necessary for the EIL paradigm. In summary, it is concluded that the English textbooks for the upper secondary level in Vietnam reveal apparent influences from the EIL paradigm. The cultural aspect has been intensively invested in the new set of textbooks for the upper secondary level in Vietnam. However, how much attention and focus the teacher pays for cultures in the authentic classroom is also a crucial element to the success of the EIL paradigm. Regarding the current study's findings, target culture still receives a high proportion of presentation in the set of textbooks. Therefore, it is suggested that the teachers encourage students to treat all cultures equally as part of the international variety of cultures in the context of the EIL paradigm.

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Online English Language Learning Activities and Academic Achievement: Experiences of First Year Students and Their Teachers

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ABSTRACT

The central objective of the study is to address the following question: what are the perceptions of students and their teachers about the impact of using online English language learning activities on students' academic achievement in the Preparatory Year Programme at Imam Abdulrahamn bin Faisal University? The study combines both qualitative and quantitative methods to collect data about these perceptions. The main instruments were students' and teachers' questionnaires and interviews, and classroom observations. In total, 1696 students and 52 teachers completed the questionnaires, 16 students and 6 teachers participated in the interviews and 16 e-learning classes were observed. The findings indicated that online English language learning activities enabled students to practice independently outside classrooms, which in turn was perceived to have a positive impact on academic achievement. Furthermore, participants believed that online learning promoted the development of vocabulary, listening and grammar skills. Also, online learning activities were seen to increase students' readiness to move to the next level of study.

Keywords: Academic achievement, e-learning, English language, online learning activities, preparatory year programme

ARTICLE INFO

INTRODUCTION

In order to learn effectively, learners engage in practical work through various strategies and activities, and since the beginning of this century, instructional designers have developed new learning management systems, such as online learning platforms, to enhance the learning process. Alfehaid (2018) argued that "online-supported language learning resources are plentiful, and the main challenge now is to find a way to organize instruction through this medium". Many have found online learning to be an indispensable aid to instruction. However, the place of online learning is controversial and has polarized many educators into two advocates, i.e. those who support online learning and those who support face-to-face learning.

Despite the fact that there are mixed results in some studies, many researchers have found that learners are able to asynchronously and synchronously take part in online courses (Hrastinski, 2008). Molchanova (2015) found out that online courses were most effective for students, with regard to improved linguistic competence, when used over an extended period of time. She added that students also found online courses more instructive, motivating and helpful with respect to gaining proficiency and independence. The major question is how and why online learning can be effective. Unlike previous studies which focused on the differences between, or strengths and weaknesses, of online learning and face-to-face learning, the present study attempts to explore English language learning processes when mediated through online activities. The novelty and significance of this study lie in its purpose which focuses on assessing the relationship between online learning activities and the students' actual academic achievement with regards to the English language.

LITERATURE REVIEW

Defining exactly what online learning entails is somewhat of a challenge. Moore et al. (2011), for example, considered the concept of online learning difficult to define because scholars concerned had not come to an absolute definition of online learning. Online learning may be thought of as a form of distance education based on the latest generation of technologies (Keegan, 1996). In the context of language learning, according to Hockly (2015), online learning "refer[s] to language learning that takes place fully online via the internet, with no face-to-face component, within the context of both formal language courses and more informal learning scenarios." This means that online learning is only made available and accessible through an internet connection. Although scholars define online learning differently, most agree that online learning makes full use of the Internet and other digital technologies; and makes course material accessible anytime and anywhere. For the purpose of this study, online learning is defined as an internet-based learning *environment* designed for students to provide them with a variety of learning resources and activities that add to their knowledge and learning experience (at

their convenience). Felix (2003) explained that there were two main forms of online learning:

On the one hand there are stand alone online courses that strive to operate as virtual classrooms, in which the technology acts both as tutor and tool. High quality examples are still very rare in languages. On the other hand, there are add-on activities to classroom teaching or distance education courses in which technology is used primarily as a tool and communication device. Teachers are present to varying degrees in both forms

The current study is concerned with the second form where online language learning activities are used and integrated within the curriculum as a pedagogical component to enhance English language learning. As the world is witnessing a major revolution in information technology, online learning seems to be natural because it can enable learners to get adapted to and meet their learning needs (Thorne, 2003).

The use of online technology-based activities for the purpose of learning English language has become prevalent in many higher education institutions. Garrison and Vaughan (2013) noted that many universities implemented online learning in order to enhance students' learning outcomes. In this context, online activities can offer different opportunities for English language learning. Felix (2003) maintained that online activities "have the potential to engage students either singly or in groups in authentic settings in which to foster one or more language skills, depending on how activities are structured, integrated and monitored." It is necessary,

however, to take into account the differing views and beliefs of students and teachers when introducing these online activities in order to avoid any resistance that may lead to reluctance and ineffectiveness on the part of the participants, i.e. students and teachers (Stracke, 2007). For this reason, the current study specifically concentrates on the perceptions of students and their teachers about learning English through online activities.

Djiwandono (2013) conducted a study to explore the effectiveness of online learning on EFL learners' mastery of vocabulary and their opinions about this experience. Results showed that the online learning approach made a significant impact on the learners' mastery of vocabulary, and students reflected positively about the authentic materials they were reading during the semester.

Geta and Olango (2016) further investigated the impact of online learning on the development of students' English writing skills through a quasi-experimental research design. The study also investigated instructors' attitudes towards the use of online platforms in teaching writing skills. Results showed a significant difference in favor of online learning which proved to be a good support for students to perform better in the writing course.

In a recent study, Isti'anah (2017) used a variety of online learning activities and investigated the extent to which these activities helped students learn English grammar. It was concluded that they were indeed effective in assisting students to learn

English grammar and students' achievement was consistent in post-test and online assignments.

No doubt, the above studies taken together enforce the idea that online activities can help improve English language learning. It is also evident that learning and achievement, to a certain degree, can improve when online learning activities are incorporated into English language learning. However, these studies tend to present a direct comparison between online learning and other modes of learning. The question that needs to be addressed is "how technology is used" in language learning (Blake, 2009). That is to say, there is an absence of research investigating the actual process of learning through online platforms. Moreover, most of the studies concentrated on a limited number of students and neglected the voices and practices of their teachers. In contrast to the above studies, the purpose of the current study was to explore the students' and teachers' experience of using online learning activities and to identify to what extent participants perceived it impacted students' academic achievement.

MATERIALS AND METHODS

Improving students' level of English is an important aim within universities in Saudi Arabia. During the preparatory year programme (PYP), students are required to extend their level of fluency in English (the required exit level depends on the students' track). All courses after the PYP are then conducted in English. Enabling students to improve their level of English alongside their degree specialism (track) is a major challenge in Saudi universities given the time constraints of what needs to be covered during the PYP (Alfehaid, 2015).

At the end of the PYP, students qualify to different colleges according to their Grade Point Average (GPAs). Students' level of English contributes 10 credits to their GPA - about one third of the total. The online component, from which online activities are used during the PYP, contributes 5% of students' total final assessment grade in each of two courses: General (Academic) English and English for Specific Purposes (ESP). Grade distribution in the online component comprises: quizzes (3%), discussions (0.5%) and practice tests (1.5%). Two contact hours are allocated for online learning during the first and the second semester. Students are responsible for completing their online learning activities during their free time and must meet the deadlines set by their teachers. In total, 2.5% of the attendance time is allocated to participating in practice tests, which give students the opportunity to practice mock tests on the online learning platform and revise information before taking the final graded assessment.

The textbook series used in the PYP, published by Oxford University Press, is called *Q: Skills for Success*. This series offers an integrated approach comprising printed published materials and an online component to be used in conjunction with face to face classes. The published materials include: printed Student Books in Reading and Writing, and Listening and Speaking,

which provide explanatory learning content focused on academic skills and activities for students; Teacher's Guides supplied in PDF format, which provide suggested activities for teaching and lesson delivery; an online component for use in both lessons and home study; and the iTools component, which is a classroom presentation tool for use by teachers to present the Student Book material to the class. The current study focuses on the online component and, in particular, the online learning activities.

The Online Component

The online component provides online practice activities to help students develop skills in: reading, writing, listening, critical thinking, grammar, vocabulary, speaking and pronunciation; and comprises the following components:

- Practice activities (including vocabulary games, grammar games and videos)
- Vocabulary skills activities
- Student Book audio
- Discussion board
- Email feature
- Progress reports
- Writing Tutor

Methodology

This study employed quantitative and qualitative methods to collect data. The mixed-method study attempts to provide a detailed picture of the use of online activities for English language learning based on participant perceptions using quantitative and qualitative methods of inquiry. The primary purpose is to gain better understanding of the issue by triangulating quantitative and qualitative data. A further aim of a triangulated mixed-method approach is to enhance the study's reliability and reliability. While qualitative data provides in-depth information about the online learning context and perceptions of participants through excerpts, quantitative data will provide descriptive information through statistical analysis.

Participants

A random selection of male and female classes were selected from across three different established tracks and three levels of study from IAU, comprising:

- each track (science/engineering/health)
- each level (beginner/intermediate/advanced)
- each group (male/female class groups).

At the time of research i.e. the end of second semester, all teachers and students in the sample had been using online activities in lessons and outside of class during the PYP academic year (September 2017 to May 2018). The age of the student respondents ranged from 18 to 19. The age of the teacher respondents ranged from 25 to 50, with the mean age being 40. Data collection included:

- an online survey questionnaire circulated to 2391 students and 102 teachers (completed by 1696 students and 52 teachers);
- classroom observations of 16

teacher-led classes (with a duration of 30 minutes duration);

- in-depth interviews with 16 students and 6 teachers.

Data Collection and Procedures

Interviews with Students and Teachers. Interviews with teachers and students followed a semi-structured interview schedule (i.e. a document that outlines the main questions to ask). A semi-structured schedule offered more flexibility than a more rigid structured schedule and provided the opportunity for the interviewer to ask additional follow-up questions.

Questions focused on the following key themes:

- background about teachers' and students' perceptions of online learning activities and how they are used in practice;
- impact of the use of online learning activities upon students' understanding of language skills, academic achievement and readiness to move to the next level of study; and
- teachers' and students suggested improvements to maximise the impact of online learning activities.

The interviews were conducted individually in person at an agreed time convenient for teachers and students, with each interview lasting between 30 and 40 minutes.

Online Survey Questionnaire for Students and Teachers

The online survey questionnaire was circulated to teachers and students at the end of the second term. This means that they had gained one academic year experience in using the online learning activities (56 hours in total). Participation was voluntary. It was made clear that survey responses would be anonymous and, as such, it would not be possible to identify individual participants.

The main purpose of the online survey was to document the students' and teachers' perceptions of the online activities and gauge the extent to which they use them for English language learning. The survey questions focused on the following key themes:

- background about teachers' and students' usage of online activities and how useful each component is for them
- impact of online learning activities upon students' understanding of language skills, academic achievement and readiness to move to the next level of study
- access to online learning activities
- technical issues

Classroom Observations

According to Gruba et al. (2016), classroom observation can help to "improve teaching and learning practices, to assess the use of instructional materials, and to assess teachers and students' interaction with technology". The 16 classroom observations (30 minutes in length, on average) were

conducted by the researcher. It was made clear that observations were not conducted to evaluate teaching quality in any way but, rather, to observe how the online learning activities were being used in practice inside English language classrooms. Observation notes were focused on the following key themes:

- technical issues and Internet access
- integration of online learning activities (e.g. how the use of the online activities links to the use of the printed materials, i.e. textbooks)
- usage of online learning activities in the classroom (time spent, technology used, how students work together and tackle activities).

Data Analysis

As noted, a series of in-depth qualitative interviews were carried out with teachers and students in person to enable the participants to speak freely about their views and perceptions, and for the interviewer to probe for further details. Therefore, this aspect of the study was a 'perceptions of impact' study and the resulting evidence is 'descriptive'. For a broader context about the way in which online learning activities are used in the classroom and at home, a series of classroom observations were carried out as well as an online survey questionnaire circulated to teachers and students. A study of this type allows an exploration of, for example, the nature of perceived impact; the scale of perceived impact (i.e. has change occurred for one individual, a few or many); and the perceived reasons for any

impact. Teachers and students participating in the in-depth interviews and online survey questionnaire gave a retrospective view of the impact of the use of online learning activities.

All interviews were transcribed. Following Braun and Clarke's (2006) principles of thematic analysis, I identified, analyzed and reported specific themes within the interview data that addressed the research question. The students' and teachers' responses to the survey questions were analyzed using frequency counts to identify frequency of use of online activities. Percentages were also provided to determine the level of agreement with the issues related to the impact of the use of online activities. The notes in the classroom observations were analyzed manually to present themes including: frequency of use in lessons, time spent doing the online learning activities, how students worked together and the teacher's role.

RESULTS AND DISCUSSION

Common patterns across the interviews, online Survey questionnaire and classroom Observations were isolated through a descriptive, thematic analysis as mentioned above.

The Survey Questionnaire

Frequency and Focus of Use of Online Learning Activities. Overall, there is a strong consensus from teachers and students that using online activities should be recommended to fellow teachers and students. Of the students surveyed

who used the online practice activities 'often' or 'always', 85% reported they would recommend online activities to other students. Of the teachers who used the online practice activities 'often' or 'always', 97% would recommend them to other teachers. A majority of teachers also reported that using online vocabulary and grammar games during lessons had increased their students' readiness to move to the next level of study. Generally, these results are consistent with those reported from previous studies (e.g. Chen, 2012), which indicate that entertainment-related online activities such as games help increase student motivation and participation because students "considered English learning should be an activity for pleasure". Farrell et al. (2007) further asserted that the impact of using technology for learning should be measured by the extent to which it enhanced the excitement of learning.

Further to this, results show that responses from teachers and students who used the resources more frequently were more positive. With regard to Practice activities (vocabulary and grammar games, and videos), of the teachers surveyed who use the practice activities 'often' or 'always', 97% agree or agree strongly that the practice activities are beneficial for their students' learning. Likewise, of the students surveyed who used the practice activities 'often' or 'always', 90% agreed or agreed strongly that the practice activities were beneficial for their learning in comparison. Teachers and students who used the online activities more frequently found it more beneficial and were more likely to say that they would recommend it.

Importantly, students participating in the online survey rated the Writing Tutor significantly more highly than teachers did. The Writing Tutor is highlighted by teachers as having a particularly positive impact on students' language skills specifically. A large majority of students reported that they used the model assignments from the Writing Tutor before writing their own assignments, and a large number of students and teachers noted that the Writing Tutor had helped students develop their writing skills. This result is consistent with the findings of Xu et al. (2019) confirming that online learning has the potential to support EFL students' writing. In addition, a majority of teachers report that the Writing Tutor helps them to provide effective feedback and saves them time in providing feedback.

In addition to the effective use of the online platform for providing feedback, a high majority of teachers (75%) reported that they found the progress reports useful for checking students' progress. Likewise, the majority of students reported that the progress reports were useful for checking their own progress. In other words, results show how online learning can help make students aware of their own learning. Awareness of learning progress may help increase student participation in online activities.

Teachers and students were asked which skills online activities helped students to develop. Consistently, teachers and students highlighted vocabulary, listening and

grammar skills the highest. These findings are in line with those reported by Ayres (2002), and Verdugo and Belmonte (2007).

Teachers and students were also asked to rate how frequently they used online activities. 55% of all teachers and 35% of all students surveyed reported that they used the practice activities 'often' or 'always'. 65% of all students and 45% of all teachers, reported that they used the practice activities 'sometimes' or 'never'. Of the 35% of students who used the practice activities 'often' or 'always', the most frequently used components were the practice activities (100% often or always), vocabulary skills activities (64%), writing tutor (48%) and student book audio (46%). In contrast, of the 65% of students who used the practice activities 'sometimes' or never', the most frequently used components were the vocabulary skills activities (20% often or always), writing tutor (19%), student book audio (17%) and progress reports (14%).

Of the 55% of all teachers surveyed who use the practice activities 'often' or 'always', the most frequently used components were the practice activities (100% often or always), grammar games, videos and student book audio (each 72%), and writing tutor (69%). In contrast, of the 45% of all teachers surveyed who used the practice activities 'sometimes' or never', the most frequently used components were the writing tutor (33%), discussion board (30%) and student book audio (20%).

Familiarity with the Online Activities and Technical Issues. Results indicated that students and teachers had easy access to the online platform and related activities. This finding is in agreement with Sagarra and Zapata, (2008) who also found that students and teachers had easy access to online environments. When asked about technical issues in the questionnaire, the majority of teachers and students report that there are technical issues 'sometimes' or 'never'. A high majority of teachers (71%) using the online platform 'often' or 'always' reported that they found the online activities 'user friendly'. This finding is not surprising given the fact that the majority of teachers and students were experienced with online activities because they had used them for a long time and were an important requirement for assessment.

The Interviews

Teachers and students interviewed further reported that the online activity most used in class was the Writing Tutor (particularly with lower level students). Most commonly, teachers show students the example writing model and explain the different features. In particular, they draw attention to the highlighted areas. The Writing Tutor is most commonly used during the 'E-learning hour' at university where students use their devices (mobiles, laptops or tablets) to do listening, reading comprehension and work with the Writing Tutor. A possible reason why the Writing Tutor was commonly used is that students were frequently asked by their teachers to use the writing samples provided by the Writing Tutor. While there is no direct evidence of this, some teachers

stated that the programme administrators had instructed them to focus on the Writing Tutor.

Importantly, the majority of teachers interviewed perceive the online platform and activities as a support system designed for self-learning, rather than a resource that was fully integrated into classroom teaching:

'It is a website for online learning. It facilitates learning and enhances the learning experience. It is like an interactive text book, it is good for extra practice.' (T02)

Most teachers interviewed reported that they predominantly recommended online activities to students for online practice at home, and that they did not use much online practice in the classroom. Likewise, the most frequent comment from students interviewed was that online activities were for extra practice outside lessons. A large number of students reported that they were mostly used for review and self-assessment:

'It is a platform with exercises and quizzes to practice and review everything you learn in class. You can self-assess through submission which is useful for your weaknesses. You can practice grammar, vocab, listening, reading and do the Writing Tutor.' (S11)

Impact of using Online Activities on Students English Language Learning

During in-depth interviews, teachers reported on their own experiences of using online activities in the classroom and their

students' use of online activities outside classes. Overall, teachers were positive about the online activities. In particular, teachers commonly reported the following perspectives of positive impact on students' learning:

With regard to enhancing students' understanding of language skills, the majority of teachers reported a positive impact on students' understanding of language skills. Teachers, in particular, highlighted a particularly positive perspective with regard to the Writing Tutor:

'The model is really useful as it gives the students an idea of what they have to write; they can see the level and get ideas from it. We use these models in class, the highlighter shows them different features of the essays and they can use some of the phrases to help them. It helps me that there is a model provided so I can save time and not have to write one or find one myself. Students find writing so difficult and if we can scaffold the task for them, it really helps with their confidence and morale.' (T03)

The data shows that online activities enable students to practice independently outside the classroom, which had a positive impact on academic achievement. Most teachers reported a positive impact on students' academic achievement when they use online activities to practice outside the classroom:

'It's very useful for students to recycle language from the classroom, they are studying so many other subjects that they forget what they have learned quite quickly.

They really need to consolidate learning at home. Using a different medium of study is good for them as it makes it less boring and young people respond well to digital learning.' (T03)

A further finding from interviews is that the majority of teachers interviewed reported a positive impact on students' readiness to move to the next level of study and to prepare for exams. Teachers commented on the appropriate level of the materials of online activities, and several teachers commented positively on the way in which the level was easier than the textbook:

'*The level is good for the students. It's quite easy compared to what they do in the book, and that is a good thing. Students are more likely to try activities if they are straightforward, and to begin with, we need them to be motivated to do the practice. It will definitely help them next year, as long as they use it more.'* (T02)

A number of the teachers interviewed felt online activities were particularly supportive with weaker students who required extra practice in certain areas. One teacher felt they were most impacting with intermediate students who were more motivated but also required extra practice.

The above findings represent perspectives from teachers with regard to how online learning may impact students. Students also reported four key ways in which they felt they benefited from the online platforms.

Most students interviewed reported a positive impact on academic achievement when they used online activities. Broadly, the greatest impact reported is the extra practice before exams. No doubt, exam results are often a great source of motivation:

'*I always use online activities for improving in tests and I think it is always good to have extra practice to keep my GPA up (grade point average)'.* (S03)

'*At the moment it only really has a positive impact on extra practice and review for exams. This is especially good if you are finding some part of English difficult because you can go away and just practise that area.*' (S14)

The interview data indicates that online activities enable students to practice and develop their writing skills independently. Like teachers, the students interviewed highlighted a particularly positive perspective with regard to the Writing Tutor and their understanding of language skills:

'*The Writing Tutor helps me to see different features of the model writing, such as useful vocabulary and organisation of ideas.*' (S05)

'*I think the Writing Tutor has had a positive impact because we will have to do more academic style writing next year when we do our degrees.*' (S14)

A number of students highlighted the impact on their academic achievement of practicing listening using online activities:

'*It has definitely had a positive impact on improving listening – it has helped with my pronunciation. By using the listen and repeat at home, I feel I am improving. I find it useful to see the words and then listen to a*

native speaker saying them so I can see the link between how the words look and how they sound.' (S07)

A number of students interviewed also highlighted how the online activities supported grammar and vocabulary:

'*Online activities are good for vocab and grammar to prepare for the exams. Exams are important because if you don't do well, you can't study the subject you want for your degree.*' (S08)

The above findings are in agreement with previous empirical studies which indicate that online learning promotes listening skills in addition to grammar, vocabulary and writing (Al-Otaibi et al., 2012; Cobb, 2007; Djiwandono, 2013; Geta & Olango, 2016; Huang, 2016; Isti'anah, 2017; Miyazoe & Anderson, 2010; Sagarra & Zapata, 2008; Yang et al., 2013).

Students were also asked about the impact of online activities on their readiness to move to the next level of study. Understandably, students were unsure. Students often see their own progress across one year of study while teachers see student progress across various years and groups. Comments from the students interviewed included:

'*Yes, [I] agree to some extent because of the exercises to improve basics of what you need in English – grammar and vocabulary. For me, it has not had any significant impact to move through the levels I have studied so far.'* (S11)

'*Possibly it helps really establish new language because of the extra practice it gives and you need to be sure of what you*

have learned in one level before you move to the next level.' (S15)

Barriers to using Online Activities. Throughout the interviews, one strongly recurring theme from the majority of teachers interviewed was time pressure on students in the PYP as a common barrier to using online activities for online practice outside classroom time:

'*The problem is that if it is not compulsory, not everyone does it. Teachers and students feel a lot of time pressure in the prep year and unless activities are compulsory, they don't tend to get done which is a pity.*' (T05)

Crucially, the majority of teachers perceived online activities as predominantly a tool for students' additional practice during their own time in order to prepare for exams and tests. A few teachers commented that they should be used more during classroom teaching to better integrate it in teaching and encourage further use outside the classroom:

'*It would have been better if teachers had the opportunity to blend the online practice with the book.*' (T05)

Likewise, students interviewed reported that they would be happy to do more online practice. While they liked – and enjoyed – this medium of studying, they did not feel they had time as the degree programme stood at present:

'*If you have time yes and if you need it I would strongly recommend it; if not save your time for other subjects. There is just too much to do in the prep year.*' (S16)

A number of students interviewed perceived examinations and their GPA as the most important area of study during the PYP. If what they are doing does not impact their GPA, their motivation drops considerably. They need a good GPA to go on to study their chosen subject next year:

'*If the university really wants students to use online activities more, they should incorporate everything into the GPA. Students would definitely do it then.*' (S16)

As students do a writing portfolio that is assessed, they do not see that they can really afford the time to use the Writing Tutor often. According to some students, combining the portfolio writing with the Writing Tutor may be useful.

Finally, from informal conversation prior to this study, it was expected that technical quality would be perceived as a barrier to using online activities. However, this was not the case. Teachers and students interviewed were asked, '*How would you describe the technical quality of the online activities platform*?'. The majority of teachers reported no problems other than a slow internet speed on occasion. A number of students described online activities as '*easy to access*' (S02) and easy to sign into. One teacher reported occasional launching issues (a time delay or shut down). One teacher commented that the screen for activities was small: '*It would be better to see it all on one screen and not have to scroll down – especially when students are using mobiles*' (T06).

Classroom Observations

Application of Online Activities in Class.

Data collected from observations indicated that the majority of teachers displayed the online activities via the Smartboard or multimedia projector at the front of the class; of these, most used the Smartboard. Some teachers did not use a Smartboard or projector and instead asked students to access online activities via their own personal devices (i.e. mobiles, laptops or tablets). Most commonly, teachers used the Smartboard or projector to introduce an activity and then asked students to complete it using their personal devices. In the majority of observed classes, all students had access to a device. In a small number of classes, students needed to share devices. In a few classes, students did not use any device.

With regard to how students were organized, the majority of teachers set up paired or individual activities; with a large number using both forms of activity. Several teachers set up group activities. Use of online activities was commonly followed or preceded with whole-class feedback from the teacher and whole-class discussion. Naturally, textbooks were not used during the few observed 'E-learning hour' classes, i.e. classes which focused on students' practice of the online platform and related activities.

Familiarity with the Online Activities and Technical Issues. During the 16 observed classes in which online activities were used, the students generally seemed familiar

with the online activities. The students also appeared focused and motivated when using them. Of these classes, only a few groups of students encountered technical issues. One group had problems watching an online video via their personal devices and instead viewed it via the multimedia projector. Another group encountered a delay with accessing the Wifi connection.

Teachers encountered a number of technical issues during the observations. This is expected since "technical problems have long created challenges with the use of technology for learning" (Song et al., 2004).

Moreover, during the 16 observed lessons in which online activities were used in class, the students generally seemed familiar with online activities and only a few groups of students encountered any technical issues. In contrast, a number of technical issues were encountered by teachers during the observations.

Summary of Results. In addition to the main conclusions about the perceived impact of online activities, the findings from the interviews, online survey questionnaire and classroom observations also indicate a number of key trends in teachers' and students' general level of satisfaction with online activities. Overall, there is a strong consensus from teachers and students that using online activities should be recommended to fellow teachers and students. The teachers and students surveyed consistently rated the email feature as the least beneficial component.

The teachers interviewed reported that the Writing Tutor was the component most used in class and during the e-learning hour. They reported that the Writing Tutor had a particularly positive impact on language skills, especially writing skills. A large majority of the surveyed students reported that they used the model assignments from the Writing Tutor before writing their own assignments. A majority of the teachers surveyed reported that the Writing Tutor helped them to provide effective feedback and saved them time in this respect.

A very high majority of teachers surveyed reported that they found the progress reports useful for checking students' progress. Likewise, the majority of students surveyed reported that the progress reports were useful for checking their own progress. Teachers and students surveyed highlighted that online learning suppored the development of vocabulary, listening and grammar skills in particular.

CONCLUSIONS

Findings from interviews, questionnaires and classroom observations provide valuable insight into students' and teachers' perceptions of the impact of online learning. Both students and teachers at the PYP perceived online activities to have had a positive impact on learning.

It is important to note, however, that the present study has a number of limitations. While teachers and students identified some evidence of assessing academic achievement and readiness to move to the next level, this is limited to teachers' and students'

perceptions. In order to make valid claims about impact on attainment specifically, a larger-scale quantitative study would be required, gathering comparative evidence, i.e. comparing data for users engaged in online activities versus non-users, or comparing data before and after engagement with online activities. Moreover, given the qualitative nature of part of the methodology and the small sample at a single institution, it is not possible to generalise from the findings. Care needs to be exercised when making claims about the impact of online learning activities based on the findings. It is not possible to claim that the use of online learning activities alone caused the perceived impact described in this study.

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Working Women and Household Expenditures on Food Away from Home in Indonesia

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ABSTRACT

The increasing woman's participation in the labor force has an impact on their allocation of time. The National Socio-economic Survey in Indonesia shows that overall, household expenditures on food away from home have increased. One of the hypotheses of this study is that working women choose to buy food rather than to cook to be more efficient and to save time. This study aimed to analyze the effects of working women on expenditures on food away from home in Indonesia using the data from the Susenas Consumption and Expenditures Module 2016. The result of the Tobit regression shows that a working mother gave significant effect on a household's expenditures on food away from home where households with full-time working women had higher expenditures on food away from home than those with women working part-time or not working at all. The result of this study is expected to complement the consumption study on food away from home in Indonesia.

Keywords: Expenditure, food away from home, Indonesia, women, work status

INTRODUCTION

Women in Indonesia have become more active in the labor market. Based on the data of the Central Bureau of Statistics, the labor force participation rate of women in Indonesia has shown a continuous increasing rate, from 37% in 1971 to 44.6% in 1990 and an increase to 53%

in 2013 (Central Bureau of Statistics, 2013, 1990, 1971). Food consumption trends, particularly in urban areas, have experienced a shift also. The data of the National Socio-economic Survey 1999 and 2014 in Indonesia in the Consumption Module shows that the percentage of food away from home consumption has been increasing continuously, from 9.48% in 1999 to 12.56% in 2014. Conversely, the consumption of grain, which indicates the processing of raw materials in the household, had been decreasing from 16.68% in 1999 to 6.83% in 2014 (Central Bureau of Statistic, 1999, 2014). These figures lead to the presumption that there is a change in the food consumption pattern of the community, where previously people tended to consume self-processed food with natural raw materials; over time, people are choosing to buy more food away from home.

Djauhari (2013) explained that the change in the food consumption pattern in the community occured particularly in households with working women. This is due to their shortage of time to prepare food at home caused by their increased activities outside the house. In general, women have a significant role in choosing and preparing food for the consumption of household members. Women who work outside the house must redistribute their time concerning the preparation of food at home (Redman, 1980). Mutlu and Gracia

(2006) used the household production theory of Becker to study the behavior of consumers regarding food away from home. It assumed that the consumer demand was not only for the food product itself but also for the comfort related to the time saved in preparing food. The result of their research showed that the income and value placed on the time of working women had positive and significant impacts on the consumption of food away from home.

Several researchers have shown that there is a relationship between a household with working women and the consumption of food away from home. An empirical study by Manrique and Jensen (1998) also showed that the time value and income of women were critical in determining factors for the expenditures on food away from home. Nayga and Capps (1992) mentioned in their research that a number of women participating in the labor market drove the existence of the opportunity cost toward the production of food away from home, or in other words, caused the consumption of food away from home that was bought outside the house. Cupak et al. (2016) saw also the effect of the working women' status on the expenditure of food away from home by using a double hurdle model, where the result of his research showed that households with working women more substantial expenditures on food away from home compared to households with unemployed women.

The increase in the consumption of food away from home may generate new problems, particularly health problems such as obesity, high cholesterol, lack of nutritions, heart problems, loss of muscle mass, depression, sexual dysfunction, asthma, stroke, Type 2 diabetes, cancer, and cardiovascular disease (Yahya et al., 2013). Food that is prepared at home has significantly better nutrition quality compared to food bought outside the house, which normally contains excessive fat and saturated fat and minimal calcium, fiber, and iron (Lin & Frazao, 1999).

Many studies on the impacts of working women toward the consumption of food away from home have been carried out in several countries. The research on food away from home in Indonesia, however, has in general, investigated the consumption of fast food only, and has used limited research objects (study cases). For example, Mufidah (2012) investigated the food consumption patterns of urban communities with a study case at the food court in Tunjungan Plaza, Surabaya. With regard to the several prior studies concerning the negative impacts of consuming food away from home and the studies showing the relationship between the working status of women and the households' consumption of food away from home, this study is conducted to see the impacts of working women on the consumption of food away from home in Indonesia. And the hypothesis in this study is that households with working women (full time and part time) have a higher consumption of food away from home compared to women that are not working.

Literature Rieview

Various studies have been conducted to see the impact of working women on the consumption of food away from home. A study conducted by Blake et al. (2009) in the US saw overall satisfaction of food choice for employed parents. A key takeaway is that while both parents have the same criteria, if it is differentiated by gender then the evaluation is different. Women in particular are satisfied if they have work and family balance and strive to provide healthy meals. While fathers are satisfied if they meet schedule stability, also participate and contribute to food preparation. It is noted that work conditions are a barrier to fulfill valued family food roles.

However, Drescher and Roosen (2013) also found that in Germany, the difference between genders, particularly on expenditure on food away from home, differed for male and female. Female expenditure on food away from home is lower than men, since they still strive to provide food at home in certain times. This shows that mother still tries to provide the best possible combination between food at home and food away from home.

Möser et al. (2012) found working women was associated with the time children spent on nutrition-related behaviors. In households with working women, children spent more time eating alone at home and less time eating meals with their women. Moreover, working women spent less time on meal preparation compared with non-working women. Cupak et al. (2016) also discovered the impact of the opportunity cost of a women's time on the demand for food away from home, households with working women having more extensive food away from home expenditures compared to households with not working women. Shotick (2015) showed that for both working and stay-at-home mother, expenditures for food away from home were significantly and negatively related to housework time. However, working women spent twice as much as a stay-at-home mother for food away from home. It is also estimated that the wage rate is positively related to this expenditure, thus income increase from working is related to more spending on food away from home.

Smith et al. (2013) found a trend in the US from 1965 to 2008 that food away from home consumption was increasing. In regards to income, lower income individuals tend to spend less and eat at home more, implicating that working women with more purchasing power tend to increase their spending on food away from home. Islam et al. (2010) had researched on household expenditure and food away from home in Malaysia and mentioned that there was a positive relationship between income and food away from home expenditure. Malaysians dines out more as their income rises. Ma et al. (2006) in their study found that increased income was seen as the most significant in determining consumption patterns. This can be observed in China where consumption of food away from home has increased dramatically with increasing income, but rich consumers in China do not spend more on food consumption. In this research, it is also shown that consumption can increase faster than income growth for various income groups. They also mentioned the change in the composition of expenditures for food in urban areas is related to the demand for food away from home; urban citizens tend to have higher food away from home expenditures due to their larger access to food away from home facilities. Besides, a higher number of activities may lead a community to things that are practical or time-saving, such as the consumption of food away from home.

Another finding by Wang et al. (2014) in Singapore was focused on a shift in child-care provider, from mother to caregiver, since women were entering the labor force. This affected children's nutrition. The findings showed that Singaporean working women cooked infrequently, families ate out frequently, and children

exert considerable influence on food choices. Bauer et al. (2012) showed that full-time employed women reported fewer food at home, less encouragement of their children's healthful eating, lower fruit and vegetable intake, and less time spent on food preparation, compared to part-time and not-employed women.

Some empirical studies have found that age is a significant determinant towards consuming food away from home. However, the age factor becomes complicated because of uncertainty over whether different generations would maintain the same dietary habits or not. It is very likely that parents in the year 2050 won't have the same expenditure patterns as those in 2013 (Stewart et al., 2004). Ma et al. (2006) found that age affected the relationship between income and demand for food away from home in urban areas in China. Stewart and Yen (2004) showed that those managing the household who were older tended to cook meals for their family more than those who were younger who would instead purchase food outside for the comfort and efficiency.

Suwandinata (2012) explained that in Jakarta, decision-making for food consumption was made up by daily routines and socioeconomic factors. In all families, women are in charge of organizing food buying and the consumption process. Children participate in and help with decision-making regarding ideas, wide food choices for meals, and decisions that are more practical. However, parents, especially mother is still the key influencer for the decision on food consumption for the family. A more recent study by Rachmi et al. (2018) in West Java also proved this. In Indonesia, decisions on food consumption are mainly influenced by socioeconomic status and family member requests. The main factors for decision are, in line with other studies, price and income. However, consideration of Halal is also a key factor, but mostly from higher income caregivers who have little to none barrier on price and income. A more qualitative study by Fulkerson et al. (2011) identified the barrier to prepare the food at home. Parents reported that they enjoyed the bonding time at meals, but limited time for preparation and mealtime required multitasking, that was eating and caring for their children at the same time, especially for working women. Another qualitative study by Roshita et al. (2013) in Indonesia found that regardless of working status, children's difference in appetite and the way mother responded to this was highly associated with children's nutrition. Thus, this could affect the mother's choice to satisfy children's appetite by buying food away from home or food at home. But an interesting finding from Greve (2011) found that in Denmark, quality of family nutrition and child care was higher because father's participation at home was higher, and there

was no significant correlation between mother's work status and children's nutrition due to father's presence.

Theoretical Model

This research is based on Becker's (1965) theory of household production. The household production model clarifies that self-processed food is related to the time used by household members to buy food raw materials. This model makes time a constraint that emerges when deciding between food at home and food away from home. This theory has been used a lot in many studies as the theoretical basis to analyze the demand for food away from home (Stewart et al., 2004). Concerning to the preparation of food in a household with a working mother, the value of time is an important factor that affects consumption. The household production theory shows that households will replace the time to prepare food with time-saving goods. Becker observed that a consumer would receive benefits from both market commodities and the time to perform household work.

The household production model demonstrates how a household selects its production activities by combining the consumption of goods and time. As such, the household utility function may be specified as follows:

$$U = U (z_1, z_2, \ldots, z_n) \qquad (1)$$

where,

$z = z_i (x_i, t_{i1}, \ldots, t_{im})$, i=1,2,....,n.

Z_i = Commodities produced by the household (i = 1, 2, ...n)

Each produced commodity results from the household production function that is subject to time limitations and income limitations, which is described as follows:

$$T_k = h_k + \sum_{i=1}^{n} t_{ik}, \quad k = 1,2,\ldots, m$$
$$\sum_{k=1}^{n} W_k h_k + v = \sum_{i=1}^{n} \rho_i x_i \qquad (2)$$

where,

I = Commodities produced in the household.

x_i = Consumption goods that are used in the z_i production.

p_i = Price of x_i.

t_{ik} = Time used by the household member to produce z_i.

T_k = Total time available for the k household member.

W_k = Wage received by the k household member.

h_k = Time that is used by the k household member in the market production.

v = Non-labor income.

The utility function is maximized with the constraint of time function by taking into account x_i and t_{ik}, so that the x_i demand function is as follows:

$$x_i = f_i (p_i, \ldots, p_n, w_1, \ldots, w_m, v) \qquad (3)$$

Yen (1993) considered that the food away from home expenditures for one income (only the husband working) and two incomes (husband and wife both working) were influenced by the work of the wife, specified as follows:

$$p_i \, x_i = f_i (h_2, w_2, v', D) \qquad (4)$$

where,

v' = $w_1 h_1 + v$, exogenous income of household, not including wage of wife.

D = Vector of demographic characteristics (dummy variable).

The wage rate of household wives, particularly of unemployed wives, is often unavailable. However, since the wage is determined by the demographic characteristics and household income, it can accommodate usually the salary variation of the wife (Zick & Bryant, 1983). As such, the expenditure in such conditions is as follows:

$$p_i \, x_i = f_i \, (h_2, v', D) \qquad (5)$$

In the theory of household production, commodity or attributes are considered in the utility function of households (Becker 1965; Lancaster, 1966), the limited income and limited time are optimized through the household production function. A household is considered doing well in the context of preparing meals and purchasing meals can take into account the cost of time spent to do such activities.

According to Becker (1965), time allocation is defined as a number of working hours that are an allocation to various activities. Especially for women, the dual role that they have in the domestic role and public role causes women to carefully calculate time allocation between the household and workplace (Farida, 2014). Regarding of meal preparation in a household where the mother works, time becomes an essential factor that affects consumption. This theory shows that such a household would replace the time spent to prepare meals with items that save time. Becker observed that consumers would accept the benefits of available market commodities and time spent doing household work. As an example, a household member needs food from home, thus there is time required to purchase the ingredients, prepare or cook the food, and clean up the utensils afterwards. Here, households have to decide whether to buy food away from home or prepare it themselves at home. This theory has often been used in research as the theoretical foundation for analyzing the demand for food away from home (Stewart et al., 2004).

In the time allocation theory, Becker (1965) states that there were two processes in household behavior, which are production process that was described by the production function, and consumption process to obtain the items and time consumed. Or in other words, households are assumed to do well as a producer or consumer. Every household maximizes utility through choosing the best combination from limitations in time, resources, and technology. Becker excluded time allocation for children in the model, as he only included adults in the household that distributed their time between workplace activities and household work.

Woman has two types of role in the society that is the tradition and transition role. The tradition or domestic role for women is being a wife, mother and household manager. Meanwhile the transition or public role covers woman as a labor force, a member of society and is part of the economic development (Wibowo, 2011). Nowadays women working in the labor market is higher than in the past, and they have reduced the amount of time they devoted to unpaid work. However, they have reduced it less proportionally compared to men. Overtime men have slightly increased their involvement in family tasks by reducing their leisure time (Mencarini & Tanturri, 2004). The skill here is how women can manage their time correctly by saving time in one of these roles for the sake of the other.

MATERIALS AND METHODS
Data and Variables

This research was a quantitative study using data sourced from the National Socio-economic Survey (Susenas) of March 2016. The research design of Susenas was *cross sectional* data. Susenas is one of the surveys that are carried out routinely annually by the Central Bureau of Statistics in Indonesia. This research used the expenditure consumption module package covering 300,000 household samples spread out over 34 provinces and 51 regencies/cities in Indonesia (BPS, 2016). The sample of this study were married or ever married women who were household heads or the head of household wives[1]. These women were considered to be the person of household in charge in the consumption within the household. The sample was only among the women aged 15 and above, based on ILO Convention No. 138 a resolution from the 58th International Labour Conference dated 26 June 1973 in Geneva, which stated that the age of 15 years was the minimum age limit for a person to be allowed to work. Therefore, in our study the women studied were aged 15 and above. The total samples obtained were 268, 132 households.

In accordance with the objective of this research, namely to study the impact of the working status of the women on the expenditures for consumption of food away from home, the dependent variable is the proportion of expenditures for food and beverage away from home over the total expenditures for household food and the main independent variable is the working status of the women. The control variables that are used are education, age, income, residential area, total household members, the existence of a household assistant or other household members managing the household, and the existence of toddlers. Hereby, Table 1 shows the explanation of each variable.

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[1]   This study uses the terminology women for women who are the focus of this study i.e. married or ever married women who are household heads or the head of household wives, aged 15 and above.

Table 1

Definition of variable in the model

Description	Definition	Category
Dependent Variable		
Percentage of Food away from home expenditures (FAFH)	Household food away from home expenditures toward total household expenditures for food	Numeric
Independent Variables		
Women's Working status (Work)	Employment status of women one week before the survey	Not working Working full time Working part time
Women's Age (Age)	Age of women at the latest birthday (in year)	Numeric
Education (MYS)	Years of schooling of the women (in years)	Numeric
Household Income (Inc)	Total household expenditures	Numeric
Household size (size)	Total household members living in the household	Numeric
Residential area (res)	Residential are a classification of respondent	Urban Area Rural Area
Existence of children aged of 0-5 years (toddler)	Existence of minimum 1(one) child staying in the household	Formal sector Informal sector Unemployed
Existence of Household Assistant or other Household Members managing the household (maid)	Existence of minimum 1(one) household assistant or other household member managing the household	Available Not available
Education interaction of women and household income (MYS*Inc)	Multiplication between women's education and household income variables	Numeric

Research Model

The dependent variable in this research is the percentage of expenditures for food away from home of the total expenditures for household food in one week. The survey results show that there are some households without data on food away from home expenditures. This issue is known as censored samples (Gujarati, 2004) in which there are only some samples that have complete information on the dependent variable.

One of the ways to overcome the censored data problem is to use the censored regression analysis, or the Tobit model. The Tobit model was introduced by James Tobin (a Nobel recipient in Economics) in 1958. Killingsworth (1983) defined the Tobit

analysis as a form of regression analysis adopted for situations omitted by the OLS regression, namely a situation where the bound variables were never less than a number of minimum values or larger than the maximum values. In this case, the Tobit model used all household observations, either with or without the food away from home expenditures. According to Greene (1997), the Tobit model is defined as follows

$$y_i = \begin{cases} y_i^* , & if \ y_i > \tau \\ \tau_y , & if \ y_i \leq \tau \end{cases} \qquad (6)$$

$y_i^* = x_i \, \beta + \varepsilon_i$
where,
y_i^* = Latent dependent variable that is observed for the value larger than zero and is censored for other values,
$y_i^* \sim N \ (\mu, \sigma^2)$
y_i = Observed dependent variable.
x_i = Matrix of explanatory variables.
β= 	Vector of model coefficient.
ε_i= 	Error that is assumed as censored normal distribution $(0, \sigma^2)$.

In the case of food away from home expenditures, there is a bottom limit variable of food away from home expenditures, namely zero (0). The data will be censored in the model for household samples that have no food away from home expenditures, so that in general, the Tobit regression model becomes as follows:

$$y_i = \begin{cases} y_i^* , & if \ y_i > 0 \\ 0 , & if \ y_i \leq 0 \end{cases} \qquad (7)$$

The estimation of the parameter in the Tobit model uses the maximum likelihood method. The basic principle of this method is to obtain the parameter estimator by maximizing the likelihood function, so that a consistent and efficient estimator is obtained for large size of samples.

RESULTS AND DISCUSSIONS

Description of Food Away from Home Expenditures

The percentage of food away from home expenditures out of the total food expenditures based on the result of data processing by Susenas in March 2016 was 5.05% with a standard deviation of 3.62%. Figure 1 describes the proportion of food away from home from the total household expenditure. It shows that 5.1% of households did not have food away from home expenditures at the time of the survey. More than 50% of the households had food away from home expenditures below 5%. Meanwhile, 0.5% only of households had food away from home expenditures of more than 20%.[2]

Table 2 reveals that 42% households had women who were not working, while the rest were households with a working woman, whereas among those who were

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2 	However, it is necessary to note that households without food away from home expenditures at the time of survey might not in reality have small expenditures on their food away from home. It may be that at the time of survey those households just coincidentally had no food away from home expenditures, although normally these households might have large amount expenditures on food away from home.

working, 27% worked part time and 31% worked full time. The mean years of schooling among the woman in this study were seven years, which means that on the average the women had studied for seven years or roughly equivalent to going to grade 1 in junior high school. This also shows that the average woman in the sample has a low level of education. The average age of the sample was 44 years.

Table 2 also shows that more than half (58%) of the woman lived in rural areas. Most of the household (88%) had no household assistant that could help doing domestic household work. The average number of household members were four persons, which implied that the average household consisted a nuclear family.
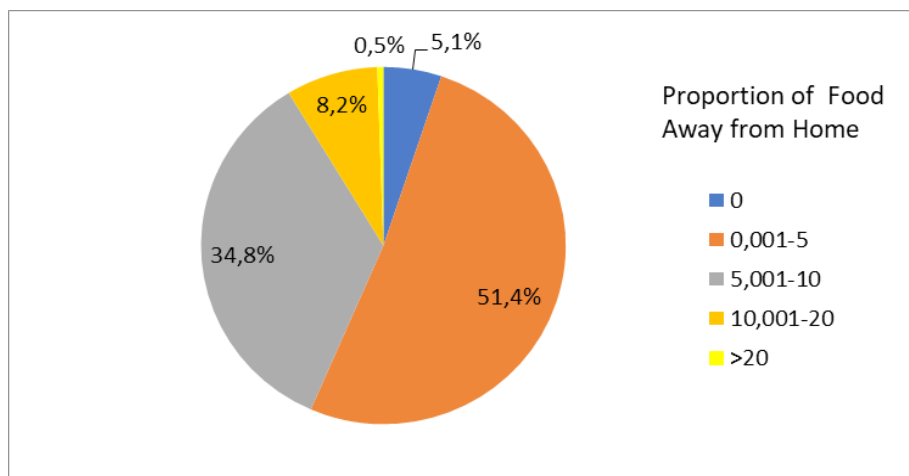
Figure 1. Percentage of household by their average food away from home expenditures

Table 2

Sample characteristics

Characteristic	Total	Percentage (%)
Women's Working Status		
Not Working	112,562	42.0
Working Part Time	71,671	26.7
Working Full time	83,899	31.3
Residential Area		
Rural	155,483	58.0
Urban	112,649	42.0

Table 2 *(Continued)*

Characteristic	Total	Percentage (%)
The existence of Household Assistant or other household members managing the household		
No	235,302	87.8
Yes	32,830	12.2
Presence of Children Age 5 and Under		
Not	183,070	68.3
Yes	85,062	31.7
Mean Year Schooling (years)	7.3 years	
Women's Mean Age (years)	44.7 years	
Mean Household Size	3.9 person	
Mean Household Income (Rupiah)	Rp. 3,530,983	

Tobit Model for Households with Food Away from Home Expenditures

The Tobit regression model that was used in this research tests the impact of the women's working status on the percentage of the household food expenditures on food away from home, controlling for other variables such as income, women's education described as women's years of schooling, women's age, household size, residential area, existence of a household assistant or other household members managing the household, and existence of toddlers (children under 5 years).

The estimation of the parameter is carried out by using the *maximum likelihood estimation* method. The model's significance value shows that overall, the 0.000 value is smaller than α=0.05, and therefore, the Tobit regression model

may be used to predict the percentage of food away from home expenditures. In other words, women's working status women, women's age, women's education, household size, residential area, the existence of a household assistant or other household members managing the household, and the existence of toddlers affect jointly the percentage of food away from home expenditures. The established model is as follows:

$$
\begin{aligned}
FAFH = {} & 2.893435 - 0.3648192 work_{11} + 0.1737685 work_{12} \\
& - 0.0147825 age + 0.0002167 age^2 + 3.6 \times 10^{-7} inc \\
& - 0.103667 size + 1.944815 res + 0.1307906 MYS \\
& + 0.1879723 todd + 0.0352489 assist \\
& - 1.29 \times 10^{-8} MYS * inc
\end{aligned}
$$

Six independent variables of seven variables that are used in the Tobit regression model, show a significance value of less than α=0.05, namely the woman's working status , women's age, women's

education, household size, residential area, and the existence of toddlers. Meanwhile, the variable of a household assistant or other household members existence is less significant in affecting the percentage of household food away from home expenditures at α=0.05.

The result of the Tobit regression in Table 3 shows that women's working status had a significant impact on the household consumption of food away from home. Households with full-time working women had more substantial food away from home expenditures compared to households with women who were not working. Conversely, households with a part-time working

women had a negative coefficient value, which meant that households with part-time working woman had smaller food away from home expenditures, compared to households with women who were not working. This finding is following Becker's time allocation theory, in which one of the constraints of the household production is that the time used to work outside the home, is replaced by the consumption of food away from home; the time used to prepare food and cleanup after meals are reallocated. Families with working women have additional income but less time to produce food for the household. Manrique and Jensen (1997) also discovered that the time value of working women

Table 3

The result of Tobit Regression on the impacts of the women's working status and variables of socio-economic demography on the food away from home expenditures of households in Indonesia

Percentage of Food away from home expenditures (FAFH)	Coefficient	Standard Error	t-stat	P>|t|
Women's working status (work)				
- Not working				
- Part time	-0.3648	0.0170	-21.40	0.000
- Full time	0.1738	0.0162	10.75	0.000
Women's Age (age)	-0.0148	0.0035	-4.54	0.000
Women's Age (quadratic)	0.0002	0.0000	6.51	0.000
Household income (inc)	0.0000	0.0000	69.17	0.000
Household size (size)	-0.1037	0.0051	20.32	0.000
Residential area (res)				
- Rural				
- Urban	1.9348	0.0145	133.17	0.000
Years of Schooling (MYS)	0.1308	0.0023	55.72	0.000
The existence of kids under 5 (todd)				
- Not existing				
- Existing	0.1880	0.0172	10.94	0.000

Table 3 *(Continued)*

Percentage of Food away from home expenditures (FAFH)	Coefficient	Standard Error	t-stat	P>|t|
Interaction of school attendance and income	-0.0000	0.0000	-31.35	0.000
Constant	2.8934	0.0769	37.62	0.000

positively affected the food away from home expenditures, compared to not working women. Women that work has a monetary contribution to their household's income and will have a higher opportunity cost in their time, the higher the wage the higher their time value. Women will substitute their activity from lower opportunity cost activities with lower time value to other higher time value activities. Food away from home is chosen than preparing food at home which is one activity with lower time value than working.

The result of *predictive margins* according to the women's working status in Table 4 shows that the highest percentage average of food away from home expenditures was found in households with full-time working women. This was followed by households with not working women and the lowest was at households with part-time working women. This

result strengthens the fact that households with full-time working women have time constraints in preparing food at home, so that they choose to consume food away from home.

The women's age has a significant quadratic relationship with food away from home expenditures. The result of the Tobit regression shows that the quadrate age coefficient has a positive value; this shows that the relationship pattern between the women's age and the food away from home expenditures is an inverted 'U' shape. This means that the consumption of food away from home increases until the women's age reaches the maximum point, and then declines. Almost all the previous research looks at the linear relationship of impact age on the food away from home expenditures only, such as Stewart and Yen (2004) who discovered that older parents prefer to

Table 4

Predictive margin average percentage of food away from home expenditures according to the women's working status women

	Margin	Standard Error	P>|z|
Not working	4.9973	0.0105	0.0000
Working part time	4.6325	0.1320	0.0000
Working full time	5.1711	0.0121	0.0000

cook food for their families compared to younger households who prefered to buy food outside the house. Likewise, Cupak et al. (2016) and Fabiosa (2008) discovered also the same result, where the age of the wife was negatively related to the food away from home expenditures.

Food away from home expenditures was also affected significantly by household income, where the higher household income, the larger the expenditures for food. This result is in line with the findings of several studies, such as the studies by Bai et al. (2010), Cupak et al. (2016), McCracken and Brandt (1987), Prochaska and Schrimper (1973), Ma et al. (2006), Smith et al. (2013), Yen (1993). According to Stewart et al. (2004), consuming food away from home is a type of relaxing activity, outside the activities of working and household production, where households with high incomes usually spend more money to enjoy products and services, such as food facilities (like waiter service), atmosphere, and variation. In other words, households with higher incomes choose food away from home with higher prices, compared to households with lower income, to obtain certain facilities and better service, as well as the freedom from household production activities, such as cooking, washing utensils, and shopping.

The level of education of the mother (which in this research is approached with mother's years of schooling) significantly and positively affected the food away from home expenditures, meaning that the longer the duration of school attendance of the mother, the larger the food away from home expenditures. This finding is in line with the results of the research by Byrne et al. (1996), Cupak et al. (2016), Keng and Lin (2005), Mihalopoulus and Demoussis (2001), Nayga (1995), and Yen (1993). However, this is contrary to the results of Manrique and Jensen (1998) who found a contradicting relationship between the level of education and food away from home expenditures. Women with higher education in general have more extensive insights and relationships, so they more often spend time outside the house, and thereby, have increased opportunities to buy food away from home.

The total number of family members has an adverse effect on food away from home expenditures, meaning that the larger the total of family members, the larger the food away from home expenditures. This finding is in line with the research results of Shotick (1996) who explained that the total number of family members had a negative impact on the consumption of food away from home. Min et al. (2004) also mentioned that the total number of household members was the primary determinant of food away from home expenditures in China, where households with more household member prefered to prepare food at home, as it was more economical. The production costs

to prepare food in households with larger numbers of household members are lower per food unit due to the efficient use of materials, such as gas, because more food can be cooked at one time.

The residential area had a significant, positive impact on the consumption of food away from home. In other words, people living in urban areas had higher food away from home expenditures compared to the communities living rural areas. Almost all the previous studies are in line with this finding, such as Tey et al. (2009), Cupak et al. (2016), Ma et al. (2006) and several others that clarified a positive relationship between the residential area and food away from home expenditures.

The existence of toddlers in the household significantly and positively affected the food away from home expenditures. Households with toddlers had higher food away from home expenditures compared to households without toddlers. This matter can be explained by the fact that the existence of toddlers in the household increases the time constraints in preparing food at home, because the mother has to reserve time for the young child who still needs more care and control compared to older children. This finding is in line with the research results of Ang and Foo (2002) who concluded that children in Singapore were used to consuming ready-to-eat processed foods at home, and often consumed food away from home.

The existence of a household assistant or other household members managing the household had a positive impact also on the consumption of food away from home. This finding is not in line with the research of Wang, et al. (2014) who used the variable of a household assistant. That study concluded that the existence of a household assistant in a family to temporarily replace the position of the working mother had a positive relationship on preparing food at home, compared to buying food away from home.

CONCLUSIONS

A women as in Indonesia has the primary role in managing the household, including choosing and preparing food for the consumption of her household members. Women regulate the time to prepare food at home and also determines whether and how much the household will consume food away from home. Working women have time constraints in preparing food at home, since they redirect their time that could be used for household management activities toward work. This research has observed the impact of the women's working status on a household's expenditures on food away from home.

A Tobit regression has been carried out to analyze the impact of the working status of the on the household's food away from home expenditures. The result showed that the women's working status the household food away from home expenditures

significantly. Households with full-time working women have higher food away from home expenditures compared to households with not working women, and conversely, households with part full-time working women have lower food away from home expenditures compared to households with not working women. This finding indicates that full-time working women apply their time allocation to maximize the utility by replacing the time that is used working with time-saving goods, in this case, consuming food away from home.

The increase in women entering the labor market in Indonesia, which is demonstrated by the continuous increase in the participation rate of women in the labor force, will cause an increasing demand for food away from home. This is continuously increasing demand in food away from home is the opportunity for the food and beverage industry to expand its business by looking at the demographic socio-economic characteristics in Indonesia. However, it is expected that the government will attempt to control and secure the food that is sold, either in the restaurant, food shops, or cafés, and snacks sold on the street, in an attempt to combat various health problems.

Along these lines, working women, who are unable to or do not have sufficient time to cook food at home, are expected to be wiser in choosing and consuming food away from home, and to remind their family members to choose healthy foods. In addition, it would be better for a working women to search actively for information to enhance her knowledge on practical and efficient food preparation, such as using cooking utensils that may accelerate food processing and improving food storage systems that retain nutrition and taste, to enable her to cook food at home for her family still.

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SOCIAL SCIENCES & HUMANITIES

The Effect of E-WOM and Structural Assurances Mediated by Guanxi towards Customer Behavioral Loyalty

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ABSTRACT

In this study, we found that Structural Assurances had positive and significant direct effect on guanxi formation and it had positive and significant indirect effect toward customer loyalty behavior. We also found the facts that e-WoM had a positive and significant direct effect on guanxi formation. Where e-WoM at once had a positive and significant indirect impact on the occurrence of behavioral customer loyalty. In the end, the results of this study indicated that guanxi positively and significantly influenced the occurrence of customer loyalty behavioral when conducting E-Commerce transactions in Indonesia.

Keywords: E-business, e-commerce, e-image, management information systems, online purchase intention, price premium

INTRODUCTION

The problem of customer loyalty is a very complicated thing. Making a customer want to purchase from the same vendor is not as easy as we may imagine. Especially to motivate potential customers to take initial purchasing; certainly, this is a very challenging situation. Therefore maintaining customer trust and satisfaction consistently, while continuing to improve service quality

is a necessary thing for every entrepreneur. We speculate that there are at least two (2) key factors that entrepreneurs need to continue to maintain in order to maintain customer loyalty as well as, motivating potential customers also to make purchases at such vendor. The factors are E-WoM (Electronic Word of Mouth) (Tran & Strutton, 2019) and Structural Assurances (Belwal & Amireh, 2018). However, specifically in Indonesia, as a country with a collectivist culture (Irawanto, 2011; Mangundjaya, 2013), it has other factors than WoM and assurance that can make a person (a customer in this context) believes in the integrity and reliability of others. Allegedly that factor is guanxi, just like a country with the kinship that is quite close to Chinese culture and tradition such as Hong Kong, Taiwan, Malaysia, and Singapore. Indonesian people make interpersonal relationships as an essential aspect of building trust. In a digital business environment, the mechanism of trust building is one of the most important things to be noticed (Paparoidamis et al., 2017; Yang et al., in press).

It is considered that the consumers are at an uncertain situation about precisely who, what, and how is the characteristic of sellers who interact with them over the internet, and vice versa. According to some previous studies by Chiu et al. (2010) and Ribbink et al. (2004) trust is the fundamental aspect of customer loyalty. The question is, how to build customer loyalty instead of customers still not having confidence in un-reputable retailers yet. Of course, this situation is challenging to realize. Then,

we use the concept of interpersonal trust or commonly called as Chinese trust in the case of customer loyalty building mechanism on E-Commerce based retail business in Indonesia. We examine two exogenous latent variables, i.e., E-WoM and Structural Assurances as antecedent variables of guanxi. Also, test them simultaneously to obtain the fact whether these variables have a relationship and or influence on the process of customer behavioral loyalty formation in the online channel. It is expected that the results of this study would be useful as a reference to stimulate the emergence of another sustainable customer loyalty research in the context of collectivist cultured society.

LITERATURE REVIEW

Electronic Word of Mouth (E-Wom)

Word of Mouth (WoM) is an essential factor for the creation of goods transaction in the traditional trading mechanism. This matter discussed in the theory of consumer confusion, which is one of the favorite Confusion Reduction Strategy (CRS) mechanisms, is the WoM method (Atmojo et al., 2014). The popularity of WoM as the most reliable and frequently used CRS mechanism has a close relationship with one of the primary human needs. Where, one of the essential needs is the need to connect, keep in touch with each other, or in other words interpreted as the need to socialize. Furthermore, another important aspect of the social interaction dimension that allows humans to stay in touch with each other is

the communication itself. A previous study by Atmojo et al. (2014) found a unique pattern of consumer purchase behavior in the case of the high-involvement product (specific: Smartphone products) in Jakarta. Salesperson played a vital role in the process of product purchase decision making. Communicative and interactive salesperson took a substantial role when influencing people to actually buy something. According to Atmojo et al. (2014), WoM had a psychological impact, in increasing the confidence level of potential customers to make purchases of products/services. Because some consumers believe that salesperson is someone who is considered to have knowledge and more information about products and services offered. The WoM mechanism does not only occur in the traditional business environment with conservative transactions but also occurs on the other side. Like online trust, WoM mechanism also has a virtual form. WoM in a virtual environment is called Electronic Word of Mouth (E-WoM). The process of justification and confirmation of consumer expectation about online merchants pours into online product review and consumer testimonials are some representations of E-WoM (Yoo et al., 2013). Where the dissemination of information through the E-WoM method naturally occurs by itself and has a plot like the spread of a virus (referring viral mechanism). Through E-WoM as an online reference purchase of products or services, of course, will facilitate consumers in justifying the selection and or purchase of products or services. Such

justification may be based on the independent judgment of any party (intrinsic motivation), or consciously conducted by the consumer as a cognitive activity to assess the quality aspects of an online vendor's service or the information of the product or service being sold. Furthermore, in the assessment of intangible aspects (such as service quality, merchant empathy, and vendor friendliness), E-WoM is a crucial reference mechanism. Any positive or negative E-WoM sentiment correlates with the success or failure of the business of the E-Commerce-based business. Moreover, if online businesses has no structural assurances such as legal and physical representation (e.g., office buildings, official business licenses) used as guarantees in reducing the potential for unfriendly consumer sentiment (Pavlou, 2003). Therefore, the creation of positive E-WoM sentiments is a fundamental aspect of online business actors to survive the competition and continue to maintain sustained success (Turilli et al. 2010). According to Yoo et al. (2013) the definition of E-WoM is mentioned as a mechanism of exchange know-how (knowledge) that occurs among consumers. In this study, e-WoM defined as an online information distribution mechanism that occurs among consumers, based on particular intrinsic and extrinsic motivations as an effort to provide the best shopping experience for customers and others. E-WoM measurement indicators in this study were divided into (i) Customer feedbacks regarding vendor service quality, (ii) Customer feedback on the quality and the price of products/services

sold by the vendor, (iii) Review feedbacks on the shopping convenience experience accommodated by the vendor.

Structural Assurances

Structural Assurances stand as representations of physical assets (tangible) and the aspects of business legality. Flavian et al. (2006) proved that physical assets in a traditional environment such as office buildings (brick and mortar) and private land owned were essential factors that could trigger the creation of trust in an online environment. In their research, Flavián et al. (2006) described customer behavior patterns in the banking industry, which tended to be more trusting and had a positive intention when using online banking services launched by the same traditional bank rather than another online banking service which did not have any solid warranty. It can be said that an essential aspect of online trust construction is the reputation of business actors who has a structured warranty (as a guaranteed asset). Because the trust aspect that is formed in the online channel environment is the result of trust transfer and transformation from the traditional environment (Kuan & Bock, 2007). Turilli et al. (2010) added that the tangible aspect was another form of warranty that online businesses could afford to their customers. Where, under certain circumstances, there were matters of dispute, then as a resolution of problem-solving matters related to structural assurances could be used by consumers to claim responsibility from the institution concerned. The definition

of structural assurances by Gefen et al. (2003) was a measure of the success of a vendor based on the ownership of security networks such as legal channels, guarantees, and regulations existing in certain contexts. In this study, structural assurances defined as the ownership of tangible assets from vendors, which could be used to convince consumers that the business models and business processes carried out comply with business regulations applicable to specific jurisdictions. The measurement indicators of structural assurances in this study consisted of (i) Confidence level. Consumers feel secure when transacting with online vendors, as they are protected by independent third-party security agencies. (ii) Confidence level. Consumers feel safe to transact with online vendors because the vendor concerned has a building/physical store in supporting his business. (iii) Confidence level. Consumers feel secure transacted with online vendors because the vendor concerned has an independent website. (iv) Confidence level. Online vendors that transact with consumers already has business licenses from the government in the form of legal entities and has written agreement documents that are protected by law.

Guanxi

In Chinese phrases, guanxi is a combination of two syllables that form a sentence. The syllable "guan" has a meaning as a resistor or can also be regarded as a barrier gate. While "xi" can have a sense of a system or in other words also can be called as the link

(connection). When forming a sentence, the meaning of the word guanxi has several definitions, as according to Fan (2002) the meaning of guanxi could lead to:

(a) An inter-personal relationship between groups or individuals. Emotional (emotionally attached) relationships between people who were connected to one another, socializing, communicating and sharing are just examples of the existence of guanxi.

(b) Emotional bonding situations that occurred due to factors of habit. In other words, guanxi created in an intense communication atmosphere. In this case, intense communication described as a form of interaction created between close relatives such as relationships between families, relationships between friends, and also colleagues. And, (c) mutual trust arises from experiences that have occurred in the past. Trust arises because of the impression or good experience that certain parties have felt to others. Although only ever experienced relatively little interaction, the good impression that ever created is the initial capital of guanxi formation.

Fan (2002) mentioned that in describing guanxi, it was preferable not to translate the word meaning into foreign language translation. It aimed to preserve the meaning of guanxi in the real sense. Fan (2002) described guanxi as a form of trust,

relationships, and complicated connections, because according to him, guanxi not only worked as a relationship without direction but a relationship that had a purpose. So that guanxi in business defined as an emotional connection between several people who were connected to each other, socialize, communicate, and shared to reach a specific goal. According to Fan (2002) the image of guanxi is categorized into several forms of manifestation, including guanxi as connectivity between relations, guanxi as a mode of exchange, guanxi as an asset or resource, and guanxi as a process. Barnes et al. (2011) and Yen et al. (2011) provided the concept of guanxi measurements in three dimensional sizes, included ganqing, renqing, and xinren.

Ganqing is defined as a relationship related to emotional level of understanding, connection, and sharing of feelings. Kinship relationships that occurrs between vendors and customers in addition to business and work problems regarded as ganqing. Furthermore, the sense of empathy that consumers have when they abandon their intention to offer very low price products/services also go into the realm of ganqing. Renqing is defined as a feeling that is associated with the sensitivity, sympathy, and understanding of humans to help both morally and in action against each other. The sympathy of a consumer who feels guilty if he does not give a positive recommendation to the seller he subscribes to is one example of renqing. Consumers who volunteer to assist sellers in providing important advice and also provides positive feedback can also

be categorized into renqing. In the concept of renqing, the consumer has the belief that the seller is a friend who was not only base on the transactional principle but is based on sincere friendship and does not take unilateral advantage. The Chinese concept of belief is called xinren. A consumer's belief in a vendor that always performs honest deeds and performs well without having to question the intent and purpose behind the actions taken can be defined as xinren. In other words, one's ability to trust others without being based on a particular tendency is a concept called Chinese trust or xinren.

In addition to Barnes et al. (2011), Ou et al. (2014), and Yen et al. (2011) and also had concepts of definitions, dimensions, and measurement indicators of guanxi that had been adapted for in the context of E-Business. According to Ou et al. (2014), guanxi defined as informal relationships that occur-between buyers and sellers could form in a digital-based market environment, consisting of mutual understanding, reciprocity, and harmonious relationships. The guanxi dimension consisted of: (a) mutual understanding was defined as the foundation of the guanxi created between the buyer and the seller in the achievement of the business deal. Where to reach the agreement consisted of several requirements that must be fulfilled by both parties. (b) Reciprocal favors were defined as the exchanged of goodwill between the parties (the seller and the buyer) which was the main condition for creating a guanxi. (c) Relationship harmony (a harmonious relationship) was defined as the main raw material needed to obtain

a guanxi relationship (Ou et al., 2014). Creating a harmonious relationship is the main focus of Chinese communications.

Based on the studies that have been done on some guanxi concepts from previous researches, in this study, the concept of guanxi is defined as a kinship relationship based on mutual trust and harmony between two parties to achieve certain business benefits. As for retaining the original concept of guanxi, this research used guanxi concept with dimension of ganging, renqing, and xinren version of Barnes et al. (2011) and Yen et al. (2011) which had been aligned with the concept of Ou et al. (2014). So the dimensions and measurement indicators of guanxi in this study consisted of: The ganging dimension was defined as a sense of mutual understanding based on the emotional ties between two business parties in order to foster and maintained a sustainable business relationship. The ganqing measurement indicators in this study such as (i) Kindship rates were intertwined. The more often consumers do business with vendors; it also increased the kinship relationship between them. (ii) The degree of kinship that existed. The kinship that took place between the consumer and the vendor in the business should also occurred in everyday life. (iii) The level of consumer support. Consumers will always negotiate in a familial way with the vendor in case of a dispute in business. Renqing dimension in this study defined as the nature of sensitivity, sympathy, and tolerance between the consumer and the vendor as a representation of the exchange of good in a

business relationship based on friendship. The renqing measurement indicators in this study consisted of (iv) Support level. Consumers will always support vendors by doing positive actions to grow the vendor's business growth. (v) Level of regret. Consumers will feel very sorry if they restrain the progress of business from vendors. (vi) Support level. When vendors need help, then voluntarily consumers will provide the needed help and vice versa. Xinren dimension in this study defined as the nature of consumer confidence in vendor performance without being based on a sense of doubt or a certain contrary tendency. The xinren measurement indicators in this study consisted of (vii) Confidence level. Consumers always believe that vendors always act honestly and reliably in performing their performance.

Behavioral E-Loyalty

Behavior-based customer loyalty (behavioral loyalty) was an intention or actual action of a customer to make visits and repeat purchases from a particular vendor Jarvis et al. (2006), and Sharifi and Esfidani (2014). For example, a customer purchases Samsung branded TV products and feels specific benefits of the product he/she purchases. Sometime later, when the customer is about to purchase a mobile phone, she decides to buy a Samsung branded phone product because she has had a good experience with the Samsung brand. Based on the behavior shown by the consumer then she is said to have loyalty to the Samsung brand behaviorally. Sharifi and Esfidani (2014)

defined behavioral loyalty as a conative or action aspect as a form of the realization of the cognitive (emotional) and affective components (emotions) to make a visit or purchased on a particular vendor. The consumer's conative attitude had a favorable cognitive construction to the reliability and integrity of the vendor in his thinking, so based on the perception, it believed would be the determining factor of making the purchase decision. Perceptive perceptions that arise repeatedly would make consumers also had the affective construction that could lead to emotional bonds between consumers and vendors. So, that in the end, the accumulation of these attitudes would build the intrinsic motivation of consumers to share the shopping experience gained by referencing specific vendors who had been believed to be reliabile of their performance.

Yoo et al. (2013) defined behavioral loyalty as the behavior of visits and repeat purchases made by consumers against particular vendors. Behavior-based loyalty measured based on a measurement indicator that was consumer commitment not to shop through the services of other vendors. Which means the actions of consumers to not switch from vendors subscribed to competitors is one representation of customer loyalty conative attitude. Furthermore, Toufaily et al. (2013) defined behavioral loyalty as the intention as well as the actual action of consumer attitudes in making visits and purchases on specific vendors. Behavioral loyalty in this study defined as the intention or action as a form of the realization of attitudes owned by consumers to make visits

and repeated purchases of specific vendors. After some adjustments to the concept study, the behavioral loyalty measurement indicator in this study consisted of three (3) indicators, including: (i) the level of commitment to not switch to the competitor's vendor. As long as the quality of service provided by the subscriber vendor always shows the best standard, the consumer will not switch to the competitor's vendor. (ii) The level of commitment not to switch to competitor despite the selling price of products is higher than the competitor. Although subscribed vendors apply higher prices than competitors, consumers will not shift to the other destination of shopping. (iii) Participation in commenting/award. Consumers will always provide positive reviews of products/services and performance that come from vendor subscription. Including level of defense, when knowing that a subscribed vendor is being hit with issues related to bad reputation, the consumer is not hesitant to make an appropriate defense.

According to the theoretical framework we used, then the proposed hypotheses in this research were:

H1: Guanxi positively and significantly influence towards the behavioral loyalty of consumers when conducting E-Commerce transactions.

H2: Structural assurances positively and significantly influence towards the guanxi creation of consumers when conducting E-Commerce transactions.

H3: E-WoM positively and significantly influence towards the guanxi creation of consumers when conducting E-Commerce transactions.

MATERIALS AND METHODS

This research used convenience sampling method in collecting data. The convenience sampling method perceived most appropriate considering that E-Commerce customers were spread in various regions and were in particular geographical conditions. A large number of subscribers connected to the Internet caused the customer population in the context of this research to always be dynamic. So the convenience sampling method was one of the most proper solutions applied by Herington and Weaven (2007), Mukherjee and Nath (2007), Kim et al. (2009), and Sahney et al. (2013). The characteristics of sampled respondents were Indonesian E-Commerce customers who had made an online purchase at least twice from the same vendor. Alternatively, in other words, the respondents were experienced buyers. For data collection instruments, we used hybrid mode questionnaire surveys; where the questionnaires that we disseminate were printed and online documents (Google docs). For measurement scale, we used the Likert scale with interval scale of 1-5 (very low-very high). Then, Likert scale which was still a qualitative scale we transformed into a quantitative scale using the method of successive interval (MSI). The purpose of using the MSI method was

to obtain a more objective and detailed weighting score. As for data cleaning, we used the Mahalanobis Distance approach as a method of controlling outliers. Outliers were one of the obstacles that could inhibit the objectivity of research if not controlled appropriately, so cleaning the data from obstacles would make the results more accurate analysis (Mahalanobis, 1930; Stevens et al., 2013). After we cleaned the data, the next process was testing the structural model and hypothesis. Then, the process of testing was used a method of Structural Equation Modeling-Partial Least Squares (SEM-PLS). The primary reason for using SEM-PLS as an analytical tool was due to the nature of this research which was explorative research and had a dynamic sample (Hair et al., 2016; Kwong & Kwong, 2013; Latan et al., 2016).

RESULTS AND DISCUSSIONS

From the data collection process, a total of 289 questionnaires filled. From the returned questionnaire then we tested the outliers and obtained 256 valid answers. Based on valid data, there was composition of 131 female respondents and 125 male respondents. The majority of respondents were dominated by respondents with age range 18-30 years (68%), followed by age range 35-50 years (18%), and the rest were respondents with age range > 50 years. Discussion of sampling method, with non-probability sampling approach with convenience sampling method, was the most appropriate analytical approach in the context of this research. In Figure 1, we described the inner model processing using Smart-PLS software.
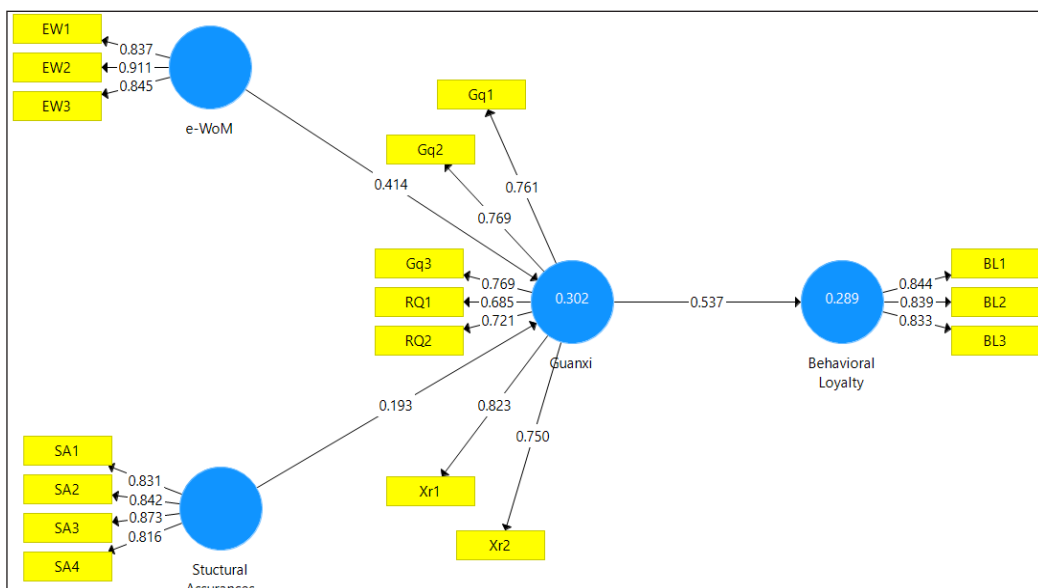
Figure 1. Inner model for path coefficient and coefficient of determination R^2

Table 1
Determination coef. value

Variable/R^2	Guanxi	Behavioral Loyalty
R^2	0.289	0.302
R^2 Adjusted	0.286	0.297

Notes: $R^2 = 0.75$ = Substantial; $R^2 = 0.50$ = Moderate; $R^2 = 0.25$ = Weak (Hair et al. 2010; Kwong & Kwong, 2013)
$R^2 = 0.67$ = Substantial; $R^2 = 0.33$ = Moderate; $R^2 = 0.19$ = Weak (Chin, 1998)

Based on the coefficient R^2 shown in Table 1 it can be said that the guanxi variable weakly explained the occurrence of 28.9% variance in behavioral loyalty. Moreover, the E-WoM and Structural Assurances variables explained the 30.2% variance in guanxi. The results showed in Figure 1 shows that the guanxi variable has the most robust correlation with the behavioral loyalty variable with the path coefficient value of 0.537. It followed by the correlation between E-WoM and guanxi with path coefficient value of 0.414. So the weakest correlation was shown by structural assurances to guanxi with path coefficient value of 0.193. Table 2 shows the results of reflective outer model.

Based on the results presented in Table 2, with rho_A > 0.4 and Cronbach value α > 0.7, the measurement model in this study has a good individual value of reliability. And the results have met the requirements of confirmatory research required (Kwong & Kwong, 2013; Latan et al., 2016). The value of Composite Reliability of all indicators in the level > 0.6 indicates that the measurement model used has met the expected criteria. According to Latan et al. (2016), Kwong and Kwong (2013), regarding the convergent validity, the required Average Variance Extracted (AVE) threshold value is suggested in the level > 0.5. In this study the research variables have been > 0.5, thus that the existing convergent validity can be confirmed its validity. Table 3 shows the Fornell-Larcker Criterion analysis results to measure discriminant validity.

To measure the discriminant validity the square root of each AVE value is required. Where, the results are set forth in Table 3 which contains the Fornell-Larcker analysis. Note that these * values have a greater value than the correlation values of the other variables in each column. In example behavioral loyalty in column 1 has

Table 2
The results of reflective outer model measurement

Latent Var.	Cronbach α	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Behavioral loyalty	0.791	0.798	0.877	0.703
Guanxi	0.874	0.882	0.903	0.570
Structural Assurances	0.862	0.866	0.906	0.707
e-WoM	0.831	0.835	0.899	0.748

Table 3
The Fornel-Larcker Criterion Analysis for discriminant validity measurement

Latent Var.	Behavioral loyalty	Guanxi	Structural Assurances	E-WoM
Behavioral loyalty	0.839*			
Guanxi	0.537	0.755*		
Structural Assurances	0.275	0.435	0.841*	
E-WoM	0.418	0.527	0.583	0.865*

a value (0.839) greater than guanxi (0.537), structural assurances (0.275), and E-WoM (0.418).

Bootstrapping

With a total sample of 256 records, in the bootstrapping procedure we used a sub-sample of 5000 data, two-tailed test, no-sign changes, and complete bootstrapping. In this calculation process, we used memory heap setting of 2048 MB. The inner model results from the bootstrapping analysis can be seen in Figure 2.

Table 4 describes the path coefficient values in the inner model after bootstrapping. To measure the significance level of the path coefficient on the inner & outer model, Kwong and Kwong (2013) compared the value of T-statistics with the critical t-value with the following conditions: (A) calculation analysis using two-tailed t-test. (B) For the 10% significance level, the t-value critical value used is 1.65. (C) For the 1% significance level, the t-value critical value used is 2.58. (D) For the 5% significance level, the t-value critical value
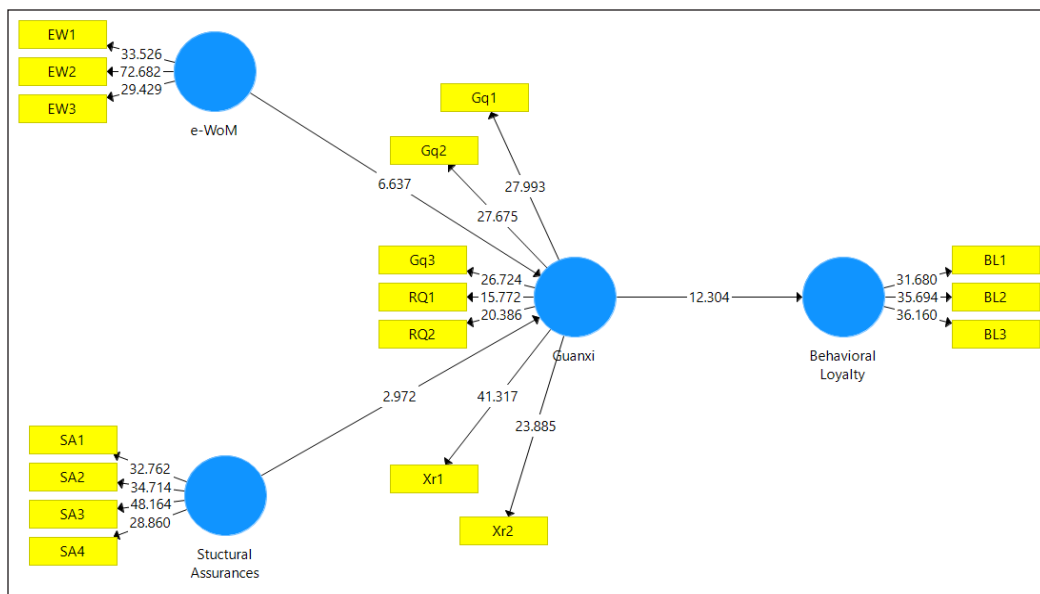
Figure 2. Inner model after the bootstrapping procedure

Table 4
Path coefficient values in inner model after bootstrapping

Latent Var.	Original Sample	Sample Mean	STDEV	T-Statistics	p-Values
Guanxi → Behavior Loyalty	0.537	0.54	0.044	12.304	0.000
Structural Assurances → Guanxi	0.193	0.195	0.065	2.972	0.003
E-WoM → Guanxi	0.414	0.413	0.062	6.637	0.000

used is 1.96. Based on the value of the path coefficient in Table 4 with reference to the level of significance of 5%, the path coefficient in the inner model that has a correlation and statistically significance with each other is the relation between guanxi → behavior loyalty; with coefficient value of 12.304 (p-values < 0.05). Then followed by the relation between structural assurances → guanxi with coefficient value of 2.972 (p-values < 0.05). And the last one is E-WoM → guanxi with coefficient value of 6.637 (p-values < 0.05).

Hypothesis Testing (Total Effects)

The hypothesis testing in this study displayed the results of total effects after the bootstrapping procedure. The results can be seen in Table 5.

Based on the total value of the effects presented in Table 5, it can be said that:

H1: Guanxi positively and significantly influence towards the behavioral loyalty of consumers in conducting E-Commerce transactions. (H1 accepted, p-values significant at [0.000] < 0.05 and < 0.01 respectively).

H2: Structural assurances positively and significantly influence towards the guanxi creation of consumers in conducting E-Commerce transactions. (H2 accepted, p-values significant at [0.000] < 0.05 and < 0.01 respectively).

H3: E-WoM positively and significantly influence towards the guanxi creation of consumers in conducting E-Commerce transactions. (H3 accepted, p-values significant at [0.000] < 0.05 and < 0.01 respectively).

Table 5
Total effects for hypotheses testing

Latent Var.	Original Sample	Sample Mean	STDEV	T-Statistics	p-Values
Guanxi → Behavior Loyalty	0.537	0.54	0.044	12.304	0.000**
Structural Assurances → Behavior Loyalty	0.104	0.106	0.037	2.798	0.005**
Structural Assurances → Guanxi	0.193	0.195	0.065	2.972	0.003**
E-WoM → Behavioral Loyalty	0.223	0.224	0.042	5.314	0.000**
E-WoM → Guanxi	0.414	0.413	0.062	6.637	0.000**

Notes: **,* Statistically significant at the level 1% and 5%

CONCLUSIONS

The results from hypothesis testing can be said that the three proposed hypotheses were accepted. In this research, it was found that structural assurances had positive and significant direct effect on guanxi formation with T-statistics value 2,972 (p-values < 0.05) and positive and significant indirect effect toward customer loyalty behavior with T-statistics value 2,798 (p-values < 0.05). We also found the facts that E-WoM had a positive and significant direct effect on guanxi formation with a T-statistics value of 6,637 (p-values < 0.05). Where, E-WoM at once had a positive and significant indirect impact on the occurrence of behavioral customer loyalty with the value of T-statistics of 5.314 (p-values < 0.05). In the end, the results of this study indicated that guanxi positively and significantly influenced the occurrence of customer behavioral loyalty when conducting E-Commerce transactions. This was shown by the value of T-statistics of 12.304 (p-values < 0.05).

The nature of this research was more focused on E-Commerce retailers with limited resources. In other words, this study aimed to find the critical success factors that needed accommodate by small retailers. We had empirically tested where E-WoM and Structural Assurances factors played an essential role in the process of guanxi creation in the context of hybrid C2C2B (customer to customer to business) retail E-Commerce. Similarly, guanxi was needed by lower-middle-scale retailers to build behavior-based loyalty from their customers. It can be said that to start an E-Commerce business, retailers needed to pay attention to the aspects of legality and also the quality of adequate services. The goal was to build an interpersonal trust construct from the consumer that ultimately leaded to a repeat purchase decision. Even if a small retailer did not need to have a physical building that used as protection for transactions. However, independent third-party accreditation licenses urgently needed were considered to build a trusted and reliable business image by consumer perspectives. Furthermore, good service performance could strengthen and accelerate the growth of quality recognition from the E-Commerce ecosystems.

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SOCIAL SCIENCES & HUMANITIES

Case study

The Effect of Marketing Mix toward Brand Equity at Higher Education Institutions: A Case Study in BINUS Online Learning Jakarta

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ABSTRACT

The research aimed to determine the application of e-learning at Higher Education Institutions (HEIs) in response to the analysis of the marketing mix elements, notably product, price, promotion, location, learning processes, people, and physical evidence. At the same time, it was necessary to determine the brand equity elements (brand loyalty, brand image, and perceived quality) and the effect of the marketing mix on brand equity in higher education that implement e-learning, particularly in BINUS Online Learning Jakarta. In order to address the notion, a quantitative approach based on Associative Descriptive Method was adopted. The data collection involved questionnaire instrument to 116 college students of BINUS Online Learning as the target population by undertaking simple random sampling. On that basis, data analysis, using Partial Least Square (PLS), explored SEM-analysis techniques. Evidence derived from the study showed that elements of people, process, and product typified powerful elements of the marketing mix variable. The elements of brand loyalty and perceived quality configured the variable of brand equity. Accordingly, the study highlighted a strong, positive and significant effect of the marketing mix on brand equity.

Keywords: Brand Equity (Brand Image, Brand Loyalty, Perceived Quality), Marketing Mix (7Ps)

INTRODUCTION

Over recent years, a rapid development of science and technology has consolidated the strand of higher education publicly in globalization era. In this respect, the progress of its development requires highly

qualified manpower so that the requirement for higher education concurrently continues to escalate.

The education development in Indonesia, as an archipelago country, inevitably entails developed education system denoting indicative spectra such as more open, flexible, and accessible by anyone who needs regardless of the age, gender, location, socio-economic background, and experience of previous education. As this backdrop, the education system proposed Distance Learning System (DLS) for the equitable distribution of education throughout the archipelago in Indonesia. Following this, distance learning emerged and Open University, as the pioneer, dominated a substantial precedent. As the time progressed, every region partakes to administer it based on applicable regulations. In this point of entry, Bina Nusantara University (BINUS University), as a private university, holds a formal distance education namely Online Distance Learning (ODL) under BINUS Online Learning Division. In addition, Binus University receives the first distance education permit from the Ministry of Higher Education Indonesia in this field. Furthermore, the institution operates and inaugurates Palembang as the first city where the program of BINUS Online Learning is implemented.

In regard to the research, the present study refers to salient previous studies. At a first glance, Yasanallah and Bidram (2012) recognized the status of the marketing mix (7Ps) and offered suggestions to improve the condition of the cooperative in Province of Ilam, Iran. In their study, the hypotheses were attributed to the price, location, promotion, product, management and physical operations which indicated a significant influence. On the other hand, the element of personnel was not significant.

Rajh (2005) study confirmed that the most powerful brand image was influenced by its employees, notably on service companies with the lowest influence of advertising intensity. It convinced that organizations should focus on value creation activities to the customers. In this respect, marketing activities typified managerial efforts and associated with the creation of brand equity that aimed to build a strong brand with a different.

LITERATURE REVIEW

The Marketing Mix in Higher Education

The marketing mix is a set of controllable marketing tools that an institution uses to produce the response it wants from its various target markets. Tangible products have traditionally used a 4Ps model, the services sector on the other hand uses a 7P approach in order to satisfy the needs of the service provider's customers: product, price, place, promotion, people, physical facilities and processes (Ivy, 2008).

Product. Product is what is being sold. It is in excess of a basic arrangement of unmistakable highlights, it is a perplexing heap of advantages that fulfill client needs. In the case a university students registering for

a degree are the raw materials of education and that the graduates are the products, with employers be the customers (Ivy, 2008).

Price. The price component of the services marketing mix is commanded by what is charged for the degree or educational cost expenses that are required to enlist at the college. The estimating component not just influences the incomes that a college gets from its enrolment, yet in addition influences student impression of the quality (Ivy, 2008).

Place. Place is the conveyance strategy that the university receives to give the educational cost to its market in a way that meets, if not surpasses, understudy desires. The advancement of elective methods of educational cost has developed fundamentally; never again are understudies limited to the classroom and their speaker to get the information they have to meet the necessities of the course. Distance learning opportunities have also developed through the post, email, the web, video and teleconferencing, block release options and more recently pod-casts (Ivy, 2008).

Promotion. Promotion encompasses all the tools that universities can use to provide the market with information on its offerings: advertising, publicity, public relations and sales promotional efforts (Ivy, 2008).

People. The people element of the marketing mix includes all the staff of the university that interact with prospective students and indeed once they are enrolled as students of the university. These can be both academic, administrative and support staff (Ivy, 2008).

Physical Evidence. Physical evidence is the tangible component of the service offering. A variety of tangible aspects are evaluated by a university's target markets, ranging from the teaching materials to the appearance of the buildings and lecture facilities at the university (Ivy, 2008).

Processes. Processes are all the administrative and bureaucratic functions of the university: from the handling of enquiries to registration, from course evaluation to examinations, from result dissemination to graduation, to name but a few (Ivy, 2008).

Marketing Mix on Distance Learning

The marketing mix on Distance Learning refers to Open University of Tanzania (Kidulani, 2014).

Product. A product is whatever can be offered to the particular market to fulfill their necessities. In higher learning education educational services were the main products and services provided to the customers in which education services are supported with three main activities of universities as services offered: teaching, research and sector services (Kidulani, 2014).

Place or Distribution. Place or distribution refers to an organization, or set of organizations, that is involved in the process

of making a product or service available for use or consumption by a consumer or business user. Place strategy is applied to identify where to bring and provide services at which specific area strategically. The organization must distribute the product to the user at the right place at the right time (Kidulani, 2014).

Price. Price in higher learning institution can be as the amount of that consumer (students, parents or employees) must pay to be educated. Arguebly that the cost of online programs is not lower than traditional programs if the same quality of the traditional programs is met and these additional costs should be reflected in pricing (Kidulani, 2014).

Promotion. The internet, as a medium of information and entertainment, is naturally suitable for promoting products. The most interesting thing about online promotion is that there are many collaboration systems that can be used or used to maximize promotions in achieving the targets, for example Facebook that already has FB Ads, Google Adwords in Google and other search results (Kidulani, 2014).

Brand. Kotler (2012) in Rachmawati et al. (2016) defined a brand as a name, sign, symbol or design or a combination thereof used by some marketers of products and services to identify and differentiate their products/services from those owned by competitors.

Brand Equity. Brand equity has been characterized as: a lot of benefits, for example, name mindfulness, steadfast clients, saw quality, and affiliations that are connected to the brand and increase the value of the item or administration being advertised. The empirical analysis indicates that brand loyalty, perceived quality and image are more significant in determining brand equity in comparison with brand awareness (Mourad et al., 2010).

Distance Learning. Surjono et al. (2008) specified that e-learning became the part of distance learning and online learning was the subset of e-learning. E-learning implied a learning which used electronic gadgets, particularly PCs.

MATERIALS AND METHODS

The research was designed to be explorative-based to acquire an overview and understanding of the research problem. The results were used as input for descriptive study. The unit of analysis in this research consisted of BINUS Online Learning students. Time horizons in this study were cross-sectional.

The research adapted survey method to collect primary data directly from the respondents. The survey method in this study involved two types of techniques, namely interviews and questionnaires. The study utilized two sorts of data, namely primary and secondary data. Primary data contained a set of information obtained directly from respondents. The method of primary data

collection applied the questionnaire. The research questionnaire was a collection of statements for respondents with the purpose of providing responses in accordance with field facts. Secondary data encompassed a set of related information from previous studies. The secondary data in this study used a literature review of the relevant theoretical basis. The population in the study consisted of 116 BINUS Online Learning respondents. Sampling method used in the research is probability sampling. The technique utilized random selection sampling. This technique was elected because it created samples that were highly representative of the population. In this respect, the data was tested its validity, reliability, and normality. Following the stage, the data employed SEM-PLS analysis technique.

Variable Operationalization. In the marketing setting, marketing mix variables consisted of seven main dimensions with some important indicators such as:

Product. The product deals with variations of majors in the BINUS Online program. The BINUS Online program is well known in Indonesia. The quality of favorable online learning materials, the number of learning sessions per course is well prepared (10 sessions from 13 regular lecture sessions).

Price. The price dimension symbolizes quality at BINUS Online that is comparable to the quality of the learning provided.

In addition, the Binus Online program provided special discounts for students, and tuition payments could be made gradually by installments each semester.

Place. This dimension was marked by new student registration methods can be undertaken online, tuition payment methods could be made flexible from various options such as automated teller machine or transfer, and online learning methods.

Promotion. Promotional dimension was reflected in the form of introduction of courses available at BINUS Online. BINUS Online also held a study exhibition in the form of seminars or workshops. In addition, the existing learning at BINUS Online also involved cooperation with companies or industries. Forms of communication with the community relied on some social media like Facebook and Twitter.

Process. The learning process was performed by using discussion forum in every learning session each week. The learning process was undertaken in several forms such as doing personal and group work for 10 sessions. It could also be done through regular video conferencing. In addition, direct face-to-face learning was also conducted at the site at the initial and final meetings.

People. This dimension consists of marketing staffs who provided the explanations required by prospective students. In addition, BINUS Online's employees also actively

responded and served with enthusiasm such as answering student questions related to actual operations. Lecturers of BINUS Online consisted of the selected person and competent in the field of study.

Physical Evidence. This described a reputable Learning Management System such as the use of a friendly Learning Management System interface. In addition, various learning features within the LMS had been well organized and comfortable lecture rooms to support the learning process.

Table 1
Gender

Gender	
Male	Female
54	62

Source: Researcher (2017)

Table 2
Employment background

Employment Background		
Employee	Employee	Employee
99	99	99

Source: Researcher (2017)

Table 3
Age

RESULTS AND DISCUSSIONS

Data of Respondents

Based on Table 1, it connoted that the majority of respondents comprised 62 women respondents. On the other hand, the male respondents counted for 54 respondents. Table 2 concludes that the employment background of the respondents was categorized into 99 employees, 13 employers, and 4 students. In terms of demographic aspect written in Table 3, the age of respondents varied from the range of below 20, 20-25 years, 26-30 years, 31-35 years, and 36-40 years, and above 40 with the total of 8, 77, 18, 6, 2, and 5 people respectively. Table 4 states the residence, respondents reside majority in Province of Jakarta (71), Banten (21), West Java (20), East Java (1), and outside Java Island (4).

Marketing Mix and Brand Equity Variable

Based on data analysis applying SmartPLS, the study revealed that all of the loading factors of Variables of 7Ps Marketing Mix (Product, Price, Place, Promotion, Process, People, and Evidence) is larger than 0.5

Age				
< 20 years	< 20 years	< 20 years	< 20 years	< 20 years
8	77	18	6	2

Source: Researcher (2017)

Table 4
Residence

Residence				
Jakarta	Banten	West Java	East Java	Outside Java
71	21	20	1	4

Source: Researcher (2017)

and all of the P-value is less than 0.01. The score produced concluded that marketing mix influenced the brand equity strongly and significantly. Additionally Physical, loading factors of brand equity (Brand Image, Perceived Quality, and Brand Loyalty) is larger than 0.5 and the significance level is less than 0.001. In all, brand equity is strongly and significantly influenced by marketing mix.

Table 5 and Table 6 exhibit all of the loading factors of Marketing Mix and Brand Equity Variables. All of the loading factors > 0.5 proved that Brand Equity was strongly and significantly affected by Marketing Mix.

Table 7 shows that the coefficient of determination (R^2) is 0.54 = 54%, which means that the marketing mix affects brand equity by 54% while the remaining 46% is influenced by other variables outside the model.

Table 5
Parameter estimation of marketing mix

Dimension	Parameter Estimation	R^2	P.Value
Product	0.76	0.58	< 0.001
Price	0.71	0.50	< 0.001
Place	0.61	0.37	< 0.001
Promotion	0.74	0.55	< 0.001
Process	0.75	0.56	< 0.001
People	0.76	0.57	< 0.001
Physical evidence	0.69	0.48	< 0.001

Table 6
Parameter estimation of brand equity

Brand Equity Dimension	Parameter Estimation	R2	P.Value
Brand Image	0.47	0.22	< 0.01
Brand Loyalty	0.88	0.78	< 0.01
Perceived Quality	0.84	0.70	< 0.01

Table 7
Estimated structural parameter of marketing mix to brand equity

Variable	Brand Equity	R^2	P.Value
Marketing Mix	0.71	0.54	< 0.01

CONCLUSIONS

The marketing mix consisted of substantial elements particularly product, price, promotion, place, learning processes, human resources, and physical evidence.

The study delineated convincingly that the loading factors of 7Ps in Marketing Mix (Product, Price, Place, Promotion, Process, People, and Physical Evidence) > 0.5 and all of the P-value < 0.01. In this respect,

it evinced that loading factors of Brand Equity (Brand Image, Perceived Quality, and Brand Loyalty) > 0.5 and significance < 0.001. It captivated interests in the study that Marketing Mix influenced the Brand Equity strongly and significantly eventually.

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Internal Firm Conditions and Their Effect on Price Wars' Intensity: A Case of Status Quo in the Indonesian Lighting Industry

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ABSTRACT

In marketing terms, the phenomenon of a price wars is regarded as the result of intense competition and retaliatory reaction in order to win market share. However, several literatures had acknowledged that this condition was the result of an abnormal internal condition, where firms competed not to engage in competitive selling activities but rather as an effort to maintain performance. This paper was written and prepared as part of a recent study in the Indonesian lighting industry, where many players in the industry considered themselves caught in a severe price war condition. Based on a qualitative survey using open-ended interviews of seven lighting companies in Indonesia, the study found that the industry regard price wars as the result of severe intra-brand competition and an effort to maintain the "status quo" of continuous growth. Propositions to ease friction in price were suggested: exploration to other market segments; exploiting information to induce loyalty; understanding rivalry through capacity size; and management of short-term performance constraints.

Keywords: Internal firm condition, lighting industry, price Wars

INTRODUCTION

Considered as one of the most severe forms of competitive interplay, price wars have been regarded by many as a condition

where competitive advantage can only be provided through price (Rao et al., 2000). Although firms in conflict may have thrown into a price war without their consent (Pot et al., 2010), various research have managed to provide empirical evidence that the condition is caused by deliberate action in the effort to win market share (Eilon, 1993; Klepper, 2002). While reasons of price wars eruptions differ among industries, several researchers have defined the condition as a result of untargeted decisions made by a conscious act of a firm's internal management (Genenz et al., 2014).

Several aspects of internal firm characteristics are often represented in the market through competitive actions and reactions (Heil & Helsen, 2001). As modern competitive interaction is based on the notion of inequality, differences in resources can lead to a competitive advantage (Barney, 1991), where all activities conducted by firms ultimately created a network of operations that serve as a structure for the entire industry (Porter, 1991). These arguments suggest that, as a strategy, a price wars can also be regarded as a collective effort to gain a competitive advantage (Ramaswamy et al., 1994). Nevertheless, while the phenomenon can be argued as a common occurrence in economic activities (Bungert, 2003), it remains as a condition of conflict and possesses great potential to lead industries into ruin (Busse, 2000). In response to the impending threat of a price war, therefore, it is important for managers to understand their firm's internal capabilities in order to develop a strong

and unique competitive offering for their customers.

This paper answered to the need for empirical research on the topic and its relation to strategic management, especially within the context of the Indonesian lighting industry. This research also served as an extension of conceptual framework of the management of price wars that were previously introduced by Heil and Helsen (2001). As previous research in a price wars is mostly discussed in the context of quantitative empirical studies (Green & Porter, 1984; Krämer et al., 2016; Levenstein, 1997; van Heerde et al., 2008), research in this paper could provide a different outlook on the topic, as seen from the qualitative perspective, alongside the works of Fox (2005), Harper (2000) and Wang (2002). Because firms in their purest form are a collection of human emotions, results of severe price competition not only affecting a firm's quantitative measure (such as profit margins and revenue) but can also induce a negative qualitative effect on overall firm performance (Heil & Helsen, 2001; Rao et al., 2000).

The Indonesian lighting industry was chosen, as it was undergoing the most exciting changes since the early days of Edison's introduction of his electric light. With the recent advancement of LED lighting, incumbent companies in this industry were currently reorganising their product portfolio in order to provide better service to their customers. Nevertheless, while this new approach in lighting systems had been regarded as a solution to improve

the lives of many (Ciriminna et al., 2015; Jägerbrand, 2015), the industry's current competitive state was reflective of past conditions where initial introduction of artificial light brought with it severe competitive consequences in the form of a price wars (Hargadon & Douglas, 2001).

Constructed around the arguments on internal firm conditions (Heil & Helsen, 2001), research in this paper examined the effects of four variables, i.e., exit barrier, price leadership, reputation, and financial condition. These variables were later defined in smaller dimensions in order to ease result collection. Further explanation in regard to these dimensions was presented together with literature discussion where several propositions were offered as solutions to manage competitive interaction and price wars.

LITERATURE REVIEW

In its most basic form, an internal firm condition can link to the resource-based view, where sustainable performance is derived from the exploitation of internal strengths, a proper response to environmental opportunities, and the ability to manage external threats and internal weaknesses (Barney, 1991). Seen as assets, these resources include capabilities, available inventory, organizational processes, market information, and business knowledge, which can control to create a specific competitive advantage in a particular market. While a majority of research argues that opportunities are a casual encounter constructed by a firm's external condition (Caves & Porter, 1977; Porter, 1980), prospective collaborations between demand and supply can surely be induced by exploitation of internal resources (Klein, 1998; Porter, 1991).

These internal resources, nevertheless, can also be regarded as an influential aspect to irregular competitive interactions in a market where business differentiation is limited, and transactional commitment is usually driven by price rather than innovation. This condition has regrettably led firms to rely on strategies based on quantity (Eslaminosratabadi et al., 2013), where firms within a market are defined by the strength of their purchasing power.

Heil and Helsen (2001) argued that several firm characteristics could intensify price competition and in turn, led to the outbreak of a price wars. As firms' resources, in general, are rarely homogenous, the exploitation of a particular resource (i.e., financial strength, and excess capacity) in a specific market can create sudden demand shock, where competitive effects often result in retaliatory reactions among firms (Ramaswamy et al., 1994). Conclusively, therefore, competitive interplay during a period where price wars flourish can be seen as the effect of firms' collective internal conditions in a particular industry, created through networks of transactional interactions driven by limited innovative differentiation. Price wars in this sense, can also occur due to efforts made by firms to reach a desirable market position along the course of their organizational life-cycle (Wu & Arief, 2015).

In the framework of price wars competition, an internal firm condition can further be defined through four antecedent variables: exit barriers, price leadership, reputation, and financial condition (Heil & Helsen, 2001). While in some situations these variables may not directly affect the intensity of price wars, they can be regarded as an asset possessed by every firm in an industry, where inappropriate management can lead to devastating results. Details of chosen dimensions and variables of internal firm conditions are presented in Table 1, in relation to price wars' intensity.

Exit Barriers

Barriers to exit can be described as costs that a firm must carry if it decides to leave the market it serve (Gilbert, 1989). The cost of exit in this sense depends on the alternatives a firm has for its assets when industry exit is

definite (Heil & Helsen, 2001). In this study, three dimensions of market exit were defined in connection with sunk costs (Rosenbaum & Lamort, 1992), asset specificity (Porter, 1976), and mobility barriers (Gilbert, 1989). Heil and Helsen (2001) argued that exit barriers were an important part of a price wars because of its connection with a firm's long-term sustainability, where higher exit barriers lead to the likelihood of a price wars eruption.

Previous literature defined sunk costs as a barrier to both market entry and exit (Gilbert, 1989; Mcafee et al., 2009; Rosenbaum & Lamort, 1992). Nevertheless, the effect of sunk costs is more crucial in relation to an exit because it is related to non-recoverable investments in assets. Where a rate of sales of items produced by these assets is declining, the need to recover sufficient financial returns

Table 1

Variables and dimensions

No.	Dimensions	Independent Var.	Dependent Var.
1	Sunk Costs	Exit Barrier	Price Wars Intensity
2	Asset Specificity	Exit Barrier	Price Wars Intensity
3	Mobility Barriers	Exit Barrier	Price Wars Intensity
4	Informational Advantages	Price Leadership Characteristics	Price Wars Intensity
5	Loyalty	Price Leadership Characteristics	Price Wars Intensity
6	Capacity	Price Leadership Characteristics	Price Wars Intensity
7	Predation	Firm Reputation	Price Wars Intensity
8	Accommodation	Firm Reputation	Price Wars Intensity
9	Fear of Bankruptcy	Financial Conditions	Price Wars Intensity
10	Competitive Volume Pricing	Financial Conditions	Price Wars Intensity

will force companies to exploit resources to its performance limit. Seen from the perspective of an incumbent, sunk costs should allow an established firm to commit to a preferred output (Gilbert, 1989). However, this condition may have little effect when competitive interactions are driven by innovation. As an example in the lighting industry, the introduction of electric light was known to be one of the antecedents of price wars in the gas industry, which, at the time, had no longer become the preferred provider of artificial illumination (Hargadon & Douglas, 2001).

In relation to sunk costs, specificity of assets has been also mentioned as an important part of an exit barrier. As businesses are structured in strategic positioning in relation to the market it serves, changes in strategy which increase entry barriers in return, also increase exit barriers (Porter, 1976). In this sense, firms are suggested to have minimum asset specialization to ensure that changes in competitive position will not create strategic inflexibility.

In collective, both sunk costs and specificity of assets create mobility barriers to firms that possess them. While market efficiency depends on the conditions that restrict the mobility of capital in all directions (Gilbert, 1989), changes in technology, skills, and common input could revolutionize industries where past investments are considered obsolete (Porter, 1998). Consequently, in conditions where economic environments are driven by technology and consumer taste, mobility

barriers should be regarded as a source of constant development, rather than long-term stability.

Price Leadership Characteristics

In many industries, some firms perform the role as the price leader in their market (Heil & Helsen, 2001). In the case of a price wars, these firms are believed to possess the power to increase price levels through market discipline and barometric efforts. Within this variable, three indicators of price leadership are defined in connection to informational advantages (Rotemberg & Saloner, 1986), loyalty (Deneckere et al., 1992), and capacity (Deneckere & Kovenock, 1992). Heil and Helsen (2001) recognized price leadership as an important aspect of price wars because smaller firms in the industry were vulnerable to the pricing policy of large firms.

In cases where price acts as a strategic variable, informational advantages can become a decisive factor in securing transactional commitment. As holding a monopoly of contemporary commercial markets can be considered uncommon nowadays, an effort to monopolize an industry will lead to a breakdown in restraint, while an outcome further from monopolistic efforts will simply result in lower profits (Rotemberg & Saloner, 1986). Obtaining information in an open market, therefore, can provide incentives where firms are able to conduct pricing strategies in relative to the structure of their operational costs.

This idea can proof effective where firms have a distinct loyal segment at their

disposal. As previously shown by Deneckere et al. (1992), firms with a large loyal base of consumers provide the equilibrium price for the market in concern, which in turn, is used by smaller firms as their point of reference. However, as building awareness to generate loyalty often takes considerable time (Ramaswamy et al., 1994), the price variable became a commonly used method to manipulate customer loyalty (Diallo et al., 2015).

Constraints in capacity have also been viewed as the source of limitation to gain a competitive advantage. Certain perceptions exist where firms with high capacity have the ability to become the market's price leader (Deneckere & Kovenock, 1992). Because capacity is a natural way to model the size of firms, smaller firms are usually prone from being undercut by larger firms. This condition can be argued to the fact that they may not have the ability to influence competitive interaction in its industry, while on the contrary, larger firms must consider the plausible responses from competitors, prior to setting their standard in price.

Firm Reputation

Past competitive behaviour usually indicates a firm's future competitive attitude (Milgrom & Roberts, 1982; Tirole, 1988), where firms that have shown a strong track record of combating past deviations in price possess the ability to prevent potential price collision from occurring (Heil & Helsen, 2001). Within this variable, two indicators are defined in connection to predation (Kreps & Wilson, 1982; Milgrom & Roberts, 1982)

and accommodation (Kreps & Wilson, 1982; Selten, 1978). Heil and Helsen (2001) considered reputation to be an important aspect of price wars because it represented market strength and a firm's establishment within it.

Predation strategies have been considered rational to deter market entry, in order to ensure that a rival's rate of return from entry cannot provide sustainable assurance of long-term business establishment (Milgrom & Roberts, 1982). It is also worth noting that predation is a costly strategy where loses cannot be rapidly recovered in a given market, even when the exit of rivals is imminent. In practice, predation is viewed as a sensible investment in order to sustain or enhance a company's reputation (Kreps & Wilson, 1982), even though it is only effective if entrants find the threat credible.

On the contrary, an incumbent firm may implement accommodating strategies when differing interests between them and the entrant exist (Selten, 1978). Accommodation may be the best response to entry when information in regard to the competitive structure is shared between rivals (Milgrom & Roberts, 1982). As a firm's reputation can be derived from its past competitive behaviour, availability of information can provide leverage in future interactions among firms within a particular industry.

Financial Conditions

In a condition where competition has been emphasized too much on price, firms would likely face lower profit margins (Griffith

& Rust, 1997). Within this variable, two indicators are defined in connection to fear of bankruptcy (Bhattacharya, 1999) and competitive volume pricing (Dolan & Jeuland, 1981; Monroe & Della Bitta, 1978). Heil and Helsen (2001) noted that in such deteriorated financial condition, firms could find new incentives to cut price in the effort to capitalize on economies of scale and induced a price war in the process. Bhattacharya (1999) argued that price wars were caused by sufficiently low-net asset levels. In the condition where firms were faced with a short-term cash constraint and threatened by bankruptcy, price cutting became one of the only options to generate a margin in the present, even at the cost of reduced future demands. Because competitors would typically responded to a decrease in price, firms might want to charge a low price early on in order to create larger demand in the present that could minimize future competitive reactions from rivals.

However, as pricing strategies usually carry a long-term market effect, it has been previously argued that a firm's price positioning during an invented monopoly period influences the rate of entry from rivals (Dolan & Jeuland, 1981). This period of monopoly, nevertheless, can be considered as an artificial condition structured by demand shocks, which on their own are created by sufficiently low prices in relation to the market standard. Price wars in this sense are the result of retaliatory actions induced by loss of volume at the

competitor's side and usually lasts longer than expected, even after the supposedly short-term constraint has been prevailed.

MATERIALS AND METHODS

This study used the qualitative method to determine the social process of waging price wars. The approach was preferred because qualitative studies were hoped to provide comprehensive answers to questions that might have been missed in quantitative methods (Lune & Berg, 2017). Face-to-face interviews were conducted through a set of semi-structured and open-ended questionnaires based on several cases and articulating arguments in regard to price wars. Results were gathered manually and later organized into a collective conclusion. Because qualitative study limits our engagement to conduct an intensive examination of large samples, respondents to this study are specially selected due to their long-term experience in the Indonesian lighting industry. In this study, seven companies, which have operated in the Indonesian lighting industry for more than five years were selected and agreed to contribute to the research, as seen in Table 2.

The study consisted of two parts: (1) respondent's type of business and his or her perceived market role; (2) respondent's view in regard to antecedents of price wars seen from his or her own internal condition and a firm's characteristics. Based on the type of activities and product portfolio, two

Table 2

List of participating firms (abbreviated due to request of confidentiality)

No.	Firms	Years of Experience per 2017	Commercial Channel	Estimated Annual Turnover Value	Interviewee's Position
1.	ATY	8 years	Professional	US$ 1.8 Mio	director (1), manager (3)
2.	SWJ	44 years	Traditional	US$ 2.6 Mio	director (1), manager (2)
3.	GIT	22 years	Traditional	US$ 1.1 Mio	director (1), manager (2)
4.	KRE	17 years	Professional	US$ 2.2 Mio	director (3), manager (1)
5.	BMK	25 years	Professional	US$ 2.1 Mio	director (1)
6.	SSJ	26 years	Traditional	US$ 2.4 Mio	directors (2)
7.	IDL	13 years	Traditional	US$ 3.7 Mio	director (1), managers (2)
8.	RJW	12 years	Traditional	US$ 7.5 Mio	declined
9.	DIM	12 years	Traditional	US$ 3.1 Mio	declined
10.	MGK	21 years	Traditional	US$ 0.9 Mio	cancelled

different commercial channels had been identified: *traditional* and *professional*. As the understanding of price wars needed to be built based on solid conceptual perspectives of industry practitioners, the respondent's differences in the commercial channel could use to provide additional and valuable input to this research.

The traditional trade channel was a market that mainly consisted of traditional stores owned by private owners without formal institutional establishments. They operated not only in the lighting industry but also in a larger part of the electrical industry. Companies that operated in this market serves its customers as suppliers with diverse types of products and were not only limited to lighting. In this study, four companies operated in this category of business.

The professional trade channel was a market that consisted of contractors or building owners, who at times were also direct users or project owners. Sales in this market were usually combined with diverse types of services alongside products, such as lighting design, installation, after-sales warranty, and a *specialized approach* to project owners. In this study, three companies operated in this category of business.

RESULTS AND DISCUSSIONS

It has been argued that practitioners should pay attention to the signals that may have contributed to the likelihood of price wars, as their organization's involvement and future profit opportunities are usually within the control of their operational activities (Heil & Helsen, 2001). However, many

practitioners, in general, are unaware that their firm's internal condition can affect activities in the market, especially if they are positioned higher in the industry, in relation to other companies that have less accessed to products and sales opportunities. Based on this argument, we discussed their input and responded to the internal aspects of price wars and its antecedents below.

Exit Barriers

Sunk costs is a difficult topic to discuss in connection with sales. The majority of respondents who related directly to daily activities had little concern with the value of their sunk costs because this subject was often regarded as a *given facility* that supported their work. This indicated that most middle-level managers had limited knowledge in regard to sunk costs. Several reasons could base on the fact that sunk costs in itself could define in various context, including the cost of operations and cost of goods sold. In the case of the respondents, most middle-level sales managers were structured in different departments with procurement, which could explain why sunk costs were understood with limitations. While purchasing managers were typically concerned with the cost of the products they acquire, in most cases, sales managers were only concerned with the level of the end value of their sales activities.

However, a slight difference in response was given from participants from higher positions in the institution's hierarchy. Directors with accessed to both procurement and sales regard sunk costs as an important

factor that influenced the intensity of price war. One particular responded to the concept of sunk costs indicated that,

> *"It is important to ensure that products are acquired with the best price in relative to our resale price. Although the market has their own standards, it does not mean that our customers are willing to buy the products with prices within those standards. More often than not, customers actually only use those standards as benchmarks for additional discounts, which in our book, becomes an additional cost of operations."*

Based on this response, it could understand that firms view sunk costs from the context of its ability to generate a sufficient margin, which at the end led to the value of their overall profitability. This study indicated that sunk costs could see as one of many factors that influenced the intensity of a price war, but only if organizations understood the relationships of sunk costs from the context of acquirement and margin.

Asset specificity was also a difficult topic to discuss, as managers often regard assets only as a physical and supporting facility of their daily activities. Specificity of assets was rarely brought up in discussion during meetings because it was challenging for managers to view them as an issue of the internal condition. Almost all respondents regarded their asset specificity as the result of external (market) influence, where firms prepared and acquired assets specifically to provide what their customer required and

not to encourage customer requirement. Some responded to the topic as follows,

> *"We prepare inventory based on what the market wants. Majority of the time it is the fast-moving items, therefore we emphasize the size of inventory based on the assurance of fast liquidation of goods to cash."*

Others, however, had a contradictive view in regard to their asset specificity and mentioned,

> *"We like to conduct tests to the customers by bringing new products at least once a year. When we offer them to try these new products, we emphasize more on their functional aspects. This consideration became the basic rule during the introductory period because customers often do not have the knowledge to understand how to maximize a product's application and tend to generalized products."*

These contradictive responses indicated that firms had a precise rule or internal guidance when it came to acquiring specific assets to support their commercial activities. As inventory can also be seen as part of a firm's specific asset, the notion of asset specificity brought up an interesting point in a firm's view of an exit barrier that caused a price war, from the context of a segment barrier. The study showed that firms were limited to the knowledge they possessed in regard to the customers they serve within a particular market segment in which they were positioned at. Using examples from the respondents in this study, asset specificity's connection to an exit barrier defined by a firm's limitation to serve different segments in the same industry, due to the fact that customers from these two segments had different requirements in terms of products and service.

Lastly, in connection with exit barriers, mobility barriers were understood by the respondents as *a decision* made to stay or remained within their industry segments. For example, managers from the professional trade segment were reluctant to enter the retail segment because they regarded the segment was driven by price-conscious customers that limit a firm's ability to drive innovative or specialized products. However, similar answers were also stated by managers from the traditional trade segment, where the choice to limit entry into the professional segment was mainly based on limited operational or product knowledge and the difficulties they encountered in the effort to reach customers in that particular segment.

These similar responses indicated that firms favour to remain in the segment where their previous experience gave them opportunities to generate a margin and reluctant to enter new and other segments because of limitation in new knowledge or product acquirement. This last indicator in an exit barrier showed that price wars' intensity increased when firms engaged to exploit opportunities to generate sales from their existing segment. Limitation in portfolio and market size would eventually

drive competition towards price rather than innovation. Based on these results, the following proposition was proposed:

P1: *A firm's inability to explore new market segments increase the likelihood of price exploitation in their current segment, which subsequently influences the occurrence of price war.*

Price Leadership Characteristics

A majority of respondents viewed informational advantages as an important part of their firm's success in sales and transactional activities. However, in their connection with a price wars, most firms did not regard their advantages in acquiring information to be the cause of market conflict but rather as an effort to win customers and secure their transactional commitment. Most respondents mentioned that,

> *"We need to acquire price information on regular basis, and it is a hard thing to do. We depend on our customers to provide us with the latest news of market price. When responses have been collected, we will try to the best of our abilities to match those prices to ensure that our customers do not run away."*

This response generates further dilemma when the issue was seen from the perspective of the whole industry because firms viewed themselves as ineffectual to the changes of market pricing structure. This condition indicated that practitioners was focused only on a limited portion of information, especially in regarded to their competitor's pricing strategy but not on the effects of

their own pricing policies. Nevertheless, it was reasonable to assume that firms did not regard informational advantages as the cause of price wars due to the fact that they operated within a restricted time-frame and observational constraints, meaning not all firms possessed sufficient ability to monitor their competitor's movement in detail.

Loyalty, on the other hand, had been described as one of the causes of price wars because it entailed customer's approval of a firm's pricing structure. Respondents regarded loyalty to price was important because their market was mostly structured only by a few established brands. In a market where product selection was pre-defined by customers, engagement in transactional activities was influenced by price acceptance because product homogeneity limits a seller's creativity to promote products through their application features. Two managers responded to this query as,

> *"If the customers think that the price is acceptable, then we are safe. However, if someone else comes with a bigger discount, we can be sure that the customers will not be hesitant to purchase their products from that particular supplier."*

Subsequently, in its relation with price leadership, respondents considered that size of inventory or production capacity related strongly to the number of price incentives that could pass through to the market, which in turn intensified price war interactions. Based on these results, the following propositions were proposed:

P2A: Informational advantages are not seen to be influential to the occurrence of a price war, while customer loyalty to price increases the likelihood of a price war.

P2B: Firm capacity differentiates market positioning and subsequently increases the likelihood of price war due to its ability to influence market price through capacity size.

Firm Reputation

The concept of predation and accommodation was understood with limitation by the respondents. This condition occurred in part because they did not consider themselves were the trendsetter in their own segments but rather as followers in a bigger market. Most respondents regarded predation as a compulsory action needed to be executed when a competitor entered their market; at the same time, however, they also considered competition as an opportunity to create a new partnership, which required firms to accommodate rivals.

However, this concept was understood in connection with firm establishment. As the Indonesian lighting industry was shaped by a handful of large firms, competitive predation and accommodation occurred at different transactional levels, started from an inter-brand competition and later developing into intra-brand rivalry. At the brand level, firms used predation as their marketing strategy against other brands, while at the transactional level, the same strategy was used to secure a transactional commitment from customers. Accordingly, most respondents were unlikely to use accommodating strategies unless they were unable to provide a particular service to their customers (unavailability of products or specific nonproduct services).

Because there was no physical or contractual barrier in the industry that could use to defend a market, most respondents who participated in this study realized that their short-term activities relied on strong pricing commitment with both their supplier and customers. One respondent mentioned that,

> *"We never want war. We like it when the market accepts our prices on the grounds of product value and seller's effort to service them. However, the other companies are also selling the same products and offer the same service to the customers. This condition has led us to the situation where we need to win against the other companies. One way to achieve this is by ensuring that our sales target is met, so we can receive better percentages in rebates from the suppliers."*

Similar to informational advantages, therefore, respondents did not consider predation strategies as the source of price wars but rather as means of securing performance. While previous literature frequently mentioned that predatory pricing was strongly related to price wars' antecedents, in the case of the Indonesian lighting industry, predation and accommodation might be a popular strategy among managers to be practised as the embodiment of their firm's reputation.

Based on these results, the following propositions was proposed:

P3: Predation strategies are used by firms on a higher market position and increase the likelihood of a price war in an inter-brand context, while accommodation strategies can be used by firms on a lower market position to reduce the likelihood of a price war in an inter-brand context.

Financial Conditions

Although, in general, respondents were reluctant to share their firm's financial conditions, all of them agreed that a performance constraint could influence them to cut prices below the market standard in order to generate short-term income. A respondent replied to this query by saying,

> *"We need cash to survive. As simple as that. Without a proper flow of cash, a company will not survive. Therefore, we need to ensure that our bank accounts have sufficient balance at the end of every month to cover costs."*

This answer had made the concept of fear in facing bankruptcy became an interesting topic of discussion. While some respondents regarded this issue as one of the definite caused of price wars, others disliked the word *fear* and replaced the concept with the notion of *short-term constraints*. Short-term constraints were thus considered more influential to the intensity of price war because firms were under pressure to generate revenue and proved their merit to remain in the market.

Nevertheless, financial conditions and especially financial distress were a difficult topic to discuss because a firm's future outlook mostly depended on how long it could sustain its reputation in the market. Attaining information in regarded to financial issues in relation to price wars therefore might not possible until a firm announces that it is withdrawing from the market it serves. As an acknowledgment of this proposition, two firms, which announced their exit from the Indonesian lighting industry, politely declined the request for an interview.

On the other hand, respondents regarded volume pricing as one of the reasonable causes of price wars. As the industry was structured by firms that differed in size and experience, competitive actions and decisive reactions were made based on acquired knowledge and previous success. A firm with a longer establishment, for example, had the opportunity to use past information in order to forecast future demand, which later could use to conduct purchases in large quantity. While the respondents mentioned that not all suppliers were willing to provide additional incentives, the size of purchase enabled larger firms to emphasize pressure to the market through volume demand. This condition indirectly proved that firms had the ability to influence market control through pricing strategies. Based on these results, the following proposition was proposed:

P4: *Short-term constraints and volume pricing increase the likelihood of a price war as firms seek to capitalize opportunities in a limited time period.*

CONCLUSIONS

Most firms that contributed to this study regarded price wars as a serious issue in dire need of a solution. However, most firms did not regard their competitive actions and reactions influenced the price wars itself, due to the fact that their establishments were limited within their own segment. The inability of firms to move into new segments intensified the severity of price wars because competition turned out was driven by price policies rather than innovation.

It could be argued that firms in the Indonesian lighting industry were focused greatly on price information in order to ensure their own targets were met. When specific sets of offers were no longer accepted by the customers, innovative non-pricing solutions rarely became the outcome of competition, as they chose to attain and secured transactional commitment through price. Once firms had found their most profitable position in the market, they were reluctant to reach into new markets because explorations were less profitable than exploitation. Understanding this issue led to a situation where firms scuffle to maintain the *status quo* of their performance because, in their view, it was the least problematic solution to remain in the market.

While some respondents acknowledged the fact that price wars was a non-avoidable occurrence in business, the discussion results showed that the condition was caused mainly by lack of internal control rather than by external influence. Especially in connection to the exit barrier and in line with the first proposition, firms in both segments were suggested to expand their current coverage by participating in larger industry scope. Although it might require firms to implement changes in their business model, this effort could lead to discoveries of new market segments where sustainable performance is driven by innovation and dynamic capabilities.

Advantages in gaining information, on the other hand, should be treated with cautious examination, especially if there are no specific methods to ensure their validity. Most firms in this study receive their market price information from the customers, which means that the pricing policies given by rivals are subject to a certain degree of adjustment. While it can be argued that customers tend to focus on the value of investment subsequent to their transactional commitment, homogeneity in products will continue to limit opportunities to generate margin at the supplier's end. As suggested by Proposition 2A, firms should carefully examine their pricing policies in order not to induce a price war among rivals but, at the same time, be able to provide assurance to the customers that they had been given the service they deserved to ensure loyalty was fostered.

Meanwhile, these policies, can also be influenced by the size of capacity a particular firm can carry. Although an exact size of the Indonesian lighting industry was difficult

to predict, the capacity measurement could forecast through historical sales data and customer consumption. Nevertheless, as the goal of any businesses was to capture market share, firms were emphasize the strength of their pricing policies through capacity size and later use them to eliminate competition from smaller rivals. Because firms with large capacity were able to obtain better product margin through their magnitude of purchasing power, predation strategies in this sense were strongly connected to capacity size and accompanying pricing policies.

Proposition 2B suggests that firms should develop different capabilities and not simply focus on a specific market segment with a limited opportunity for product development. Proposition 3 suggests that firms should be aware not to challenge firms with larger capacity if, in comparison, they have a clear transactional size disadvantage, while at the same time firms are recommended to work together with rivals to serve customers in different segments within the same market to reduce the likelihood of price wars. As customer structure between segments is more diversed in comparison with their product preference within the same segment, transactions with slightly different pricing policies in different segments can ease competition.

Finally, as an important part of internal management, firms should avoid resolving short-term constraints through volume pricing policies. As suggested by Proposition 4, price wars' intensity can be reduced if firms are able to manage their

financial performance and ensured sufficient margin can be constantly generated. Further research in regarded to the causes of short-term constraints are needed and can be the next objective of future research.

Results showed that even within their own environment, firms and managers had limited knowledge in regarded to the relational effects of internal policies that had been implemented in the market. Further studies needed to be conducted to ensure that these relational effects were truly interrelated to the intensity of price wars. As firms continue to consider their internal actions and competitive reactions as the result of market influenced, future research could also be conducted not only on the ground of internal conditions but on the external environment where a firm operated.

ACKNOWLEGEMENT

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Transforming Smallholder Farmers Business towards Agribusiness: A Framework Using ICT

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ABSTRACT

This paper introduces a framework using ICT to transform smallholder farmers' traditional business towards agribusiness in Malaysia by extending the existing theoretical framework. The introduction of agribusiness to the farmers is not well understood and difficult to implement due to their limitations as smallholder farmers. The framework outlining ICT usage which was improved through identifying major factors affecting agribusiness transformation by using ICT such as environment (ENV), technology (TECH), farm work design (FWD), and information system elements (ISE). This paper focuses on testing relationships between ENV and TECH which acting as independent variables (IVs) towards agribusiness transformation using ICT as dependent variable (DV). The moderation effect of ISE and FWD acting as moderation variables (ModVs) which interacted with TECH towards agribusiness transformation using ICT were also being investigated in this paper by using slope analysis. This research used a quantitative approach to explore the nature of the phenomenon through the underpinned theory available in information systems theories such as technology-organisation-environment (TOE), technology acceptance model (TAM), diffusion of innovation (DOI), and task-technology fit (TTF). The method chosen in this research was

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questionnaire, which was distributed to more than 209 smallholder farmers in Taman Kekal Pengeluaran Makanan (TKPM) in Selangor. The statistical results provided the researcher the opportunity to outline the ICT usage framework to be used to transform smallholder farmers' traditional business towards technological intensive agribusiness. Overall, the findings outline the low level of information system elements and farm work design influencing the technological effect towards agribusiness transformation using ICT.

Keywords: Agribusiness, agriculture technology usage, ICT framework, smallholder farmers

INTRODUCTION

Farmers need to manage their agricultural business and productivity resources effectively by using computers and internet connectivity to stay competitive in the agricultural industry (Nuthall, 2004). There are many studies related to information and communications technology (ICT) usage conducted in agriculture involving large farm firms worldwide (Adams, 2007; Taragola & Van Lierde, 2010). However, in the Malaysian context, most of the farm operators, especially in the agro-food subsector, are considered small farmers; they are agricultural entrepreneurs who find it challenging to remain competitive in the agricultural market (Department of Agriculture, 2010a). In Malaysia, the use of ICT in managing farm business and activities is still unknown (Malaysian

Communications and Multimedia Commission [MCMC], 2012) as almost 40% of fruit growers are over 50-years old (Performance Management and Delivery Unit, 2011). It seems that older farmers are not willing to use ICT in their agriculture activities. However, some scholars outlined that the age of farmers was not a factor for ICT usage in agriculture (Alvarez & Nuthall, 2006; Botsiou & Dagdilelis, 2013). Therefore, the investigation of ICT usage must look beyond farmers' behaviour and demographic profile.

The aim of introducing Agribusiness in Economic Transformation Programme (ETP) is to advance the agricultural industry to become more competitive and contribute highly to the country's gross national income (GNI). The transformation towards agribusiness is also related to the process of improving the scale of farms and yields that link to the supply chain system in agriculture (Performance Management and Delivery Unit, 2011). This highly demanding process requires farmers to improve their farm activities and daily operations in every element of their agriculture projects (Nuthall, 2011). Since all agriculture projects are unique, smallholder farmers face highly competitive challenges in improving their production so as to suit the supply chain providers from both the private and public sectors (Sen & Choudhary, 2011). Nevertheless, both sectors also need to work together and integrate these practices into their suitable business cases. This difficulty has affected ETP implementation in Malaysia.

Most failures in agriculture projects are due to poor management and planning from the beginning of the project and during its implementation (ERA Consumer, 2001). Agricultural sustainability, which relies significantly on good farm management, is therefore crucial. In Malaysia, most small- and medium-sized local farmers still depend on the traditional methods to manage their farms. Even though the ICT penetration amongst Malaysian has increased dramatically, the use of software and information systems for managing daily farm operations, especially in modern farming, is still low and remains at the beginning stage. The exact main reasons that Malaysian farmers are not using ICT in agriculture remain unknown and these will be explored in this research.

Some scholars have claimed that smallholder farmers are not part of the value chain and community (Vermeulen & Cotula, 2010). It was due to the term 'agribusiness' that is also known as the entity or agency element in the agricultural value chain focusing on the production, logistics, and business operation from the upstream to downstream of agricultural value chain. However, other scholars have stated that smallholder farmers are also part of the source and input suppliers in agriculture (Martin & Jagadish, 2006; Sen & Choudhary, 2011). Therefore, one useful suggestion is to isolate them from the value chain so they can be empowered to continuously support the agricultural value chain.

Despite numerous definitions of 'agribusiness' and its relation with the food and supply chain system, there is a need for critical and fast decision making by farmers in natural farming activities (Salin, 1998). Thus, consolidating all data, especially the farm activities, becomes important to support farmers' decision making. Prior to this, farmers may utilize the internet and recently developed devices such as tablets and smartphones to consolidate the data by using Farm Management Information System (FMIS) as an application to collaborate and interrelate with other information on the internet to facilitate more precise decision-making (Salami & Ahmadi, 2010). Therefore, the researcher focused on farm management, which is essential for all farmers, including smallholder farmers, to use FMIS as an ICT solution for transforming their traditional business towards agribusiness. By integrating the information system elements (ISE) in FMIS with the Information Systems Theory from the literature, the new ICT usage framework is introduced in this research.

Literature Review

Construction of the Framework and Hypothesis. The principles underlying the construction of this research framework rely on the literature review and theory underpinned in this study. This study outlines four major elements focusing on ICT usage from the technology and environment aspects, information system elements and farm work design, the tasks in farm and agriculture application.
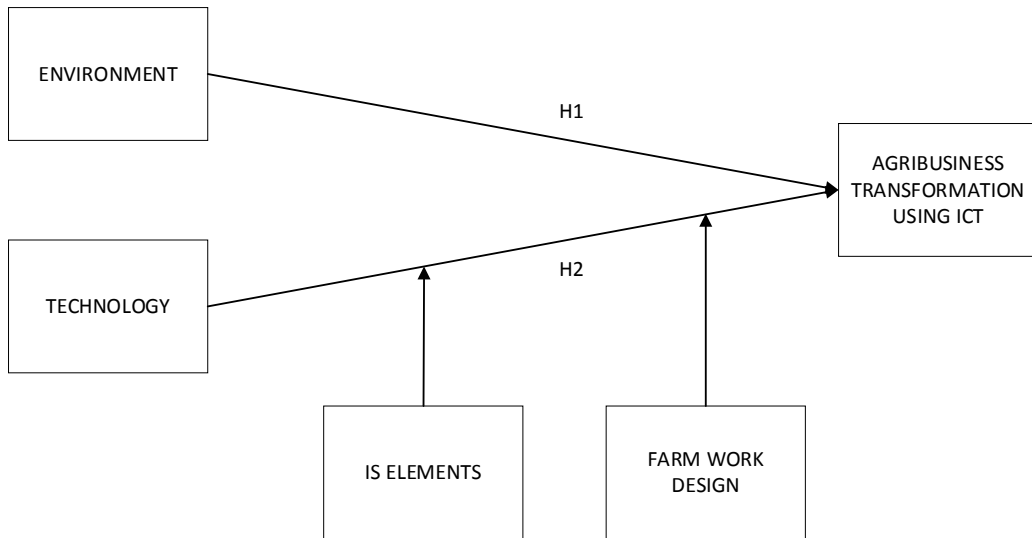
Figure 1. Proposed ICT framework in transforming smallholder farmers business towards agribusiness

This research framework was derived from the previous IS theories such Technology Acceptance Model (TAM), Technology-Organisation-Environment (TOE) and job design theories. It consists of four main independent variables which are considered as the factors influencing ICT usage by smallholder farmers in Malaysia. Technology and environment are the two main independent variables. Meanwhile, information system (IS) elements and farm work design are the moderating variables which interact with technology to affect ICT usage. The level of moderation is the degree of slope interaction effects of both moderating variables on the main technology variables in the research framework.

Technology and Environment Aspect. The technology and environment variables were derived from the technology-organisation-

environment (TOE) framework introduced by Tornatzky and Fleischer (1990). A previous research supports the evidence that large organisations are more willing to adopt new technology compared to small organisations (Bertschek & Fryges, 2002). This is because the resources and capacities of a large organisation are much higher compared to those of a small organisation with less resources such as smallholder farmers (Vermeulen & Cotula, 2010). Nevertheless, some researchers have argued that farm size affects ICT adoption and usage (Smith et al., 2004). The researcher believes that this will not affect the ICT usage among smallholder farmers in Malaysia. Therefore, the organisational factor in TOE framework has been excluded, while the technology and environment factors are included in this study.

The TOE framework is well-defined in Tornatzky and Fleischer's book, *The Processes of Technological Innovation* (Tornatzky & Fleischer, 1990). The book describes the process of innovation with a focus on the development of innovations by engineers and entrepreneurs regarding the usage and implementation of those innovations by users within the context of technological, organisational and environmental setting. The TOE framework represents how the organisational context influences the usage and implementation of innovations. However, the TOE framework provides a "generic" theory, in which the three major factors of technology, organisation, and environment are placed (Zhu & Kraemer, 2005). Therefore, many scholars integrate the TOE framework with others related to the technology usage theories such as technology acceptance model (TAM) and diffusion of innovation (DOI) (Awa et al., 2010; Thong, 1999; Wu & Liu, 2015).

The technology context refers to technology that is available for and currently used by the firms in the market (Tornatzky & Fleischer, 1990). Therefore, the researcher measures the technology through the context of ICT, as well as agricultural technology which is based on ICT that is currently used by smallholder farmers. For instance, intense competition stimulates usage of innovation (Mansfield, 1977). In addition, the dominant subject within the value chain can influence other value chain partners to innovate. This TOE framework context can be indicated as one of the main criteria to measure the factors affecting the proposed framework and hypotheses.

Meanwhile, the environment factor includes the smallholder farmers' environmental or external factors that may influence ICT usage among them. It includes the environment of Malaysian agriculture such as social influences, competitive pressures, and other factors for smallholder farmers' business. The environment factor also identifies the external factors of organisations in the TOE framework (Tornatzky & Fleischer, 1990). In contrast, organisations focus more on internal factors such as firm size, management structure, and so on.

Farm Work Design is a Task Characteristic of Agricultural Application. The task characteristic in agricultural application underpins the work and job design model and it should be distinguished from the task-technology fit (TTF) model. In the TTF model, the task characteristic is non voluntary, whereas for the farm work design, it has to be voluntary (Goodhue & Thompson, 1995; Ilgen & Hollenbeck, 2003; Morgeson & Humphrey, 2008). The TTF model focuses more on task fit while using technology, whereas this research focuses on the task or job characteristic in the agricultural application, which is best known as job or work design in agriculture. The TTF framework introduces direct effect towards technology usage, whereas the researcher would like to further investigate whether the interaction with technology of smallholder farmers' job design influences ICT usage.

Much crucial research has been carried out into work design especially in terms of psychology and organisations, specifically on the behavioural effects of work design. Work design means how the contents of the work including tasks, activities, relationships, and responsibilities of each individual assist in the achievement of every organisational and business goal. Work design influences individuals' attitudes, behaviours, pro-social differences, motivations, cognition, satisfaction, and performance that will lead to better organisational achievements (Grant, 2007; Morgeson & Humphrey, 2008; Sutherland & Cooper, 1992). For many years, research on work design has become more comprehensive and expanded into cross-disciplinary research.

Information System Element. Information system element (ISE) is a service that helps people to organise and analyse data to achieve their objective. ISE is widely used in most organisations nowadays as part of the ICT deployment to improve business processes and enhance organisation's performance (Laudon & Laudon, 2007). Such processes are usually represented in the hierarchy of the organisation and reflected by the people working in the organisation. Several levels incorporate ISE such as transaction processing systems, management information systems, decision support systems, and finally, at the top of the hierarchy, executive information systems. As ISE is most representative of the organisation, it also directly interacts with the people who are represented as users of the system. The elements or components of ISE interact with the users to ensure that the functionality of ISE is feasible. The elements or components of ISE are usually involved with the contents and presentation, which lead to more details of the system's functions and available features (Bakar et al., 2010; Sørensen et al., 2011). The researcher has outlined ISE in previous research articles used in this research (Danuri et al., 2016, 2017).

Moderation and Interaction Effects. A few researchers have found that moderation or interaction effects play a major role in ICT usage (Chen et al., 2006; Johnson, 2012; Wu & Liu, 2015). The efficacy of online co-operative learning systems outlined group task to moderate the information characteristics that affect the satisfaction and performance of technology usage (Chen et al., 2006). Meanwhile, Wu and Liu (2015) outlined that the way any person processes information would combine with technology factors that influenced ICT usage. In the agricultural context, although technology can assist farmers to improve ICT usage, it raises the following key questions: what makes farmers to be willing or unwilling to use ICT? What if the technology factor is moderated by work and others? The researcher argues that the TTF mediation variable, as introduced by Goodhue and Thompson (1995), shows a strong direct effect on technology usage. The interaction effects between technology, IS elements and farm work design have been examined by the researcher in this study.

There are many previous literature researches that apply IS theories into the study of agriculture. However, some of the research do not improve on the theories itself, as they do not contribute to a better body of knowledge (Aleke et al., 2011; Samah et al., 2011). They just apply existing theory to their study such TAM, including the introduction of external variables, and focus on descriptive analysis. Only a few scholars have introduced new knowledge to TAM. Some of them introduced extra and external elements in order to extend the theory, such as perceived resources, and others (Mathieson et al., 2001; Musa et al., 2005; Pierpaoli et al., 2013). This has improved the body of knowledge of the IS theories, however, in the context of agriculture, the application still needs a lot enhancement especially with the interaction with the farm works design that specifically in the context of the study.

This is the first time the researchers takes into consideration the moderating role of IS elements and farm work design as the moderating variables which interact with the technological effects on ICT usage. This is called the 3-way interaction, which involves more complex analysis compared to the 2-way interactions analysis (Francoeur, 2011; Reinholt et al., 2011). Further investigation of significant interaction terms varies substantially and is sometimes error prone. Therefore, it is important to understand the nature of 3-way interaction between the low and high levels of moderation. The researcher used the simple slope analysis introduced by Jeremy

Dawson to further interpret the 3-way interaction in this study (Dawson, 2014).

METHODOLOGY

The research method adopted in this study allowed deductive research theory-testing before presenting the findings, which might extend the underpinning existing theory and strengthen the new ICT usage framework in the context of agriculture in Malaysia. In this study, the researchers selected the quantitative approach using questionnaires which had been distributed to 209 farmers in Taman Kekal Pengeluaran Makanan (TKPM) in Selangor as stated in Table 1. The questionnaire content was adapted from a previous research to sustain the reliability and validity of the instrument (Davis, 1989; Gelb et al., 2008; Morgeson & Humphrey, 2006; Sorensen et al., 2010). Furthermore, the questionnaire was verified through two stages of face validation by several subject matter experts (SME) before distributing it to the target population. The first stage involved several experienced researchers at the Department of System Management, Faculty of Information Management, Universiti Technology MARA while the second stage involved selected SMEs from the Selangor Department of Agriculture (DOA). Amendment and rearrangement of the questionnaire were done according to the feedback received from them.

Other than that, the researcher also ensured validation during a pilot test by using exploratory factor analysis (EFA) for construct validation. EFA is done to examine the factor loadings for each item before any

action can be taken such as rearranging and removing the items. During the pilot test, copies of the questionnaire were distributed to 100 potential respondents selected from the target population. A pilot test gives feedback on the clarity of the questions and the reliability of the instrument. It is an important step which must be conducted to ensure that the instrument is comprehensive before distributing it to the actual population.

The target population for the generalisation of this research area was the smallholder farmers. They represent the agriculture entrepreneurs, many of whom were individual farmers. The double sampling method was chosen because all Taman Kekal Pengeluaran Makanan (TKPM) in Selangor were selected as the sample for this research, in which the nature of research in the study population that served as the setup area might have excluded external factors that could potentially influence the research (Sekaran, 2003). Completing the actual survey distribution took about three months. There were total of 67 questions in the questionnaire excluding those in the demographic section. Each respondent was asked to answer all the

Table 1

List of Taman Kekal Pengeluaran Makanan in Selangor 2011

No	TKPM	Size developed (Ha)	Number of participants	Major crops
1	Sg. Blankan, Sepang, Selangor	400.00	151	Cassava, sweet potatoes, vegetables
2	Ulu Chuchuh, Sepang, Selangor	100.00	21	Sweet potatoes, vegetables
3	Bestari Jaya, Kuala Selangor, Selangor	57.00	22	Vegetables, melons, livestock
4	Bkt Changgang, Kuala Langat, Selangor	36.00	14	Orchids, vegetables, livestock
5	Semenyih, Ulu Langat, Selangor	36.00	8	Cattle, starfruit, guava
6	Sg. Kelambu, Kuala Langat, Selangor	80.00	18	Pineapple, cassava
7	Batang Si, Ulu Langat, Selangor	65.09	12	Papaya, star fruit
8	Serdang, Selangor*	5.00	10	Melon
9	Kundang, Kuala Langat, Selangor	120.00	41	Cassava, sweet potatoes,
10	Hulu Yam, Hulu Selangor, Selangor	116.00	34	Vegetables
11	Siswazah, Serdang, Selangor	3.00		Melon
Total Number of TKPM Selangor		1,018.09	331	

questions, which took approximately 10 to 15 minutes. From a total of 331 respondents, only 209 responded to the questionnaire. Thus, the response rate was around 63.2% of the total respondents.

Construction of the Hypotheses

We live in an era where ICT acts as an enabler in many other sectors. In general, living conditions have improved. Many people are using ICT in their lives, and it has been shown that ICT improves their livelihoods (Duncombe, 2006; Richardson, 2005; Singh et al., 2008). The environment has been shaped by many improvements in technology. However, there is still a lack of ICT usage even though the environment setting has improved. This becomes a major concern after all the pledged initiatives, especially by the government, to improve the level of ICT usage. Thus, the researcher investigated this matter further. The researcher decided to examine this factor within the best environment setting in the country. Therefore, the study was conducted in the state of Selangor, which has the highest ICT penetration in the country, as explained in the sampling selection. Therefore, the first generated hypothesis is as follows:

H_1: The environment factor has a positive effect on the use of ICT.

A growing body of research demonstrates that technology factors predict the level of ICT usage in positive ways. The technologies grow rapidly and represent significant and sudden growth of ICT (Tan & Eze, 2008). If the factor of technology is low, the level of ICT usage will probably drop in tandem. This is a common result in many studies. In the new knowledge era, however, the interaction between technology and other factors is considered important to explore the nature of understanding of ICT usage especially with other domains or principles of study.

The IS element is of great empirical importance in the ICT industry. It consists of the elements contained in the available system or software. Most of the elements are written in the products' specification and form part of the competitive advantage (Crinnion, 1992; Ghadge et al., 2010; Wilson, 2001). As a result, the IS element becomes one of the common factors for consumers' adoption and acceptance of the system. However, even if farmers are adopting ICT, they may not be aware of the IS elements (Ali & Kumar, 2011; Sorensen et al., 2010; Uphoff, 2012). Some complex system such decision support systems (DSSs) have been introduced to farmers to improve farm management efficiency and support decision making in farming activities (Kuhlmann & Brodersen, 2001). Nevertheless, since the systems are complex and sophisticated, farmers do not intend to use them. Therefore, the interaction of this element in the system with technology becomes an important factor for ICT usage in the context of ICT proficiency.

In this context, the researchers aimed to investigate further the effect of technology on ICT usage while interacting with this complex farm work design and IS elements. Both interactions were inspected together, and thus, the researcher postulated another hypothesis, as follows:

H_2: The effect of Technology on the use of ICT is highest when both Information System Elements and Farm Work Design are low.

Sampling Technique

The double sampling method was chosen, as all Taman Kekal Pengeluaran Makanan (TKPM) in Selangor are selected as the sample for this research whereby the nature of research exist in the study population as the setup area may avoid external factors that may influence the research (Sekaran, 2003). In 2009, Selangor, one of the earliest developed states in Malaysia, had the highest percentage of households with access to personal computer and ranked fourth highest for broadband penetration (Malaysian Communications and Multimedia Commission (MCMC), 2012). In addition, in 2010, Selangor had the highest agro-food sub-sector yield production with 11 areas of TKPMs and 331 participants in the cultivation program (Department of Agriculture, 2010b). Most of these farmers are categories as smallholder farmers which means the TKPMs area in Selangor was a suitable sampling area for this research.

Data Analysis

The total responds of questionnaire distributed are 207 (63%) and the data were keyed in and analysed using the statistical software. The researchers went through pre-processing data such identifying missing data, normal distribution and outliers. From the normality test conducted, there were two variables (Environment and ICT Usage) shows the result of the Shapiro-Wilk ($\rho >0.05$) test. The researchers had to conduct Skewness and Kurtosis test to determine the z score within the range ±2.0. As a result, all variables were finally determined as normal distributed. Subsequently, further analyses such as frequency analysis, exploratory factor analysis, confirmatory factor analysis, reliability analysis, correlation analysis, regression analysis and slopes analysis were performed.

RESULTS AND DISCUSSION

The Cronbach's alpha value of between 0.6 and 1.0 may be considered as providing a reasonable level of consistency in social science research (George & Mallery, 2003). However, some scholars suggest a higher value, such as more than 0.7, as a suitable coefficient alpha (Cortina, 1993). Nonetheless, it depends on the type and nature of the research. The items in the questionnaire were tested with factor analysis for item reduction and internal consistency using Cronbach's alpha reliability test. The factor analysis focuses on testing with both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) to examine the factor loading for each of the items.

Table 2
Results from factor analysis and reliability

No	Variable	Type	KMO & Bartlett's Test		EFA Component	CFA Fixed Component	Action taken from existing item (s)	New sub-scales/items	Reliability Test (Cronbach's Alpha)
			Sampling Adequate	Sig.					
1	Agribusiness Transformation using ICT	Dependent	0.883	0.000	2	3	Drop questions no 79	3/ 11	0.868
2	Farm Work Design	Independent	0.883	0.000	4	4	No action taken	4/ 16	0.896
3	Technology	Independent (Moderation)	0.889	0.000	4	4	Drop question no 42	4/ 15	0.889
4	Environment	Independent (Moderation)	0.732	0.000	5	5	Drop questions no 55 & 66	5/ 16	0.720
5	IS Elements	Independent	0.796	0.000	2	2	No action taken	2/ 9	0.855

Table 2 illustrates that all the variables show Kaiser-Meyer-Olkin (KMO) results of more than 0.6 and a Sig. value < 0.5. However, the researcher had to drop some items, such as questions 20 (INNO2), 42 (PU3), 55, 66 and 79 during the factor analysis due to the factor loading of those items. Thus, the total for the new sub-variables or sub-scales was reduced to 18 and the total number of items tested was 67 for all the variables. The Cronbach's alpha reliability test was more than 0.7, which was acceptable.

Respondents' Profiles

Table 3 shows that most of the smallholder farmers (n=209) in the agro-food industry are males, with the majority of 185 male farmers (88.5%) compared to only 24 female farmers. Most of the smallholder farmers aged over 50 years (134 farmers or 64.1% of the total number of respondents)

at the time of this study. This meant only 35.9% of the smallholder farmers aged below 50 years old. Meanwhile, in terms of race, the highest number of farmers are Malay (191 farmers or 91.4% of the total number of smallholder farmers in Selangor). There was only 1 Indian farmer and the remainders were Chinese (17 farmers or 8.1% of the total number of respondents). Most of the smallholder farmers are married (204 farmers, accounting for 97.6% of the total number of respondents), while most smallholder farmers had school-level academic qualifications (187 farmers, or 89.4%, with primary and secondary schools' qualifications). This meant only 22 farmers (10.6%) had higher education with a Diploma certificate as their minimum qualification. Finally, in term of income, 151 (72.2%) smallholder farmers earned more than RM3000, followed by 54 farmers (25.8%) had an income between RM1000

Table 3

Respondents' profiles and background

Background	Respondent	Frequency	Percentage
Gender	Male	**185**	**88.5**
	Female	24	11.5
Age	20-29 years old	3	1.4
	30-39 years old	23	11.0
	40-49 years old	49	23.4
	More than 50 years old	**134**	**64.1**
Race	Malay	**191**	**91.4**
	Chinese	17	8.1
	Indian	1	0.5

Table 3 *(Continued)*

Background	Respondent	Frequency	Percentage
Marital Status	Single	5	2.4
	Married	**204**	**97.6**
Academic Qualification	Primary School	77	36.8
	Secondary School	**110**	**52.6**
	Diploma	10	4.8
	Bachelor Degree	10	4.8
	Master Degree or Doctorate (PHD, etc.)	2	1.0
Income	Less than RM1,000	4	1.9
	RM1,001-3,000	54	25.8
	RM3,001-6,000	**97**	**46.4**
	RM6,001-10,000	50	23.9
	More than RM10,000	4	1.9

and RM3000, and only 4 farmers (1.9%) had an income of less than RM1000. In conclusion, the objective of TKPM to produce smallholder farmers with an income of more than RM3000 is considered a success, with more than 70% success rate.

Correlation Analysis

The correlation analysis needs to be conducted as pre-analysing the regression analysis as stated in Table 4. The result must show a significant relationship so that the variable can be included in the regression model as stated in Table 5. The researchers conducted a bivariate correlation after the value of variables had been centred.

There was a non-significant indicator of the relationship between farm work design and IS elements with r = -0.066, n = 208, $\rho > 0.05$. However, the researcher was not interested in investigating this relationship. Meanwhile, the results show

some correlation results with r > 0.8, which probably has multicollinearity issue. Therefore, the researcher conducted Pearson correlation for all the variables again by using the centre value of each variables to avoid multicollinearity issue (Field, 2009).

Most modern scholars have said that correlation result does not provide any strong evidence to test a hypothesis as it shows only the relationship between the variables and does not carry any weight in a regression analysis especially for the moderation and mediation types of variables (Cohen, 1988; Dawson & Richter, 2006; Hayes, 2013). Therefore, the researcher extended the inferential analysis to regression and slope analysis.

Regression Analysis

The multiple linear regressions for all the independent variables, including the moderating variables, had correlation and

Table 4

Results for the Pearson Correlations between all centred variables with ICT usage

Variables	1	2	3	4	5	6	7	8	9
1 ICT Usage	1								
2 Farm Work Design	0.181**	1							
3 Environment	0.423**	0.185**	1						
4 IS Elements	0.538**	-0.066	0.317**	1					
5 Technology	0.599**	0.143*	0.430**	0.535**	1				
6 Farm Work Design x Technology	0.069	0.134	-0.114	-0.151*	-0.007	1			
7 IS Elements x Technology	-0.216**	-0.128	-0.265**	0.007	-0.078	-0.147*	1		
8 IS Elements x Farm Work Design	0.079	0.112	-0.023	-0.194**	-0.177*	0.467**	0.027	1	
9 Farm Work Design x IS Elements x Technology	0.219**	0.307**	-0.008	-0.001	-0.089	0.340**	-0.326**	0.333**	1

Note: $*p < 0.05$. $**p < 0.01$

Table 5

Results of multiple linear regression analysis–dependent variable ICT USAGE and variables in the equation

Multiple R	0.733
R^2 (Pearson)	0.537
Adjusted R^2	0.518
S.E.	0.502

$F=28.673$, significance of $F=0.0000$

Table 5 *(Continued)*

Variables	Unstandardised Coefficients		Standardised Coefficients	T	Sig T
	B	S.E. B	Beta		
Farm Work Design	0.044	0.056	0.042	0.781	0.436
Environmental	0.189	0.095	0.116	1.991	0.048
Information System Elements	0.303	0.061	0.303	4.991	0.000
Technology	0.459	0.070	0.413	6.518	0.000
Farm Work Design x Technology	-0.037	0.085	-0.026	-0.440	0.661
IS Elements x Technology	-0.130	0.064	-0.113	-2.048	0.042
IS Elements x Farm Work Design	0.258	0.089	0.171	2.903	0.004
Farm Work Design x IS Elements x Technology	0.224	0.084	0.159	2.674	0.008
(constant)	4.320	0.039		109.991	0.000

Note: B, partial regression coefficients; S.E. B, estimated S.E. of the partial regression coefficients; T, Student's t-distribution with N−2 degrees of freedom; Sig T, observed significance of Student's t.

contribution of (53.7%) at ($\rho < 0.01$) for the ICT usage among smallholder farmers in Malaysia. Using the enter method, it was found that environment and technology, which were moderated by farm work design and IS elements, explained a significant amount of the variance in the ICT usage by smallholder farmers in Malaysia ($F(8, 198)=28.673$, $\rho < 0.01$, $R^2=0.54$, $R^2_{Adjusted}=0.52$).

From Table 5, the analysis shows that farm work design did not significantly predict ICT usage ($B=0.42$, $t=0.78$, $\rho > 0.05$). The interaction between technology and farm work design also did not significantly predict ICT usage ($B=-0.03$, $t=-0.44$, $\rho >0.05$). However, the researchers were not concerned with both these results. Instead, the researchers were more interested with the results obtained for the interaction between farm work designs and IS elements

that reveals the effects of technology on ICT usage.

The most dominant independent variable for ICT usage was the technology factor ($B=0.41$, $t=6.52$, $\rho < 0.01$). The second dominant independent variable for ICT usage was the environment factor ($B=0.12$, $t=1.99$, $\rho < 0.05$). Meanwhile, for the moderation variables, the dominant moderating variable for ICT usage was the IS elements factor ($B=-0.11$, $t=-2.05$, $\rho < 0.05$). The farm work design reported earlier was not significant. Finally, both the moderation variables, farm work design and IS elements, that revealed the effects of the technology on ICT usage are significant with $B=0.16$, $t=2.67$, $\rho =0.08$ ($\rho < 0.05$).

As shown in Table 5 above, the researchers were able to reject the Null Hypothesis and accept the Alternative Hypothesis, "H_1: The Environment factor

has a positive effect on ICT usage". However, the rest of the results cannot further explain both the moderation effects (farm work design and IS elements) of technology on ICT usage. Therefore, the researchers conducted a simple slope analysis, which was introduced by Jeremy Dawson (2006, 2014), to further interpret multiple regression result and test the alternative hypothesis, "H_2: The effect of technology on ICT usage is highest when both information system elements and farm work design are low".

Model Comparison

Before the researchers could interpret the interaction effects with the simple slopes analysis further, he conducted model comparison so as to compare the multiple models that might exist in this study. Thus, the researchers conducted the coefficient of multiple correlation comparison between direct effect and multiple regression model for all the variables in the proposed conceptual framework. The result of R, coefficient of multiple correlation, takes the value between 0 and 1, whereby the higher value or near to 1 is the better prediction and higher correlation coefficient between the variables in this study. In order to confirm that the model fit is the best model, the results shown in Table 6 indicate that the 3-way interaction effect used in this

Table 6

Comparison of the coefficient of multiple correlation model

R	R Square	Dependent	Independent	Moderation/ Interaction	Description
0.628	0.394	ICT usage	Environment	-	Direct effects model
			Technology		
0.676	0.457	ICT usage	Environment	-	Direct effects model
			Technology		
			IS elements		
			Farm work design		
0.692	0.479	ICT usage	Environment		2-way interaction effects
			Technology	IS elements	
			Farm work design		
0.687	0.472	ICT usage	Environment		2-way interaction effects
			Technology	Farm work design	
			IS elements		
0.733	0.537	ICT usage	Environment		3-way interaction effects used in this study
			Technology	IS elements	
				Farm work design	

study is the better model. The interaction between IS element and farm work design with technology gave the higher value of R. Therefore, there is no doubt that the chosen type of 3-way interaction effects is the best suit for this study.

Simple Slopes Analysis

Slope analysis is widely used by many scholars for analysing moderating variables and interactions between independent variables and dependent variable (Aiken & West, 1991; Dawson, 2014; Dawson & Richter, 2006). However, several steps and procedures using multiple regressions need to be carried out before conducting a slopes analysis. All the data need to be centred so that the variables are standardised while the standard deviation has to be near to 1. In order to interpret the effects of interaction in this research, the researcher used the slopes

analysis to test the interactions because the interpretation of coefficients can be slightly simpler.

Below are the results derived from the coefficient analysis for all the centred independent and moderation variables towards the dependent variable.

Table 7 shows the coefficient results for all the variables which include all the independent variables, all three pairs of two-way interaction terms, and the three-way interaction term. The values could then be inserted into the slope test formula Excel file provided by Dawson (2014) in his slopes website and the result as stated in Table 8.

This implies that the slope should be the most positive when ISE and FWD were both low, that is, slope (4) on the plot. To test the hypothesis, the researcher compared slope (4) with three other slopes, i.e. looking at three separate lines in the slope difference

Table 7

Coefficient analysis result for all centred variables

	Model	A	B	C	D	B*C	B*D	C*D	B*C*D
	A	0.009	-0.002	-0.001	-0.001	0.002	0.002	-0.002	0.001
	B	-0.002	0.005	-0.002	-0.001	5.843E-5	-0.001	0.001	0.001
	C	-0.001	-0.002	0.004	0.001	0.000	0.001	0.001	-0.001
Covariances	D	-0.001	-0.001	0.001	0.003	0.000	-7.669E-5	6.970E-5	-0.001
	B*C	0.002	5.843E-5	0.000	0.000	0.004	0.001	-0.001	0.002
	B*D	0.002	-0.001	0.001	-7.669E-5	0.001	0.007	-0.003	-0.001
	C*D	-0.002	0.001	0.001	6.970E-5	-0.001	-0.003	0.008	-0.002
	B*C*D	0.001	0.001	-0.001	-0.001	0.002	-0.001	-0.002	0.007

Note: Dependent Variable: E=ICT Usage
Where,
    A = Environment
    B = Technology
    C = Information System Elements
   D = Farm work design
    E = ICT Usage

test table: (1) and (4); (2) and (4); and (3) and (4). The researchers found that they were all significant except for slopes (1) and (4), and therefore [as (4) is the most positive slope], the alternative hypothesis H_2 was supported and the null hypotheses was rejected.

Both ISE and FWD had a high line in the plot (1); which suggests that when ISE and FWD are high, ICT usage is always high. However, because it is always high, there is no effect of TECH on ICT usage, which is why the p-value is not significant (the two variables are unrelated under these conditions). This may be a useful and important finding in its own right; however, because the slope of the line is not fairly flat, it is related to the effect of TECH. The entire test took the environment factor as another independent variable, which is always constant.

Table 8

Slope 3-way interaction analysis results
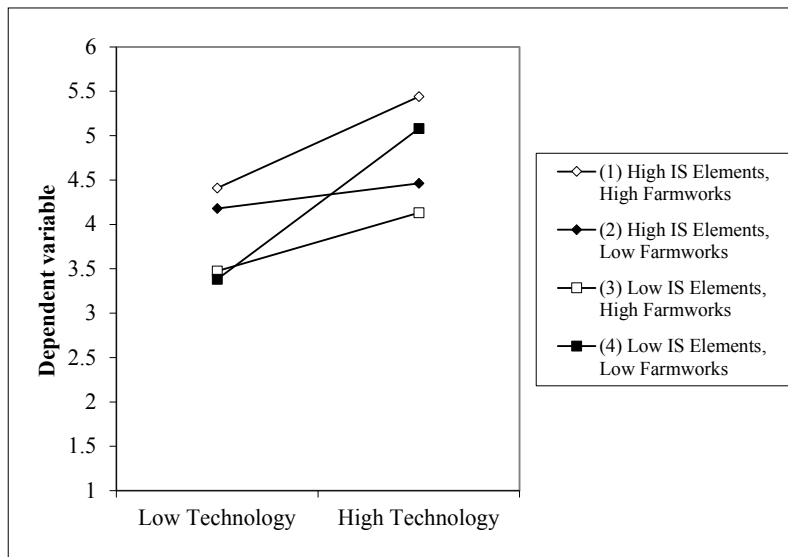
Slope Difference Tests:

Pair of slopes	t-value for slope difference	p-value for slope difference
(1) and (2)	1.707	0.089
(1) and (3)	0.768	0.444
(1) and (4)	-1.465	0.145
(2) and (3)	-0.980	0.328
(2) and (4)	-4.231	0.000
(3) and (4)	-2.063	0.040

CONCLUSION

Many studies carried out in the field of information system have proposed models on ICT usage and acceptance (Davis, 1989; Tornatzky & Fleischer, 1990; Venkatesh et al., 2003). However, most of these frameworks and models were constructed according to their respective environment settings and surroundings. Since Malaysia is a developing country and the usage of internet among Malaysian farmers is quite recent compared to developed countries, previous ICT usage models may not suit the Malaysian context. Therefore, there is a need to develop a specific model that can be used as a guideline for Malaysian IS practitioners to solve the issue of how to encourage ICT usage among smallholder farmers in Malaysia. This could lead to better IS implementation in the Malaysian context.

This study proposes a moderation/interaction process model of framework. This study adds to the literature by responding to the recent ICT usage in agriculture where there is a call of new research to propose a theoretical framework to improve the body of knowledge (Kang et al., 2015). The moderation effects in the underpinned theory can provide an extended understanding which enhances the existing TAM and TOE framework underpinning this study.

In the current study, the researchers constructed a new ICT usage framework which specifically caters for smallholder farmers in Malaysia. This framework was constructed through an empirical study that involved survey. The framework outlining ICT usage will be improved through identification of major factors affecting agribusiness transformation such as environment, technology, farm work design, and IS elements by using ICT.

In conclusion, based on the result of the analysis, the researchers have identified the variables that affect the use of ICT in order to transform the smallholder farmers' traditional business to agribusiness. The technology factor was identified as the dominant factor that influences ICT usage among smallholder farmers. From all the analyses carried out, it is clear that the technology factor significantly influences ICT usage while both IS elements and farm work design have only low levels of influence.

To further elaborate on this, for the smallholder farmers to adopt the IS elements (including the specifications of the system), such elements should be simple and not too high end. The farm work design also needs to be simplified and not too complicated so that smallholder farmers may use ICT in their agricultural application. Hence, the interaction between both low conditions IS elements and farm work design with technology will significantly improve ICT usage among smallholder farmers in Malaysia.

From the findings, the Department of Agriculture (DOA) should be aware that agribusiness transformation using ICT depends on the low conditions IS elements and farm work design. In order to improve the ICT usage, the DOA may introduced

alternative method to reduce the farm works and activities in the farm such more automation and mechanization in agriculture activities. The low IS elements means that DOA should introduced simple and easy to use application system by the smallholder farmers. The application system should reduce the IS elements in the application system to ensure the smallholder farmers improved the ICT usage. The DOA officer may utilise the used of application system by the smallholder farmers and extend to management information system (MIS), decision support system (DSS), and other application systems for better management of all TKPMs. Therefore, the findings not only benefit the smallholder farmers, but also to other stakeholders such as DOA officers, researchers, and others.

ACKNOWLEDGEMENT

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Indonesian Public School Productivity

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ABSTRACT

Productivity measures are the foremost indicators of the performance of an economy, i.e., how efficiently resources are used to generate outputs and income. They provide warning signs and also give feedback to help the government take required measures to improve its performance. In the public sector, it is difficult to measure the output as services provided do not have a price which would indicate their value to the community. Outputs, such as education services, are provided free or at a subsidized price. One of the public sectors in Indonesia which is very important to be measured for its productivity is public schooling. This study is one of the first efforts in looking at the feasibility of constructing productivity measures for Indonesian public schools. The method and model used in measuring Public School productivity is modified. Data used are secondary data available from several government sources. The study has been positive and has produced some interesting and meaningful results. Public school productivity in Indonesia has improved overall since 2011 and the improvement is getting better still, since 2014. But these improvements are not enough and are still lagging behind several ASEAN countries. The policies and programs need to be analyzed and evaluated in such a way that there is improvement in the overall education productivity and education

quality. It is important that measures will be improved by involving stakeholders in the productivity measurement study.

INTRODUCTION

Measuring productivity matters. Productivity measures are vital high-level indicators of the performance of an economy – how efficiently resources are used to generate outputs and income. They provide warning signs when things get tough for the community and the government, and they also provide feedback on measures governments could take to improve productivity performance. The public sector, however, is normally excluded from conventional productivity measures. This oversight is due to the difficulty in measurement, rather than a lack of importance. The public sector forms a large and growing portion of the economy. Output in the public sector is hard to measure because services provided do not have a price, which would indicate their value to the community. Output, such as education services, is provided free of cost or at a subsidized price. One of the public sectors in Indonesia, which is very important to be measured for its productivity, is public school.

Indonesia Public Schools

Over the past few decades, Indonesia has made enormous strides toward ensuring that most of its children get a basic education. Now the focus turns to quality and preparing them for life in the 21st century. President Joko Widodo made education a key part of his election campaign and, after taking office in October 2014, embarked on a series of reforms designed not only to make the education system more appropriate for contemporary Indonesia, but also to help the government meet its goal of raising per capita incomes from $3500 in 2011 to $14,250–15,000 by 2025.

Under a 2002 constitutional amendment, all levels of governments are required to spend at least 20% of their annual budgets on education. In practice, however, authorities have tended not to meet that target, with spending peaking at 18.1% in 2012 and declining to 17.5% in 2014, according to UNESCO. District authorities generally cover most of the costs of basic education, contributing 61% of spending at primary and junior high levels, while the central government pays 38% and the provincial authorities 1%, according to the World Bank. Indonesia has more than 250,000 schools, 2.6 million teachers and 50 million students. From June 2015 (the start of the school year in Indonesia), the government made it compulsory for all children to complete 12 years of schooling, starting at the age of 7 years (previously it was 9 years of compulsory schooling). Early learning remains exclusively private, which is, generally, the preserve of better-off Indonesians. The Indonesian Education System is shown in Figure 1.
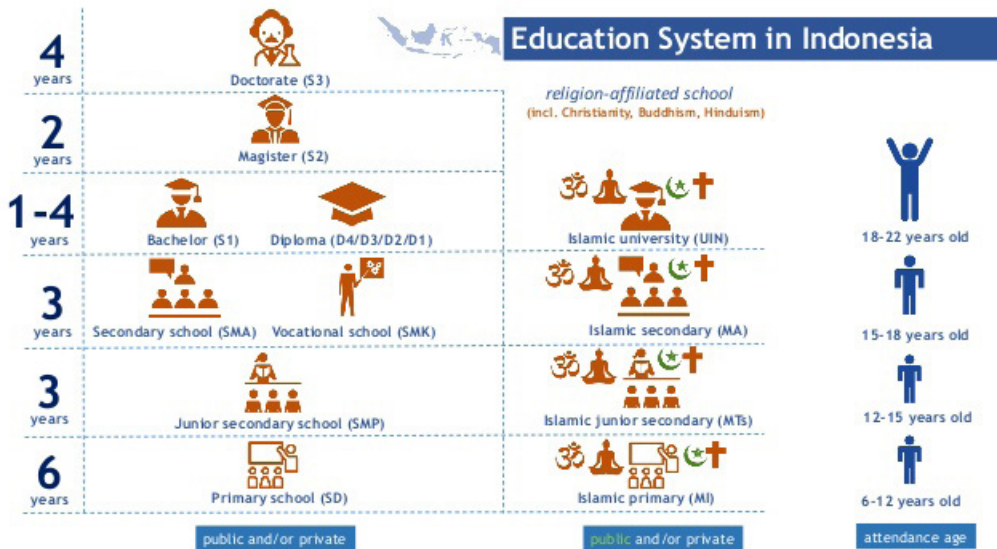
Figure 1. Education system in Indonesia

In the past 20 years, the school participation rate has increased from 94.4–98.6% for —7- to 12-year-olds in primary education, from 75.8–94.6% for 13- to 15-year-olds in junior high school and from 47.6–70.3% for 16- to 18-year-olds in high school. The literacy rate for all adults older than 15 years is now 92.6%, rising to 99.5% for those aged 15-24 years. However, the numbers mask stark regional differences, as well as a divide between urban and rural areas. While this has been gradually narrowing, further challenges are raised by the ethnic and linguistic diversity in the country, with Indonesia home to some 700 active languages, eight of which are considered major. Many children are not able to speak the national medium of instruction – Bahasa Indonesia – by the time they start school.

Spending per student has shown steady growth, with primary-level expenditure

increasing from $808.47 (in purchasing power parity terms) in 2007 to $1291.29 in 2014, while at secondary level it has increased from $667.88 in 2007 to $1046.68 in 2014, according to the UNESCO[1]. However, despite the headline-grabbing 20% benchmark, Indonesia's spending-to-Gross Domestic Product (GDP) ratio for education remains relatively small. Southeast Asia's biggest economy spent 2.3% of GDP on non-tertiary education in 2012, only slightly more than Russia (2.2% of GDP) and less than South Korea's 3.2% of GDP, according to the Organization for Economic Co-operation and Development (OECD). The proportion of spending relative to GDP is also lower than that of Indonesia's regional peers. In Vietnam, education spending was 6.3% of GDP in 2012. The national budget

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[1]   Oxford Business Group. https://oxfordbusinessgroup.com/overview/turning-it-around-through-substantial-investments-ministry-education-path-producing-more-educated

Table 1

Indonesian education budget (2010–2017)[2]

Education Budget Components	2010	2011	2012	2013	2014	2015	2016	2017
	APBNP	*APBNP*	*APBNP*	*APBNP*	*APBNP*	*APBNP*	*APBNP*	*APBNP*
1. Managed by Central Gov,	96.5	105.4	117.2	126.2	128.2	154.4	145.0	145.4
A. Managed by Ministrial of Institution	96.5	105.4	117.2	126.2	128.2	154.4	141.7	141.8
B. Managed by other (*BA BUN)*	-	-	-	-	-	-	3.3	3.6
2. Budget transferred to Regional, District and Village	127.7	159.0	186.6	214.1	238.8	254.2	266.6	268.2
3. Budget by Project Cost	1.0	2.6	7.0	5.0	8.4	-	5.0	0.0
4. Total Education Budget	225.2	266.9	310.8	345.3	375.4	408.5	416.6	416.1
5. Total National Budget	1,126.1	1,320.8	1,548.3	1,726.2	1,876.9	1,984.1	2,082.9	2,080.5
Education Budget Ratio	20.0	20.2	20.1	20.0	20.0	20.6	20.0	20.0

Source: Indonesia Ministry of Education and Culture (2014, 2016).

for education since 2010-2017 is shown in Table 1 and Figure 2.

In Figure 2, we can see the portion of education budget increasingly more managed by regional and district government with the aim to boost local autonomy. Additional spending is available under the School Operational Assistance program introduced in 2005, with this coming directly from central government on a "per student" basis, as well as under district support programs.

Under the Teacher and Lecturer Law, implemented in 2005, professional teachers are those who hold a bachelor's degree and pass a teaching competency test. Those who have the designated qualifications

would receive an additional allowance to effectively double their salary. The initiative proved successful in increasing the level of training, with the majority of the country's 2.6 million teachers taking steps towards being equipped with professional status. However, a 2014 World Bank study concluded that the program did not significantly improve learning outcomes and made recommendations for increased

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[2] Indonesia Education Budget (2010 – 2017) from The Management of National Education in 2014/2015 at a Glance. Division of Utilization and Services by Indonesia Ministry of Education and Culture (2014, 2016).
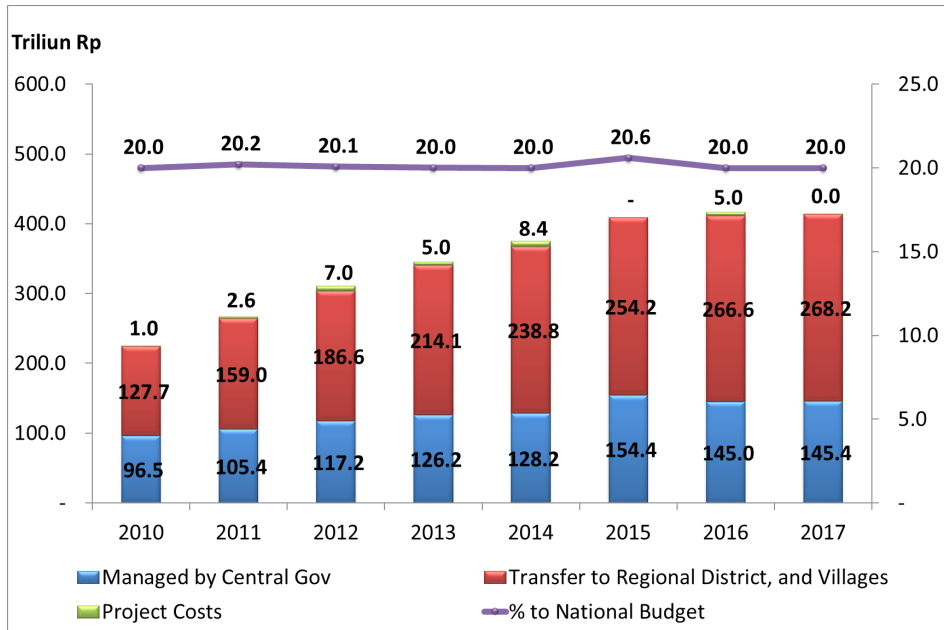
Figure 2. Education budget in Indonesia

monitoring across the teacher training program and improving teacher selection procedures.

This study examines the provision of education services at government schools. Primary and secondary schools are covered, but not tertiary institutions. As the private-sector involvement is excluded, the measures do not cover the whole school systems. Specific objectives of the study are to assemble key indicators to measure productivity, identify factors that may have contributed to productivity trends and recommend improvement in indicator gaps and data of Indonesian public schools.

LITERATURE REVIEW

Productivity and Measurement in the Business Sector

The methodology for measuring public-sector productivity is meant to draw on, if not mimic, the principles of private-sector productivity measurement. An outline of productivity measurement in the private or business sector is therefore a good starting point. The OECD Productivity Manual provides detailed guidelines on business-sector productivity measurement (OECD, 2011).

Productivity is about the efficiency of production. It is the rate at which outputs of goods and services are produced from the inputs used in their production. Labor and capital (such as buildings, plant, and machinery) are the major inputs used in production. In some contexts, the use of intermediate inputs (components, materials and purchased services such as energy) is also included.

Improved production efficiency — productivity growth — can come about either by using fewer inputs to produce the same volume of output or by using the same volume of inputs to generate more output. Over the long term, the latter is more important as, for example, technological advances enable businesses to produce a lot more output without raising their use of inputs to the same degree.

While there are several ways to measure productivity, the ratio of outputs produced to inputs used is a simple way to capture the essence. That is:

$$\text{Productivity} = \frac{\text{outputs}}{\text{inputs}}$$

Outputs and inputs are measured in terms of quantity. The number of vehicles produced from a factory per person per hour worked and the number of tons of rice produced per hectare farmed are examples of quantity-based productivity measures.

But how is output measured across numerous firms and industries?

Statisticians use prices to add the different outputs. Price multiplied by quantity equals value and the value of vehicles produced can be added to the value of rice produced and so on (Statisticians also use price deflators to remove the effects of inflation, so that values become 'quantity-like', real or volume measures.)

The use of output prices means that the productivity measures cover the production of goods and services *of value.* Products with a higher price will receive a higher weight in adding together the production of different goods and services. However, if customers do not value a good or service,

it will effectively be excluded from a group output measure.

An improvement in the quality of goods and services that is valued by customers will also be reflected in a higher price. A producer will charge a higher price for a good or service of higher quality. If statisticians allow for quality improvement (not treating it as price inflation), higher quality will show up in the data as increased output.

In essence, and from a national point of view, productivity is ultimately about using resources in ways that generate more value to the nation, where value is expressed in terms of income.

Concerted efforts to measure public-sector productivity are quite recent. The Atkinson Review is a seminal study from 2005 (Atkinson, 2005). It provided a foundation for expanding the scope of national accounts estimates of national productivity to embrace the public sector (Dunleavy & Carrera, 2013; Office for National Statistics, 2016). Other studies have been directed at measuring the productivity of individual government agencies (Statistics New Zealand, 2010) and measuring productivity in the provision of major subsectors (Andrews et al., 2016).

METHOD

A Broad Framework

Figure 3 displays a framework for assessing performance in the public sector that circumvents the lack of prices.[3] The figure shows, as expected, productivity as the relationship between inputs and outputs
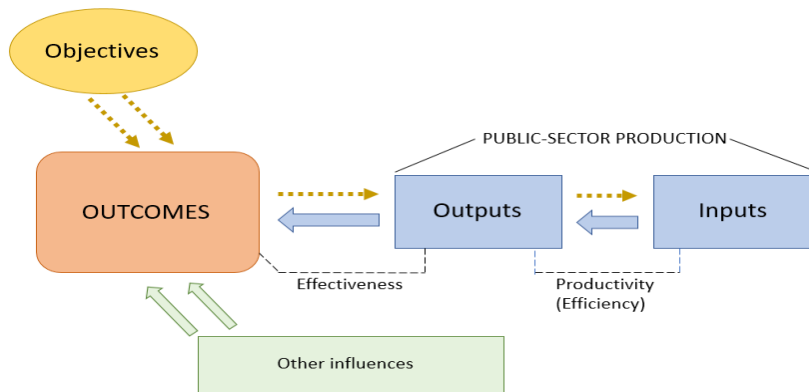
Figure 3. The framework for measuring public-sector productivity

of public-sector goods and services. Other important relationships, beyond inputs and outputs, help to incorporate notions of value.

First, there are the outcomes or consequences of the public-sector outputs. For hospitals, for example, the outputs might be surgical operations, while the outcomes might be improved quality of life and longer life expectancy.

Second, desired outcomes are defined in reference to broader community objectives. They might include, for example, aiming for a healthy, safe and educated community. Objectives can have economic, social and environmental dimensions.

Third, the outputs to be considered in the productivity analysis are the ones that have the most relevance to achieving desired outcomes. Because value is related to improvements in desired outcomes, this brings an element of value into consideration of productivity.

As shown in Figure 3, the productivity analysis should start from community objectives, which determines the nature of the desired outcomes that are most relevant to the public-sector services under consideration. The desired outcomes then determine the most relevant outputs to be included in the analysis.[4]

Fourth, other factors, and not the public-sector activity alone, influence outcomes.

The public sector has full control over its outputs but, often, not over changes in outcomes. Productivity, therefore, usually provides a stronger basis for the performance assessment and accountability. It should be mentioned in passing that productivity measurement is not the end of performance assessment of the public sector. Effectiveness in achieving desired outcomes (see the 'Effectiveness' link in Figure 1) can also form a part of the assessment (New Zealand Productivity Commission, 2017).[5]

[3]   The figure is an adaptation of a framework set out in many papers and reports, including Atkinson (2015) and Australian Government Productivity Commission (2017)

[4]   The importance of working backwards from objectives, through desired outcomes to identify relevant outputs was stressed by Dunleavy and Carrera (2013).

The Australian Productivity Commission (APC) presents a range of indicators under major headings of headings of 'Efficiency', 'Effectiveness' and 'Equity' (Parham, 2013).

Measuring Output Growth

Identifying Outputs. The public sector delivers many different outputs that make progress on desired outcomes. For example, improved health outcomes will require a mixture of preventative health care, remedial care and emergency treatment. Hospital services can include out-patient services, emergency treatment, trauma care, maternity care, surgery and other specialist treatment of various conditions.

It is not necessary to separately identify all outcome-improving outputs. In fact, Atkinson (2005) suggested a small number of measures.

Outputs of specific services can be grouped when they have similar production characteristics, as indicated by their unit costs of production. If possible, output groups should remain separate where they have very different unit costs of production. When summing up growth in all outputs (Equation 1), total output growth will then take into account the different input

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⁵   In most formulations of the Figure 1-type framework, 'effectiveness' is portrayed as a relationship between inputs and outcomes. This does not seem to allow for the presence of other influences on outcomes. Here, following the [NZPC], effectiveness is taken to be the effect that outputs have on outcomes. The NZPC takes the relationship between inputs and outcomes to be 'cost-effectiveness' (New Zealand Productivity Commission, 2017).

of different services. Similarly, the analysis can take into account the compositional shifts towards outputs that are costlier or cheaper to produce.

In practice, the number of outputs that can be separately identified will depend on the availability of cost data on each individual service or group of services. As will be shown in the following, costs of production of each identified output or output group are required to form a measure of total output growth – that is, growth in sector output (output of all services delivered).

According to Robano (2016), the services identified by national statistical offices in the area of schools are as follows:

- pre-primary education;
- primary education;
- general secondary education; and
- technical and vocational secondary education.

Measuring Outputs. Measuring public-sector outputs is difficult, as has been discussed. They are often not well defined, and their value is indistinct. Fortunately, measurement for productivity purposes is made easier by the need to capture output *growth* and not the *level* of output. If the output measure—whatever it is—grows at the same rate as 'true' output, true output growth is accurately represented by growth in the selected measure. If a constant value is created from each service delivered, the growth in true output will be the same as the growth in the number of services delivered.⁶ The number of services delivered is a direct volume measure, not requiring any deflation.

The way forward then becomes measuring output by a direct volume measure and to check for, and handle, any quality changes. Quality change is discussed in the following. Many countries have implemented measures of education services. Output indicators commonly used or recommended for schools are (Robano, 2016):

- number of pupils; and
- number of pupil hours.

The numbers of students is a gross output measure. That is, the production of the service includes the use of intermediate inputs. The alternative is a value-added measure of output, where value added is gross output less intermediate input usage. Only labor and capital are considered to generate value added.

It is important to include the use of intermediates and their costs, wherever possible, when a gross output measure is used. Otherwise, a shift in the degree of outsourcing can show up as a step change in productivity. For example, labor use would decline if activities previously performed in-house were contracted out. But, since output would remain essentially the same, labor productivity would rise to a large degree, because of fewer employees engaged in-house, which would be spurious from a production efficiency point of view.

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[6] The same applies to measurement errors. Measurement errors only matter if their significance changes over time

Aggregating Growth in Different Outputs – Output Cost Shares. Growth in total or aggregate output is formed as a weighted sum of growth in outputs of identified services. For example, the growth in school outputs could be formed as a weighted sum of growth in the number of students enrolled in primary school and growth in the number of secondary school students.

The weights for the aggregation reflect the relative costs of providing a unit of each of the service outputs. They are calculated as the share of each output activity in the total cost of production across all outputs. This is a departure from the private-sector case, where prices form the basis for the weights and reflect the relative value generated by outputs. The cost-based weights used for the public sector do not reflect the relative values generated.

To illustrate the aggregation for the case of three outputs A, B, and C, total output growth ($\hat{Y}$) is given by:

$$\hat{Y} = s_A \cdot \hat{Y}_A + s_B \cdot \hat{Y}_B + s_c \cdot \hat{Y}_c \qquad (1)$$

where, $\hat{Y}_A$, $\hat{Y}_B$ and $\hat{Y}_c$ refer to the growth in outputs of A, B, and C; and s_A, s_B and s_c refer to the costs of producing the outputs of A, B and C as a proportion of total costs of production. They are called as output cost shares.

The Laspeyres formulation, which is used in this study, uses base period weights. To illustrate, Equation (1) is implemented with the growth between years 1 and 2 weighted by the cost share in year 1. One alternative would be to use the Paasche

formulation, which uses end-period (year 2) weights.[7]

The use of output cost shares means outputs that are more numerous or are costlier to produce a greater weight.[8]

Quality

As noted earlier, the nature of the study is to measure output by a direct volume measure and to check for and handle any quality changes. Incorporating quality into public-sector performance assessment is a much discussed and debated topic. It is fair to say that different agencies and individuals have adopted different approaches in certain respects and a firm consensus on how to proceed has not yet emerged.

Nature of Quality Indicators. Quality is mostly related in the literature to the effects of public-sector products on outcomes. They capture elements of value. A weakness of performance assessment is that the outcomes are open to influences, aside from the public-sector activities being examined.

On the other hand, in practice, some indicators that are used relate to the quality of the outputs generated and these indicators do not necessarily or strongly reflect value.

This suggests the use of two types of indicators:

- output quality indicators: to what standard are outputs delivered?
- outcome indicators: what outcome changes can be identified?

Integrating Quantity and Quality Indicators. There is a debate about whether quality indicators should be explicitly integrated into output measures—that is, to downgrade or uplift output growth depending on whether there has been a decline or rise in quality. Some have done it (Office for National Statistics, 2016), but others have kept quality measures separate. European Union (2016) and others have suggested keeping quality indicators separate because an unanimous way of integration has not been reached. It is difficult to arrive at an appropriate weight to give a quality uplift or downgrade to apply against a quantity change.

In this study, quality indicators have been kept separate from measures of the quantity of growth in output. The question asked, then, is whether there has been any change in quality that would qualify the measure of growth in output in either a positive or a negative direction.

Measuring Input Growth

Labor Input. Labor input in public schools is perhaps the easiest to measure. For private-sector productivity measurement,

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[7]   The Laspeyres index approach appears common in measuring public-sector productivity. In measuring private-sector productivity, many national statistical offices use geometric averages of base- and end-period weights, in the form of Tornqvist or Fisher indexes.

[8]   The use of cost shares also means that the growth in total output as calculated from Equation (1) will not be equal to the growth in the total number of services.

labor input is normally measured by hours worked. If an hours-worked measure is not available, a numbers-employed measure generally is. An alternative measure would be to take labor costs, adjusted by a suitable deflator such as a general wage cost deflator.

While a numbers-employed or hours-worked measure is commonly used, it does not take into account the different skill levels of different groups of employees. For example, schools employ administrators, staff and teachers. They have different skill levels that are not accounted for by simply adding up the numbers employed, or hours worked. This can be overcome by specifying the growth in total labor input as a weighted sum of growth in numbers employed or hours worked in the different employment groups and setting the weights equal to the share of total labor costs incurred by each group. The relationship is similar in form to Equation (1).

Similarly, if labor inputs are measured for different services and labor cost data are available, the growth in total labor input would be the weighted sum of growth in labor inputs for the identified services, where the weights are the shares of the identified services in total labor costs.

Capital Input. The measure of capital input is meant to represent the flow of services from the available capital stock. The flow is usually assumed to be proportional to the stock. In private-sector measurement, the stock is mostly measured through the perpetual inventory method, whereby real investments are additions to the stock and depreciation and retirements are deductions from the stock.

While capital expenditure data is often recorded for public-sector organizations, data on the real or volume stock of capital, net of depreciation and retirements, rarely is.

Consequently, some other proxy measure is usually required. The consumption of fixed capital would be the most suitable. The amount of depreciation recorded in a year is a close substitute and has been used in several studies. These measures must be deflated to form real or volume measures. Since capital information has been very difficult to obtain, basic measures have been used for this study. For schools, the number of classrooms or number of schools has been used to indicate the growth in capital used.

Intermediates Input

The use of intermediate inputs can be measured from data on procurement costs. They should be adjusted by a general production deflator, such as the GDP price deflator.

Aggregating Input Growth – Input Cost Shares. A total inputs measure is needed to calculate Multi Factors Productivity (MFP). The growth in combined inputs ($\hat{I}$) is a weighted sum of growth in labour ($\hat{L}$), capital ($\hat{K}$) and intermediates ($\hat{N}$):

$$\hat{I} = c_L \cdot \hat{L} + c_K \cdot \hat{K} + c_N \cdot \hat{N}$$

where the weights are the shares of the different inputs in the total costs of production—that is, c_L is the labour cost

share, c_K is the capital cost share and c_N is the intermediates cost share.

As with output growth, base-period weights are used.

Forming Productivity Measures

Following the procedures above, one can generates estimates of annual growth in inputs and outputs. These are easily used to form index number series. A base period is selected and set equal to 100. The growth rate over the next year is applied to that base value to calculate the index value in the next year. The next growth rate is applied to that value, and so on. In symbols,

$$X^{t+1} = X^t \cdot (1 + g^{t+1})$$

where X^{t+1} is the value of a variable, X, 1 year after year t, X^t is the value in year t and g^{t+1} is the growth in X between years t and $t+1$.

The calculation of productivity indexes is straightforward, once the output and input indexes have been formed.

$$Labour\ productivity\ index = \frac{Output\ index}{labour\ Input\ index} \times 100$$

$$Capital\ productivity\ index = \frac{Output\ index}{capital\ Input\ index} \times 100$$

$$Multifactor\ productivity\ index = \frac{Output\ index}{Combined\ Input\ index} \times 100$$

Proceeding without Complete Information. It may not be possible to calculate an MFP index because of the absence of capital input data or complete cost data (for the calculation of input cost shares). In such cases, labour productivity may be the only measure that can be calculated.

This would be a reasonable measure of efficiency so long as the degree of contracting out was small or stable over the period measured. As noted earlier, a shift towards more contracting out can have effects on labor productivity that do not represent improvements in production efficiency. The number of services delivered could remain the same, while the labor input from the public sector declines due to contracting out.

Dunleavy (2016) recommended persisting with MFP measures in the absence of capital cost information. He suggested that shares should be calculated from other costs, apart from capital costs.

Inferring Something about MFP Growth. It is also possible to infer something about MFP growth when there is no cost information to calculate input cost shares. MFP growth ($\widehat{MFP}$) is a weighted sum of labor productivity growth ($\widehat{LP}$), capital productivity growth ($\widehat{KP}$) and intermediates productivity growth ($\widehat{NP}$), where the weights are the input cost shares:

$$\widehat{MFP} = cL \cdot \widehat{LP} + c_K \cdot \widehat{KP} + c_N \cdot \widehat{NP}$$

In this case, the input cost shares are unknown. Nevertheless, MFP growth must be between the lowest and the highest rate of growth in the partial productivities. The range can be narrowed down if something is known, or can be inferred, about the structure of production. For example, the rate of MFP growth will be closer to the rate of labor productivity growth, the more labor-intensive production is.

RESULTS AND DISCUSSION

Output

Output as number of enrolment, growth for elementary, secondary, and middle high has been mostly increasing, especially since 2014 where the current government of President Joko Widodo started functioning as shown in Table 2 and Figure 4. Data used in this analysis for all levels of schooling for output and all inputs are very much available. Output as number of enrolment, growth for elementary, secondary, and middle high has been mostly increasing, especially since 2014 where the current government of President Joko Widodo started functioning. It is also evident that the rate of growth also improved since 2014, except for secondary school down and up again parallel with elementary and middle high.

Inputs

All input (labor, capital, and intermediates) costs have been deflated using inverse of inflation rate during 2011 to 2016.

Labor

Labor costs cover all employees. Labor input has been decreasing since 2011, but began to change direction upwards since 2014, again this is where the new government started with the new policy (Table 3 and Figure 5)." Labor costs cover all employees. Labor input has been decreasing since 2011, but began to change direction upwards since 2014, again this is where the new government started with the new policy.

Capital

Capital cost used has been deflated based on opposite of historical inflation since 2010, as shown in Table 4 and Figure 6.

Table 2

Output

Number of services delivered (index, 2011 = 100)						
	2011	2012	2013	2014	2015	2016
Elementary	100	97.52	96.72	96.07	97.53	99.44
Secondary	100	102.13	102.92	107.30	102.75	104.76
Middle High	100	102.65	102.97	102.81	102.09	104.09
Total	100	99.74	99.63	100.24	99.60	101.55

Number of services delivered (Millions)						
	2011	2012	2013	2014	2015	2016
Elementary	30.78	30.04	29.79	29.60	30.05	30.65
Secondary	12.17	12.43	12.53	13.09	12.56	12.81
Middle High	9.28	9.53	9.56	9.54	9.48	9.67

Source: Indonesia Central Bureau of Statistics (2017)
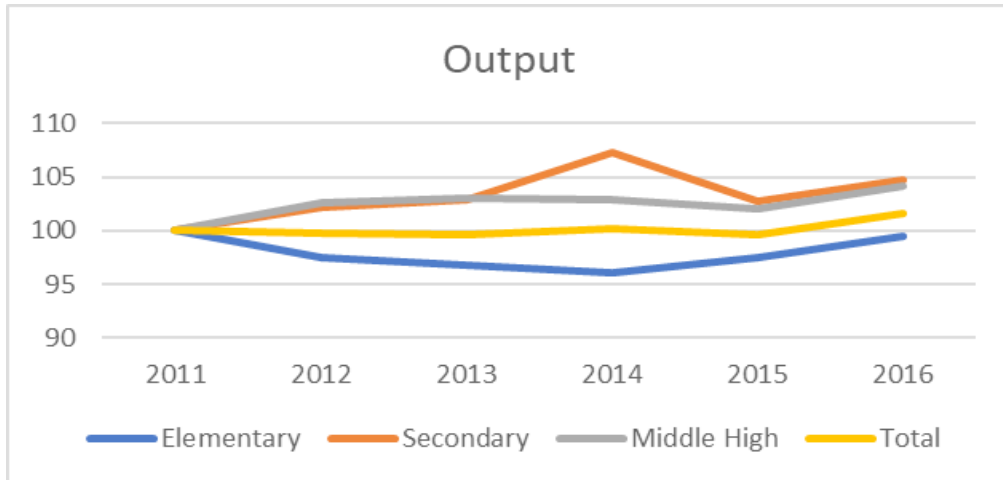
Figure 4. Output

Table 3

Labor

Labour input costs (index, 2011 = 100)						
	2011	2012	2013	2014	2015	2016
Elementary	100	109.56	105.52	115.61	107.67	109.82
Secondary	100	110.46	108.68	133.44	113.15	115.41
Middle High	100	111.69	118.07	147.55	119.33	121.72
Total	100	110.25	110.53	128.89	112.05	114.29
Labour input costs (Trillions)						
	2011	2012	2013	2014	2015	2016
Elementary	35.05	15.51	28.30	25.44	32.80	36.08
Secondary	13.19	10.04	10.98	17.90	24.42	26.87
Middle High	15.17	14.60	15.75	19.66	33.95	37.34
Total	63.42	40.15	55.02	62.99	91.17	100.29

Source: Indonesia Central Bureau of Statistics (2017)

Capital cost has been calculated from data provided as total budget minus labor and intermediate. Capital cost used has been deflated based on opposite of historical inflation since 2010. Capital costs cover new building and facility, upgrading and maintaining all facilities. Capital growth has been almost flat since 2011, but began to increase since 2014, again this is where the new government started with the new policy.

Intermediates. Intermediates growth for all indices has been steadily increasing since 2011, as shown in Table 5 and Figure

7 Intermediates growth for all indices has been steadily increasing since 2011.

Total Inputs. Total inputs are somewhat decreasing although the actual budget is increasing, except for middle high. This is due to the deflation adjustment, shown in Table 6 and Figure 8.
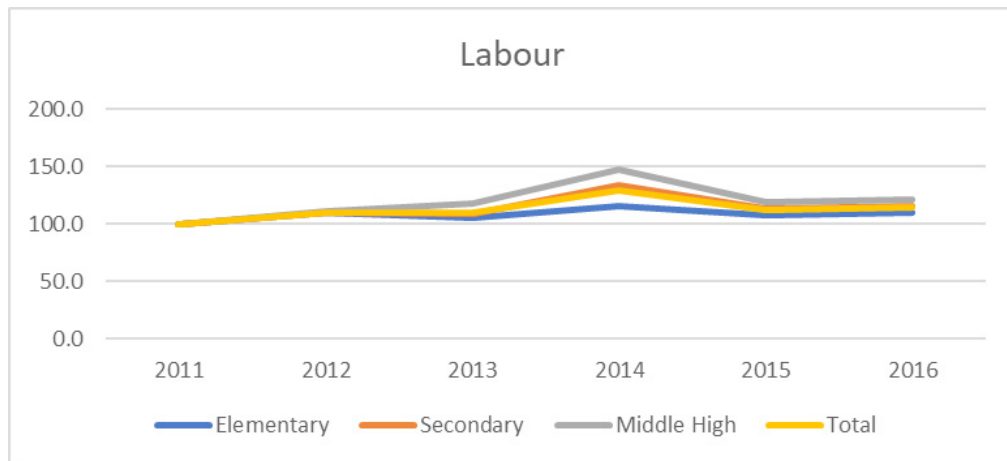
Figure 5. Labor

Table 4

Capital

Capital input cost (index, 2011 = 100)						
	2011	2012	2013	2014	2015	2016
Elementary	100	98.47	92.59	88.02	84.40	84.11
Secondary	100	101.53	96.84	94.74	87.65	87.34
Middle High	100	100.32	100.52	98.03	89.02	88.71
Total	100	100.32	89.90	81.28	64.39	63.72

Capital input costs (Trillions)						
	2011	2012	2013	2014	2015	2016
Elementary	25.48	25.83	25.79	25.78	25.72	26.24
Secondary	12.23	12.78	12.94	13.31	12.82	13.07
Middle High	10.00	10.33	10.99	11.27	10.65	10.86
Total	47.71	48.94	49.72	50.36	49.18	50.17

Source: Indonesia Central Bureau of Statistics (2017)
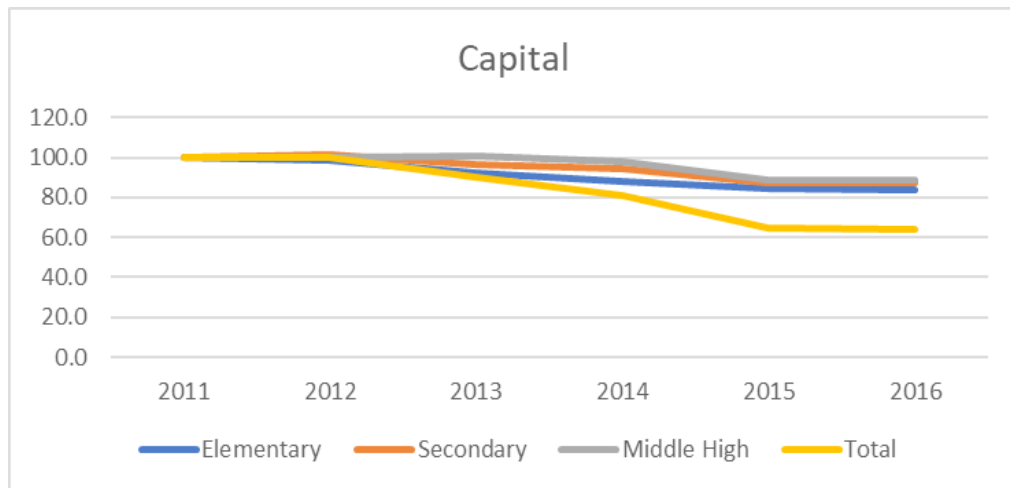
Figure 6. Capital

Table 5

Intermediates

Intermediates input costs (index, 2011 = 100)						
	2011	2012	2013	2014	2015	2016
Elementary	100	98.47	92.59	88.02	84.40	84.11
Secondary	100	101.53	96.84	94.74	87.65	87.34
Middle High	100	100.32	100.52	98.03	89.02	88.71
Total	100	99.64	95.34	91.84	86.20	85.90

Intermediates input costs (Trillions)						
	2011	2012	2013	2014	2015	2016
Elementary	12.74	12.92	12.90	12.89	12.86	13.12
Secondary	6.11	6.39	6.47	6.66	6.41	6.54
Middle High	5.00	5.16	5.49	5.63	5.32	5.43
Total	23.86	24.47	24.86	25.18	24.59	25.08

Source: Indonesia Central Bureau of Statistics (2017)
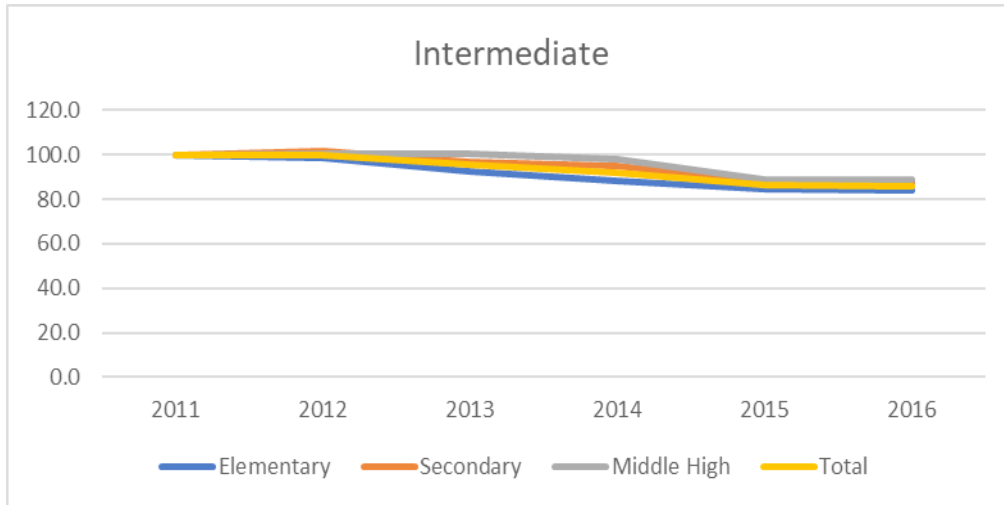
Figure 7. Intermediates

Table 6

Total input (trillion)

Total inputs	2011	2012	2013	2014	2015	2016
Labour	63.42093	40.14758	55.02357	62.99189	91.17054	100.2876
Capital	47.71	48.94	49.72	50.36	49.18	50.17
Intermediates	23.85673	24.46985	24.86175	25.18128	24.5924	25.08425
Sum	134.9911	113.5571	129.6088	138.5357	164.9477	175.5403

Total input (index, 2011 = 100)	2011	2012	2013	2014	2015	2016
Elementary	100.0	103.8	98.3	99.4	94.3	94.9
Secondary	100.0	105.3	101.5	108.4	96.4	97.3
Middle High	100.0	106.0	109.1	121.0	103.4	104.7
Total	100.0	114.9	108.9	130.6	94.8	97.6

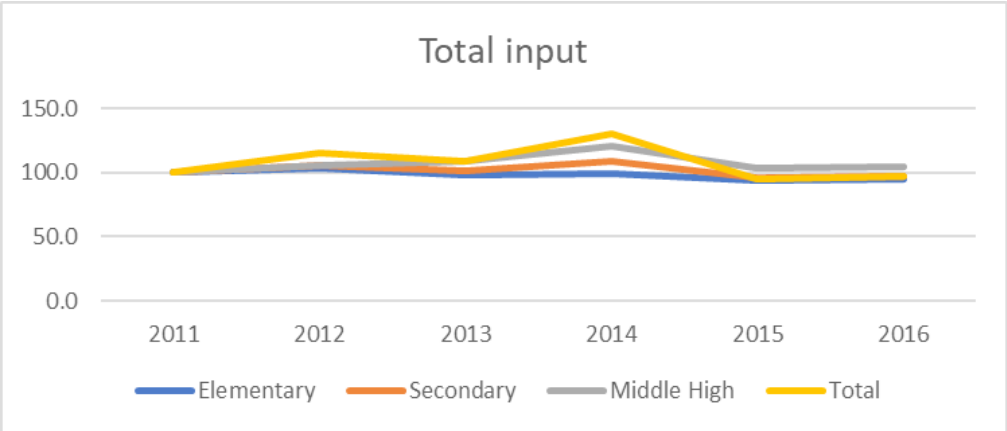Source: Indonesia Central Bureau of Statistics (2017)

Figure 8. Total input indices

Productivity and Quality

Productivity

Multifactor productivity (Figure 9) was decreasing for almost all indices until 2014, after which it had been increasing for all indices and the total shows very clear significant improvement. These coincided with the new policy implemented since 2014 by the current President Joko Widodo's government.

Figure 10, labor productivity, showed decreasing for all indices up to 2014, then began to show an increasing trend direction.

Figure 11, capital productivity, shows steadily increasing trend since 2011.
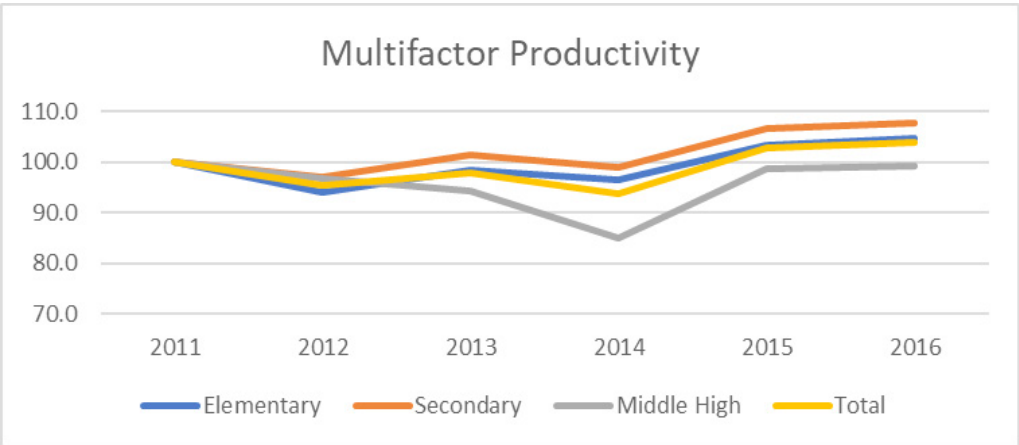
Figure 9. Public school multifactor productivity growth
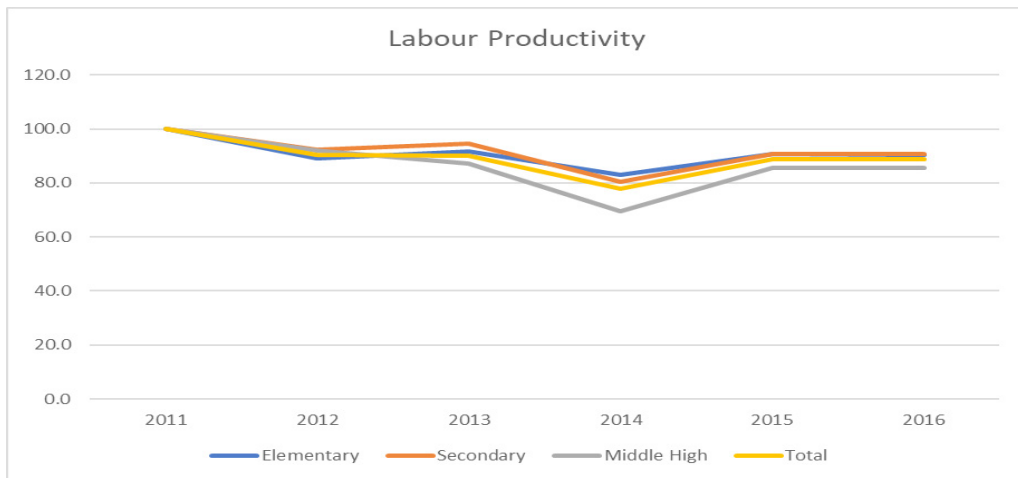
Figure 10. Public school labor growth
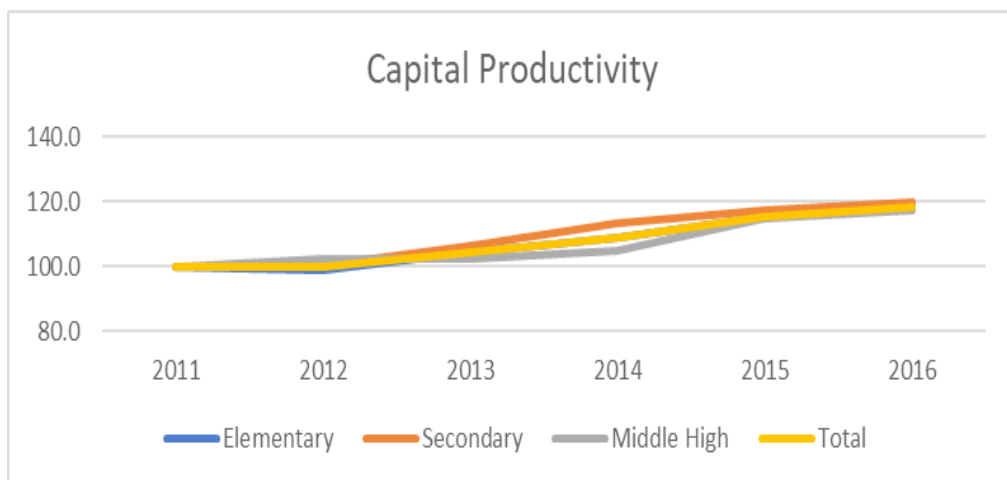
Figure 11. Public school capital productivity

Figure 12, intermediates productivity, shows steadily increasing trend since 2011.

Labor productivity, in general, was decreasing up to 2014, then started increasing. Capital and intermediates productivity had been steadily increasing.

The measures used for input and output, have shown good and credible trends for multifactor productivity for elementary, secondary, middle high, and the total.
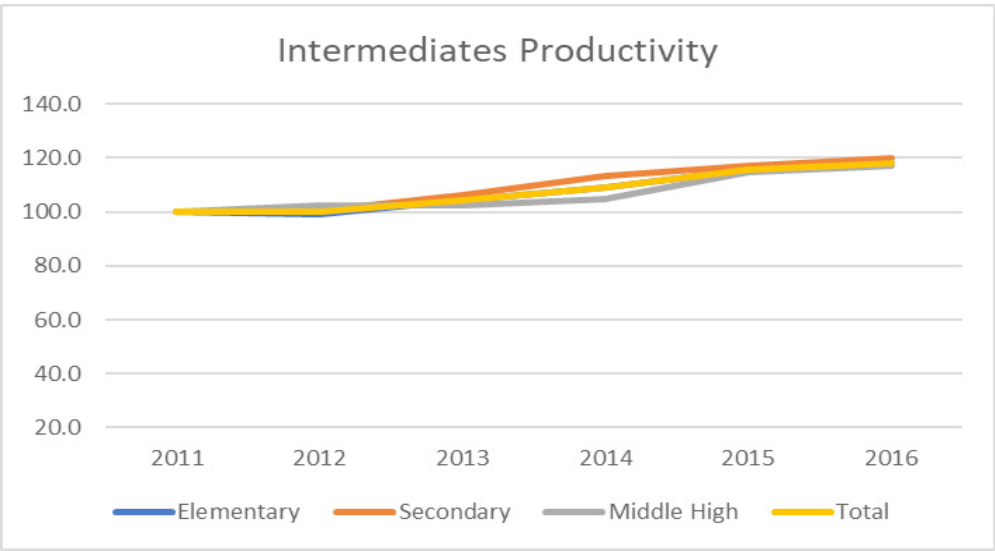
Figure 12. Public school intermediate growth

Quality

The quality measures presented for level of schooling show that *no school*, *not finish elementary* and *secondary* overall good result. However, elementary and middle high have not shown good improvement.

Figure 14 shows the steady improvement since 2011 of school participation for all indices.

Figure 15 shows the steady improvement (decreasing) since 2011 of illiteracy rate for all indices.
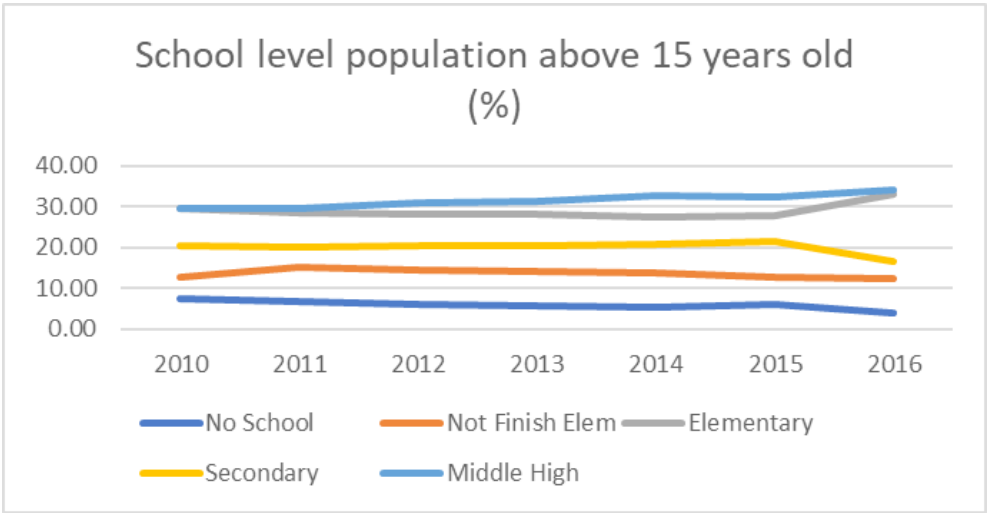
Figure 13. Public school quality
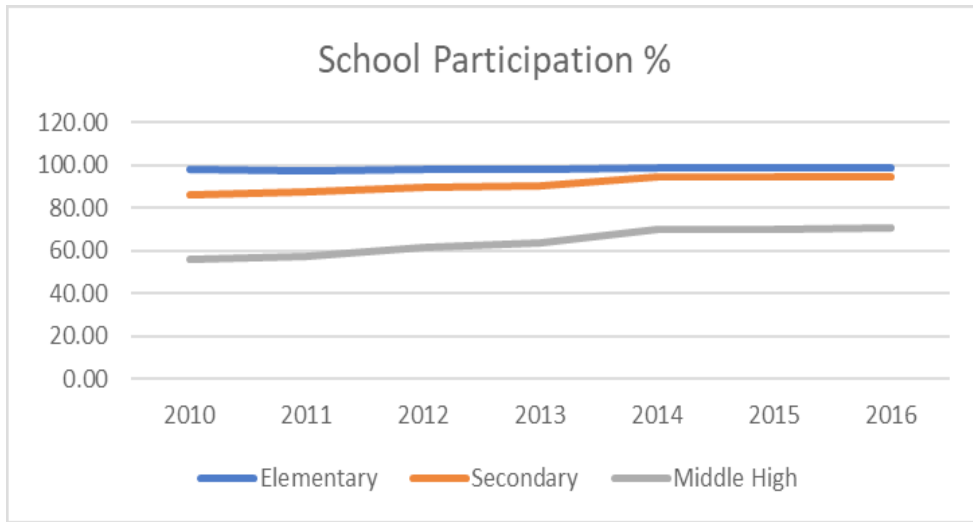
Figure 14. Public school participation
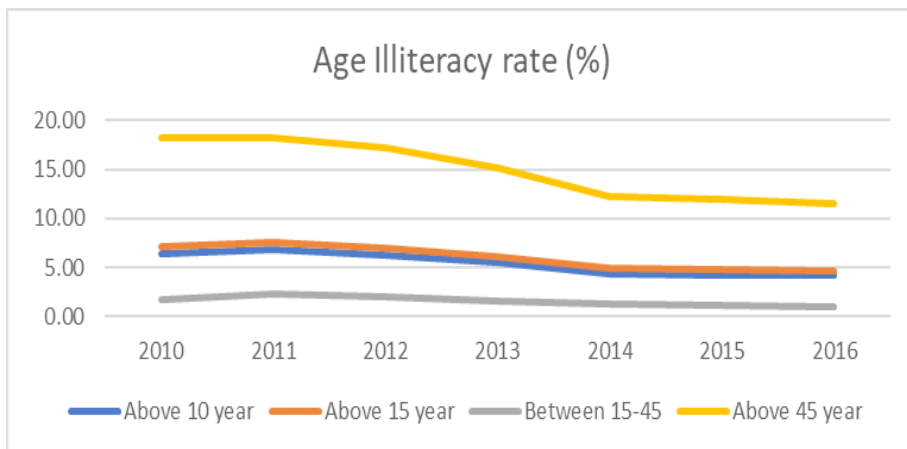
Figure 15. Public school age illiteracy rate (%)

The change in productivity appears to be because of policy changes, which has been continuously refocused from time to time.

Improving Productivity Measures

By looking at Figures 13, 14 and 15, one can suggest that schools' quality has not been totally improving. The continuing implementation of policy needs to be evaluated; to those that are working are to be continued, and those that are not, need to be replaced.

CONCLUSION AND RECOMMENDATION

Conclusion

This study should be viewed as a first step in trying the feasibility of constructing productivity measures for Indonesian public schools. From that point of view, the study has been positive. It has produced some interesting and meaningful results.

Public school productivity in Indonesia, overall, has been improving since 2011 and the improvement is getting better since 2014 when the new government began. However, these improvements are still far behind the stated goal in Sustainable Development Goals (SDGs) and behind several ASEAN countries. Therefore, the policy and program need to be evaluated for refocusing and realigning in such a way that will speed up the overall education productivity and education quality to achieve SDG and improve national competitiveness.

Even though Indonesia has made a great progress in reducing poverty – the proportion of the population living below the poverty line fell to 15.9% in 2012, according to the ADB – the costs associated with schooling remain a problem. Joko Widodo's government has attempted to address the issue through its Indonesia Smart Card initiative. One of its earliest policies launched, on taking office, the program provides fees and stipends to children from low-income backgrounds to ensure that they complete their schooling. The School Operational Assistance program has also helped millions of poor children stay in school by paying their fees – from 34.5 million in 2005 to 44.7 million in 2012. The government is also working closely with NGOs and corporate foundations to raise standards in Indonesian schools, especially for the most disadvantaged.

Indonesia has recognized the challenges posed by an education system that is struggling to equip its students for the fast-changing demands of the global economy. The adoption of the ASEAN Economic Community in 2016, theoretically enabling the free movement of labor, will increase the pressure on Indonesia to compete effectively, provide opportunities for its people and nurture human capital with the skills to feed its economy. In an archipelago of more than 17,000 islands and 250 million people, change will take time, but the country is on the right path.

Recommendation

The quality of the measures could be improved over time, with concerted effort put into upgrading data collections. The data gaps in Indonesian Public-School productivity measures are data availability both in data quality and reliability and the data consistency used coherently throughout the government sectors and levels.

It is important that the process of improving measures be enhanced by involving stakeholders in the measurement study. They could suggest strengths and weaknesses in measures and additional data sources that could be tapped. Dunleavy and Carrera (2013) noted that the process of selecting outputs could itself lift productivity over time. It encourages public-

school agencies to think more about their objectives, their desired outcomes, what is core and what is peripheral in their activities and where they can focus their resources to achieve the most.

ACKNOWLEDGEMENT

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Building Organizational Innovation Capability through the Corporate University Program

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ABSTRACT

People are one of the most strategic assets for an organization, hence when they are managed well, they will be the source of an organization's competitive advantage, and the organization that can manage and produce continual innovation will maintain its competitive edge. The number of corporate universities has substantially increased since the 90's, and some researchers have noted that corporate universities can be a related to production of innovation. Knowledge management somehow plays an important role in managing new and existing knowledge gained from a learning activity. Bina Nusantara (BINUS) a leading organization in education business, is currently known as the only entity that has implemented a corporate university in Indonesia. This research will analyze the role of the corporate university program in building innovation capability through knowledge management; however, only limited related research has conducted empirically. Using the SEM PLS analysis method, research is conducted through the "Best Employee of BINUS" program which considers a "Best Employee" an organization's representative who guarantees the continuity of the a corporate university program, and its organizational capability via knowledge management.

Keywords: A corporate university, innovation capability, knowledge management

INTRODUCTION

People are one of the most strategic assets of an organization, hence when they are managed well, they will serve as the source of an organization's competitive advantage. Once an organization has a skillful and competent employee base, the organization will have competitive leverage which, if framed in terms of resource theory, will be rare, valuable and difficult to imitate (Holland & Pyman, 2006). The number of corporate universities has substantially increased since the 90's (Abel & Li, 2012) for many organizations believe they can compete with excellence if their employees possess competence and in accordance with the needs of the organization and are also able to achieve organizational goals. Although institutional forces have been considered as that which triggered the rise of the corporate university, it is also believed that a corporate university, as a discrete entity, links knowledge management and innovation to learning (Alagaraja & Li, 2015).

An organization that can manage and produce continual innovation will stay competitive. Thus, a corporate university not only intents to distribute knowledge, but also works to contribute to knowledge production. The application of new knowledge will affect the improvement and innovation of work processes (Jansink et al., 2006).

Knowledge management plays an important role in managing new knowledge from learning activity. Nowadays, innovation and knowledge management are determining factors for the success and sustainability of organizations (Dickel & Moura, 2016).

Bina Nusantara (BINUS) a leading organization in education business, founded the only university with a corporate university which was established on July 4, 2013, called BINUS Corporate Learning & Development (BCL&D). BCL&D is responsible for improving the core leadership and technical competencies of the employees in BINUS. In the future, related to the integration of human capital management, that self-development initiated by employees themselves would be a prerequisite to promotion.

By 2017, BINUS had been nominated and awarded ten times the Most Admired Knowledge Enterprise (MAKE) Award, a prestigious commendation awarded to well recognised organisations which out-perform their peers in creating shareholders' wealth by transforming tacit and explicit enterprise knowledge and intellectual capital into superior products/services/solutions.

Bina Nusantara's "Best Employee Award" is given to an outstanding employee who demonstrates excellent performance. The criteria for selecting the best employee is based on proven core & technical competencies, demonstrated work ethic, loyalty and evinced future prospects in Bina Nusantara. The core competencies include human resources development, service excellence, operational excellence, business acumen and innovation. What is more, the candidate must demonstrate significant innovation achieved in the past year.

The best employee program assures the continuity of the corporate university program and ensures the organizational innovation and knowledge management.

LITERATURE REVIEW

The Corporate University

Besides the fact that the number of corporate universities are continuously increasing, it is still debated as to whether the corporate university could change the paradigm from just a functional area of training to one in with which an organization can develop the employee competence to increase an organization's competitive edge (Holland & Pyman, 2006). The corporate university can be described as an engine that plays a role in building and developing people's competence to support organizational goals through (Abel & Li, 2012; Jansink et al., 2006). The corporate university strengthens connections, innovation, and flexibility in offering the learning program to a motivated and energized workforce (White, 2009), and furthermore its concept was founded on a key learning resource provided by Coles Myer Limited, namely the strategic tailoring of knowledge and skills (Holland & Pyman, 2006). In this study, one argues that the corporate university program could be even more effective if linked to knowledge management.

In this research, we define the corporate university as the organization's strategic engine that aims to leverage employee competence (skill, knowledge and attitude), which in turn can support the achievement of organizational goals.

Knowledge Management (KM)

As we know, an organization's collective knowledge and competencies have become critical assets in maintaining a competitive advantage. However, how an organization manages the attributes of a human brain and builds its intellectual capital differs (Dealtry & Dealtry, 2006). Knowledge management is a process an organization uses to access information within the organization and translate it into usable knowledge (Cooper, 2016). Furthermore KM is centered on knowledge creation, sharing, up-grading and application (Mishra, 2011). It is aligned with an end goal of acquiring, organizing, sharing and applying knowledge within an organization (Cooper, 2016).

Previous research conducted and shared in a conceptual paper stated that there is relationship between Learning Organization (LO) and Knowledge Management (KM), whereby LO creates something new which differentiates it from a non-LO (Firestone et al., 2006; Mishra, 2011).

In this research, we define knowledge management as an ability or organizational strength in managing knowledge resources, which management sees in terms of acquisition, conversion, application and knowledge protection.

Innovation Capability

Innovation capability can be described as the ability to invent new products needed by the market (Sulistyo, 2016). Previous research stated the capacity for innovation influenced a company's reputation (Gupta & Malhotra, 2013), and that "reputation"

represented communal judgments that observers made according to their evaluation of the corporation's ability to be innovative (Foroudi et al., 2016). Internal factors, such as investment in training and human resource development, are the determinants of organizational innovation. Furthermore, innovation capabilities will be increased through management practices that empower employees through delegation in the decision-making process (Sulistyo, 2016). What is more, the evident role of innovation capability for organization is strongly related to customer loyalty and reputation (Foroudi et al., 2016).

In this research, we define innovation capability as the process that begins with the idea, which leads to the development and introduction of new products, processes and services.

Based on what has been learned from the literature, it is found that existing research is limited to the conceptual paper that the corporate university programs will be able to build innovative capabilities through knowledge management. Therefore, in this study, we conduct empirical research.

MATERIALS AND METHODS

Data collection was performed using a questionnaire with a Likert type 5-point scale, developed from previous research that related to the topic, and that was adjusted to meet the case conditions. The questionnaire consists of 3 parts that each refer to variable of the research: The corporate university program section

comprised with nine indicator questions; the knowledge management section comprised 15 indicator questions, and the innovation capability section comprised five indicator questions. The questionnaire was distributed through email to Best Employee recipients selected between 2014 and 2016, and the sampling technique used was judgment sampling for 35 the respondents.

Analysis was conducted using Structural Equation Modelling Partial Least Square (SEM PLS) and SMART PLS software to prove the impact of the corporate university program on innovation capability through knowledge management.

RESULTS AND DISCUSSIONS

We tested the validity of the 29 indicators, and the result indicated that all indicators were valid with the result all above 0.5.

Based on the result above, indicators of the corporate university program in average is 0.84, and the most dominant indicator is that the corporate university should use a comprehensive Learning Management System (LMS). Next, indicators of Knowledge Management on average are 0.88, and there are two dominant indicators: 1. using knowledge to adjust the achievement of strategic goals and 2. connecting available knowledge to solve problems. Lastly, indicators of Innovation Capability on average are 0.75, and the most dominant is respondents who can innovate by using skills acquired from training activities.

Table 1 and Table 2 show that three variables are reliable with the result above 0.7 either with Cronbachs Alpha and Composite Reliability.

Based on the results shown in Figure 1, the data analysis showed that building innovation ability was influenced by the corporate university program through KM. These results are in-line as the result from previous research posited that learning capability influences innovation (García-morales et al., 2012; Ruiz & Vargas-Silva, 2015; Sutanto, 2017). The analysis also showed that the corporate university program has strong effect on knowledge management as all knowledge is acquired, converted, applied and protected by the institution, a conclusion that is aligned with previous research (Alagaraja & Li, 2015; Jansink et al., 2006; Holland & Pyman, 2006). Thus, in order to improve innovation capability, it is recommended the organization improve the dominant indicators for each variable. Taking into consideration workload and time constraints in the context of the corporate university, where employees also work and may also serve as lecturers, then the improvements could as follows: First, as it relate to the corporate university, the program needs to be improved in the form of digital content. Secondly, once a digital platform is established, most of learning delivery and ancillary system processes such as registration, material access, and task execution, can be performed therein and thereby increase the usage of LMS. For knowledge management, it is necessary to improve the process by which employees can easily and quickly access knowledge to solve problems and achieve strategic goals, and this can be achieved by ensuring the speed and convenience of KM portal access wherever and whenever it is required by the employees. Furthermore, to improve the innovation capability of the training results, it is recommended that the training program provides space for the training participants to work on innovation-based projects that might be linked to their key performance management.

Table 1

Realibility testing of the variable using Cronbachs Alpha

	Cronbachs Alpha
CorpU Program	0.953798
Innovation Capability	0.808597
Knowledge Management	0.979416

Table 2

Realibility testing of the variable using composite reliability

	Composite Reliability
CorpU Program	0.961458
Innovation Capability	0.867223
Knowledge Management	0.981674
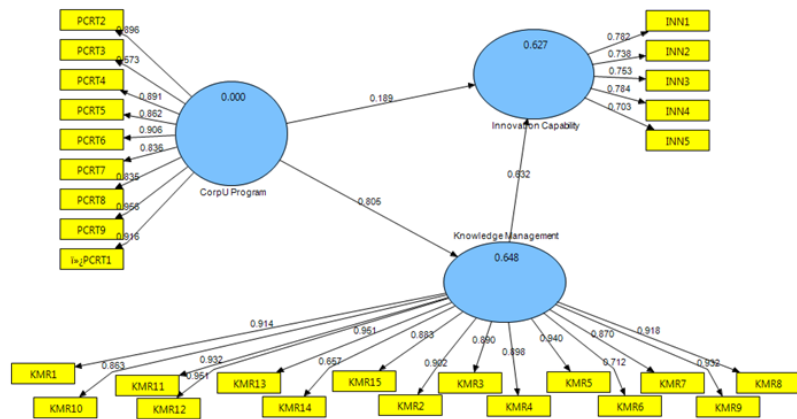
Figure 1. The result from run model research.

CONCLUSIONS

From this research, it is found that building innovation capability influenced by the corporate university program is achieved through knowledge management. The strength of this research is that Bina Nusantara is an organization committed to improvement of employee competence, KM management, and innovation improvement, and even has a special division to carry out these functions, namely, BCL&D and KM&I Directorate. These results can be a reference for organizations with special attention to these three issues and how to improve their innovative capabilities.

This research was only conducted within this specific organization, and in the future, it will be interesting to gather and analyze results gained through the respondents from various organizations, especially from those specializing in commercial goods that also place innovation as one key important in doing business.

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Assessing the Psychometric Properties of the Intercultural Competence in Teacher Education Questionnaire (ICTE-Q)

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ABSTRACT

There are limited psychometric instruments that measure intercultural competence in teacher education programmes. Empirical studies that examine the psychometric properties of these instruments are scarce, thus the authors set about to develop the Intercultural Competence in Teacher Education Questionnaire (ICTE-Q). This paper reports the findings on the psychometric properties of the ICTE-Q. Sixty pre-service teachers in their third or final year of study were sampled purposively from three Higher Education Institutions in Malaysia. The data were analysed using the Rasch Model technique to validate the ICTE-Q. The analyses covered properties such as Category Fit, Item Polarity, Item Fit, and Person and Item Reliability. Data obtained from the study was successful in validating the ICTE-Q to be employed to measure the intercultural competence component of teacher education programmes in preparing pre-service teachers to teach in culturally diverse settings. Polarity Analysis for items towards a construct from the positive Point Measure Correlation (PTMEA Corr) value showed that items in the construct were functioning in the same direction to measure the developed construct. The results of polarity analysis were used to triangulate the item fit result which was considered acceptable to fit the Rasch model framework. For the Category Measure, the measurement functioning was as expected. Finally, both

person and item reliability indices were found to be high. It thus can be concluded that the ICTE-Q is a valid and reliable instrument that can be used to measure the intercultural competence component of teacher education programmes.

INTRODUCTION

Educators around the world are faced with new challenges of balancing local, national, and global norms and values in the process of educating children. Many societies are experiencing cross-boundary migrations of peoples of diverse cultures and backgrounds. The advent of globalisation has further complicated social identities within many nations, which stimulated public debate on how pluralism and multiculturalism are recognised in the curriculum and pedagogy of national school system (Coronel & Gómez-Hurtado, 2015; Gholipour et al., 2015; Sutton, 2005). This is even more so in traditional multicultural societies like Malaysia. There have been enough documented incidents that tell of the challenges of the country in maintaining civil harmony among the different cultural and ethnic communities. Among the tools that have been cited to maintain national cohesion and harmonious relations and indeed the most compelling one is education. Multicultural education (ME) is commonly understood as one that encompasses three components of Gollnick and Chinns' five main goals of ME, namely, the promotion of

the strength and value of cultural diversity, an emphasis on human rights and respect for those who are different from oneself, and the promotion of social justice and equality for all people (Gollnick & Chinn, 1990). Multicultural education is important in multicultural societies and should be part of the DNA of schools. Therefore, it is crucial for all teachers to be equipped with intercultural competence, which is the appropriate knowledge, skills and attitudes necessary to promote and achieve multicultural education goals (Phoon et al., 2012, 2013). A recent synthesis of the research literature by Perry and Southwell (2011) had indicated that intercultural competence was increasingly necessary in our multicultural and globalised world. The role of educators now is not so much as the 'experts' but more as facilitators to create an environment for meaningful discourse between all stakeholders, including parents, to identify goals and approaches that will serve the child's best interest. Culturally responsive pedagogy and curriculum that are designed around the educational needs of learners from diverse cultural backgrounds are particularly crucial. This is because a culturally responsive pedagogy and curriculum allow for the discussion of difficult topics (e.g. racism, discrimination, and prejudice) and offers students of all ages the opportunity to engage in meaningful discussion that enhances learning (Metropolitan Centre for Urban Education, 2008). However, the goals of multicultural education can only be achieved if teachers are equipped with intercultural competence to deliver the curriculum effectively.

Literature reviews show that many teacher education programmes merely infuse multicultural perspectives by simply adding one or two courses in multicultural education and/or requiring pre-service teachers to complete assignments that explore surface level differences in cultures and languages (Assaf et al., 2010; Muchenje & Heeralal, 2014). According to Darling-Hammond et al. (2005), one way to make more lasting changes in the way teachers are trained to work with culturally diverse students is to build a shared vision of good teaching and demonstrate shared knowledge, skills, and common beliefs about multicultural education. Teachers should not be exposed to cultural diversity at the surface level only; they must be trained professionally to manage classrooms which are made up of cultures different from their own (Baldwin et al., 2007).

Teachers should also be trained to examine their own values and assumptions on diversity (e.g., race, culture, class) and reflect on how their perception and attitudes could impact their classroom practices. Furthermore, teachers play an important role in encouraging children to view others as individuals, without preconceived notions through multicultural education practices. Teachers have significant power in guiding children to embrace diversity. Active intervention by teachers through all aspects of teaching and learning processes can change children's negative concepts about other ethnic groups. In order to do so, teachers must be equipped with adequate knowledge and skills to implement multicultural education practices.

The literature shows that while studies that measure intercultural competence have been conducted among respondents in various sectors such as human resource (Bennett, 2008; Stringer & Cassiday, 2003, business (Mahalingam & Levitt, 2007; Moran et al., 2007), social work (Armour et al., 2007; Fong et al., 2006; Lum, 2007) and even education (Coulby, 2006; Cushner & Brennan, 2007; Deardorff, 2006; Holland, 2013; Kadriye & And, 2014; Karabinar & Guler, 2013), there is a dearth of research on the incorporation of intercultural competence in teacher education programmes. It is premature to start measuring teachers' intercultural competence if infusion of such competencies, whether by design or as an incidental learning outcome, in teacher education cannot be certain. In view that there are limited psychometric instruments that gauge intercultural competence in teacher education programmes, this study was conceptualised with the aim to fill in the literature gap. The focus on preparation of pre-service teachers to teach in culturally diverse settings was chosen due to the researchers' concern about the competency of teachers to handle teaching-learning issues that arise when placed in educational settings where the learners comprised students from different cultural backgrounds. As the key person in classrooms, it is of the utmost importance that teachers at the very least be equipped with the knowledge, skills and values that make up intercultural competence. Intercultural competence would ensure that teachers would be able to deal with conflicts or issues related to cultural differences,

as well as serve as role models to impart and nurture the same competence to their charges. Consequently, there is a need to assess the psychometric properties of the instrument in measuring intercultural competence in teacher education program. This instrument would be used to assess the content of teacher education programmes in terms of how much the curriculum actually incorporates intercultural competence education for pre-service teachers. The instrument would be able to indicate the coverage given to the different components of intercultural competence and indirectly the preparedness of pre-service teachers to be able to serve in multicultural educational settings.

In the matter of methodological issues, intercultural experts were asked to indicate their agreement to the various ways of assessing intercultural competence (Deardorff, in Deardorff & Bok, 2009). The different techniques listed included case studies, interviews, mix of qualitative and quantitative measures, solely qualitative measures, narrative diaries, self-report instruments, observations and judgement by self and others. All these methods were highly endorsed, especially case studies and interviews. The present study utilises both interviews and self-report questionnaires, and the present paper analyses the psychometric properties of the self-report questionnaire, ICTE-Q. Among the many existing self-report intercultural competence instruments compiled by Fantini (in Deardorff & Bok, 2009) are as shown in Table 1. These instruments are designed to tap into the intercultural competence of the respondents through self-report or self-judgement scales. Some of the instruments are designed specifically for students, while a couple of others have been used with teachers or agencies that deal with children and families, as well a third category of instruments that serve as generic instruments that may be used with any group. Once again, there does not seem to be any existing equivalent instrument that examines if and how intercultural competence is incorporated in teacher education programmes or even other human resource training programmes. The ICTE-Q was developed to measure the extent intercultural competence has been incorporated into teacher education programmes, and the target respondents are pre-service teachers.

Table 1

Self-report intercultural competence instruments

Name of Instrument	Year	What It Purports to Measure	Respondents	Author
International Competence Assessment (INCA) Project	2009	Intercultural Competence	Generic	The INCA Project

Table 1 *(Continued)*

Name of Instrument	Year	What It Purports to Measure	Respondents	Author
Assessment of Intercultural Competence (AIC)	2006	Intercultural Competence including language proficiency	Peers and Teachers	Fantini, A. E.
Cultural Competence Self-assessment Questionnaire (CCSAQ)	1995	Cross-cultural competence	Service agents working with children with disabilities and their families	Mason, J.L.
Cross-cultural Sensitivity Scale(CCSS)	1993	Cross-cultural sensitivity	Undergraduate students	Pruegger, V.J. & Rogers, T.B.
Intercultural Sensitivity Inventory (ICSI)	1992	Intercultural Sensitivity	Undergraduate and graduate students	Bhawuk, D.P.S. & Brislin, R.W.
Intercultural Competency Scale	1987	Intercultural effectiveness	Missionaries and foreign students	Elmer, M.I.
Intercultural Competence Questionnaire	n.d.	Global Literacy	Generic	Trompenaars Hampden-Turner Consulting

Source: Fantini (2009)

The Intercultural Competence in Teacher Education Questionnaire (ICTE-Q)

Based on the above narrative, the ICTE-Q instrument was developed to serve as a tool for data collection in the research that aimed to investigate the intercultural competence component of teacher education programmes in preparing pre-service teachers to teach in culturally diverse settings. Culturally diverse settings in this study refer to environments which include classrooms, schools, neighbourhoods and communities that comprise learners of different race, ethnicity, culture and language. The first version of the ICTE-Q was developed by the corresponding author in collaboration with academics in the Queensland University of Technology and University Of Sydney.. It was based on a framework developed by Zeichner (1993). The framework proposed critical elements to educate teachers for diversity. According to Zeichner (1993), there are 12 critical elements to consider when educating teachers about cultural diversity (Figure 1).

Figure 1. Elements to educate teachers for diversity (adapted from Zeichner, 1993)

These elements can be sub-divided into three components; (1) cognitive/ knowledge; (2) affective/attitudes/values; and (3) behavioural/skills. In the ICTE-Q, there were 12 items that covered these three components in addition to the types of experiential learning that respondents had to respond to in the form of a four-point Likert scale. The option scale for the instrument was worded in terms of the number of courses that they took in a semester that incorporated these competencies.

The ICTE-Q included two other items that required respondents to state the degree to which they agreed on the importance of intercultural competence to be included in teacher education, as well as one other item that asked them to rate their teacher education program in terms of having prepared pre-service teachers to teach in culturally diverse settings. The ICTE-Q also included eleven open-ended items, but these were not included in the analyses of its psychometric properties as only closed-ended items are appropriate for the Rasch Measurement Model.

When it was decided that the ICTE-Q was to be used for a sample of Malaysian pre-service teachers, the instrument was then translated into the Malay language and back-translated by two different pairs of lecturers from two public universities in Malaysia who were bi-lingual and experts in curriculum studies and teacher education. It was then validated by another four education lecturers, whose expertise was in curriculum evaluation, two from a public university and two from an institute of teacher education. Only changes in terminology to fit Malaysian contexts were recommended by the experts. These changes did not affect the substantive meaning of the items. Finally, the ICTE-Q

was also vetted by four pre-service teachers to ensure that the language was appropriate and comprehensible. The components of ICTE-Q is shown in Table 2.

THE RASCH MEASUREMENT MODEL

The Rasch model was introduced by George Rasch in 1960 (Bond & Fox, 2001). He suggested a moderate logistic model as the basis to develop an objective measurement in psychometrics due to the problem in defining items which were free from its population and which were not affected by the sample's individual attributes such as ethnicity and gender. The Rasch model is a measurement model based on the Modern Testing Theory which is one of the parameters in Item Response Theory (IRT). The Rasch Model which is based on IRT has a few advantages compared to the Classical Test Theory (CTT) which are (i) Item statistics do not depend on the sample (Cook & Eignor, 1991; Hambleton & Swaminathan 1985), (ii) the test analysis does not require a strict parallel test to evaluate the reliability,

Table 2

ICTE-Q components

Components	Items	4-Point Likert Scale	No. of Items
Importance of IC	Importance of IC in TE, and Important for all Pre-service Teachers	Agreement	2
Cognitive/Knowledge	Histories and perspectives of various cultures; cultural concepts; various ways culture is manifested	Number of Courses	3
Affective/Attitudes/ Values	Open-mindedness, Social justice, Mutual respect	Number of Courses	3
Behaviour/Skills	Re-evaluate own attitudes towards other cultures; deal with prejudice in school; effective communication with families of different cultures	Number of Courses	3
Experiential learning	Field experiences; internship; micro-teaching	Number of Courses	3
Rating of TE Program in IC integration	Equipping pre-service teachers with intercultural competence to teach in culturally diverse settings	Strength	1

and (iii) the ability to diagnose whether each item is measuring the intended construct (Boone et al., 2014).

Rasch modeling is a popular method in the survey research in many areas such as psychology, business, and health sciences and is also common in establishing quality measurement and valid instruments in the social sciences. Rasch models are able to increase functions monotonically as the models are logistic and have latent trait models of probability. Rasch measurement models are static models that are imposed upon data and are not similar to the other statistical models that are developed based on data. Rasch models are invariant and on a linear continuum; Rasch models assume the probability of a respondent agreeing with a particular item is a logistic function of the relative distance between the person and item location. Rasch models require unidimensional data and could be used in both dichotomous and polytomous scenarios, but polytomous models are usually employed in survey research. In a survey that uses a rating scale that is consistent with the number of response options, it is appropriate to apply the Rating Scale Model (Andrich, 1978).

The formulae for the Rating Scale Model are presented below:

$$\ln (P_{nik}/P_{ni(k-1)}) = B_n - D_i - F_k$$

where,

P_{nik} is the probability that person *n* encountering item $_i$ is observed

in category $_k$,

$P_{ni(k-1)}$ is the probability that the observation (or response) would be

in category $_{k-1}$,

B_n is the "ability" (agreement) measure of person $_n$,

D_i is the "difficulty" measure of item $_i$,

F_k is the impediment to being observed in category $_k$ relative to

category$_{k-1}$.

RESEARCH OBJECTIVES

The main objectives of the research were:

1. To assess the psychometric properties of the ICTE-Q using the Rasch Model analysis.
2. Based on the above, to determine if the ICTE-Q is a reliable instrument to investigate the extent to which intercultural competence is incorporated in teacher education programmes.

METHOD

This research employed a survey research design to obtain the data needed to assess the ICTE-Q's psychometric properties. The research involved a sample of sixty pre-service teachers in their third or final year of studies. The sampling technique used was purposive sampling where the respondents had to be full-time students enrolled in teacher education programmes, and willing participants of the study. The questionnaire was administered to the pre-service teachers in one sitting at their respective institutions that took about 20-25 minutes.

The data was analysed using Rasch Model to validate the ICTE-Q. The analysis

covers the properties of Category Fit, Item Polarity, Item Fit, Item Reliability and Person Reliability. The category fit property refers to a category that fits and functions as expected, meaning the higher the scale value, the more positive the measurement category values. Next the Point Measure Correlation Coefficient (PTMEA Corr) was evaluated. A positive PTMEA Corr value shows that the all the items in the construct functions to measure the same construct. While a negative value shows the response relationship for item or person contradicts the variables or construct. Item fit is checked to identify the extent to which items in the ICTE-Q successfully measure the intended things to be measured. The mean squared infit value and mean squared outfit for each item must be within 0.6 to 1.4 (Bond & Fox, 2001). The model analyses the individual and item reliability and, the item and individual discrimination index jointly. Bond and Fox (2001) stated that good item and person reliability values were the ones that approach 1.00 while a good person and item discriminant index value was greater than 2.00.

RESULTS AND DISCUSSION

Item Fit & Polarity of Items in the ICTE-Q

The findings show that the item's mean squared infit is between 0.63 to 1.70 and the item mean squared outfit is between 0.62 to 1.67. According to Bond and Fox (2007), for Likert scale items, the item that is compatible with the Rasch model assumption should be in the range of 0.6 to

1.4. This means there are two items that did not fit the Rasch model framework, namely: item B3k and B3j. B3k states "Exposed to internship/teaching practice that aids in development of competence to teach in culturally diverse settings", whereas B3j is "Exposed to field experiences (projects/ programmes within the course) that aids in development of competence to teach in culturally diverse settings".

However, before the decision was made to discard these two items from the instrument, point measure correlation (PTMEA Corr) was referred. PTMEA Corr value is used to determine an item polarity. If the PTMEA Corr is high, it means that the item possesses the ability to differentiate the respondents' ability. Items in the questionnaire are able to differentiate between high agreement and low agreement respondents.

Polarity Analysis for item towards a construct from the positive PTMEA Corr value shows the items in the construct is functioning in the expected direction to measure the developed construct (Linacre, 2006). A negative value or zero shows that the relationships for response item or the respondents contradict with the variable or the construct (Linacre, 2006). The questionnaire did not have any such items. Thus, these two items had to be reviewed to decide whether they needed modification or if they needed to be eliminated. Based on Table 3, all the items in the instrument showed high positive PTMEA Corr. Thus, the decision to discard B3k and B3j was deferred due to the reason that both items

exhibit high positive PTMEA Corr although the infit and outfit value are slightly higher than the maximum cut-off point of 1.4.

Subsequently, after a discussion was carried out with experts in the field, it was decided that the two items should be maintained as they contained pertinent content in measuring the extent to which intercultural competence was incorporated in teacher education programmes.

Category Fit of the ICTE-Q

The findings show the category mean squared infit is between 0.92 to 1.46 and the category mean squared outfit is in the range of 0.87 to 1.50. The category measures also displayed a pattern that fits the Rasch model assumption of sequencing from easy to difficult. This can be observed when the category labelled as 1 has a category measure of -5.47 logit, followed by category label of 2 has a measure of -2.12 logit, category label of 3 has a measure of 2.18 logit and finally, category label of 4 has a measure of 5.35 logit. For the Category Measure, the measurement functioning is as expected (i.e. the higher the response scale value, the more positive the category measure value). This shows that the four response scales for each item in the instrument are functioning well. This situation is depicted in Table 4.

Item and Person Reliability of the ICTE-Q

The item reliability (Table 5) is the estimation of the consistency of the item placement on the logit scale if the item is answered by a group of different respondents that possess

Table 3
Item fit

Entry NUMBER	Raw SCORE	Count	Measure	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTMEA CORR.	ITEM
13	148	55.0	0.63	0.26	1.70	3.1	1.67	2.9	A 0.66	B3k
12	149	55.0	0.57	0.26	1.44	2.0	1.44	2.0	B 0.54	B3j
6	149	55.0	0.57	0.26	1.32	1.6	1.30	1.4	C 0.51	B3d
7	148	55.0	0.63	0.26	1.07	0.4	1.06	0.4	D 0.62	B3e
14	152	55.0	0.36	0.26	1.03	0.2	1.04	0.3	E 0.72	B3l
9	169	55.0	-0.82	0.26	0.96	-0.2	0.95	-0.2	F 0.75	B3g
5	139	55.0	1.25	0.26	0.92	-0.4	0.93	-0.3	G 0.57	B3c

Table 3 (*Continued*)

Entry NUMBER	Raw SCORE	Count	Measure	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTMEA CORR.	ITEM
15	159	55.0	-0.12	0.26	0.90	-0.5	0.92	-0.4	H 0.64	B4
1	185	55.0	-1.96	0.27	0.91	-0.5	0.91	-0.5	G 0.47	B1
11	169	55.0	-0.82	0.26	0.87	-0.7	0.86	-0.8	f 0.76	B3i
8	154	55.0	0.22	0.26	0.83	-0.8	0.82	-0.9	e 0.82	B3f
10	168	55.0	-0.75	0.26	0.79	-1.2	0.78	-1.2	d 0.78	B3h
4	142	55.0	1.04	0.26	0.78	-1.2	0.78	-1.2	c 0.56	B3b
2	188	55.0	-2.19	0.28	0.76	-1.5	0.77	-1.2	b 0.59	B2
3	137	55.0	1.38	0.26	0.63	-2.3	0.62	-2.3	a 0.60	B3a
MEAN	157.1	55.0	0.00	0.26	0.99	-0.1	0.99	-0.10		
S.D.	15.1	0.00	1.05	0.01	0.28	1.4	0.27	1.30		

Table 4
Category fit

CATEGORY LABEL	SCORE	OBSERVED CounT	OBSERVED %	OBSVD AVERAGE	SAMPLE EXPECT	INFIT MNSQ	OUTFIT MNSQ	STRUCTURE CALIBRATN	CATEGORY MEASURE	
1	1	12	2	-1.83	-2.61	1.46	1.50	NONE	(-5.47)	1
2	2	188	26	-0.51	-0.41	0.97	0.98	-4.36	-2.12	2
3	3	389	54	2.05	2.02	0.92	0.87	0.13	2.18	3
4	4	126	18	4.17	4.16	1.00	0.99	4.23	5.35	4

Table 5
Item reliability

	RAW SCORE	COUNT	MEASURE	MODEL ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	158.4	55.0	0.00	0.28	1.00	-0.1	0.99	-0.1
S.D.	15.8	0.0	1.25	0.00	0.22	1.2	0.23	1.1
MAX.	188.0	55.0	1.67	0.29	1.40	1.8	1.45	1.9
MIN.	137.0	55.0	-2.35	0.28	0.61	-2.5	0.58	-2.5
REAL RMSE	0.29	ADJ.SD	1.22		SEPARATION 4.16		ITEM RELIABILITY	0.95
MODEL RMSE	0.28	ADJ.SD	1.22		SEPARATION 4.33		ITEM RELIABILITY	0.95
S.E. OF ITEM MEAN	= 0.36							

the same ability (Bond & Fox, 2001). The analysis result shows the item reliability index is 0.95. The separation index is a separation for the item level of difficulty which is the item strata difficulty count in the construct. The findings show the item separation index is 4.33 which indicates that there are four levels of item difficulty in the ICTE-Q.

Table 6 shows the person reliability for the ICTE-Q. Person reliability is the estimated consistency of an individual ranking on the logit scale if the respondent answers a different set of items to measure the same construct (Wright & Master in Bond & Fox, 2001). The findings show that the person reliability index of an individual is 0.90. The findings of the analysis show that the individual separation index is 2.99 which indicate that there are three levels of respondent ability in the ICTE-Q.

CONCLUSION AND IMPLICATIONS OF THE STUDY

The strength of the Rasch model lies in its ability to solve the weakness of the Classical Testing Theory (CTT) approach (Prieto et al., 2003). Based on CTT approach, the scale of the instrument is treated as interval scale based on ordinal level item scoring which is not statistically proven. This study showed that more fundamental evidence could be provided when evaluating an instrument with the Rasch model which allowed the use of scale scores in an interval level. Moreover, the use of the Rasch formula allows the data analysis in this study to use expected score information when

Table 6
Person reliability

	Raw SCORE	Count	Measure	Model ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	37.4	13.0	1.68	0.58	0.99	-0.2	0.99	-0.2
S.D.	5.5	0.0	1.83	0.02	0.65	1.6	0.68	1.6
MAX.	47.0	13.0	4.96	0.63	3.17	3.8	3.32	3.8
MIN.	25.0	13.0	-2.50	0.56	0.22	-2.7	.21	-2.7

REAL RMSE	0.65	ADJ.SD	1.71	SEPARATION	2.63	ITEM RELIABILITY	0.87
MODEL RMSE	0.58	ADJ.SD	1.73	SEPARATION	2.99	ITEM RELIABILITY	0.90
S.E. OF ITEM MEAN	= 0.25						

dealing with missing data. This is due to the fact that the Rasch algorithm compares each observed item score to an expected score based on the overall Rasch scaling model (*Nunnally & Bernstein, 1994)*. The findings have demonstrated that the ICTE-Q possesses the psychometric properties that make it a reliable and valid instrument to be used in investigating the extent to which intercultural competence is incorporated in teacher education programmes. The Rasch model analysis technique used in the study generated evidence to support the properties of Category Fit, Item Polarity, Item Fit, and Person and Item Reliability. All these dimensions are necessary to prove that the ICTE-Q is both a valid and reliable instrument that can be employed to measure the intercultural competence component of teacher education programmes in preparing pre-service teachers to teach in culturally diverse settings.

Indirectly, the findings of this study also serve to validate the framework used in developing the ICTE-Q, namely Zeichner's critical elements to educate teachers for diversity. These elements can be summarised into three crucial components; (1) cognitive/ knowledge; (2) affective/attitudes/values; and (3) behavioural/skills components, which were transformed into the items that made up ICTE-Q. The findings of this study not only lend support for the underlying framework of ICTE-Q but also reaffirm the importance of knowledge, attitudes and skills on multicultural competencies in teacher education programmes.

Pre-service teachers should have knowledge of their own ethnic and cultural identities so that they understand the concept of cultures, the variety of ways culture manifests and understand the roles culture plays in their life as well as the life of the students. This knowledge is critical so that teachers would self-reflect and avoid any predetermined biases, particularly when conducting lessons in culturally diverse classrooms. Teacher training programmes also need to address the nature and causes of prejudices and racism and equip the teachers with research-based instructional skills to reduce these attitudes in the classroom. Teachers should also be aware of school practices that could contribute towards the reproduction of societal inequalities. Hence, during the course of training, teachers must be provided with opportunities to gain practical knowledge and skills in exploring equity and inequity issues in the field of education.

Information regarding the characteristics and learning styles of different groups also need to be conveyed to the teachers during their training, to help them identify the instructional strategies that appeal to a wider variety of learners. In line with this emphasis, teachers must have the knowledge on diverse needs of students with different cultural backgrounds and be equipped with skills to apply culturally appropriate pedagogy to conduct lessons.

In addition to knowledge and skills, teacher education curriculum also should include the histories and background of various ethno-cultural groups in their respective communities so that the contribution and cultural values of each culturally diverse group would be appreciated. In order to be effective teachers, the training programmes have to expose teachers to examples of successful teaching of ethnic and language minority students and how instructions can be embedded in a group setting to provide both intellectual challenge and social support (Zeichner, 1993). Positive teacher attitudes towards culturally responsive education are crucial because "effective teachers would use knowledge of their students' culture and ethnicity as a framework for inquiry as they organise and implement instruction" (Banks et al., 2001). In order to have an effective multicultural and anti-bias curriculum, teachers must examine their own attitudes such as beliefs and perspective towards various cultural groups (Tarman & Tarman, 2011). To summarise the above, the ICTE-Q have included items that focussed on three main components of intercultural competence, and these were knowledge, skills and values/attitudes. These components correspond to the three dimensions of cognitive, affective and behavioural components that were identified by Matveev and Merz (2013) when they did a meta-analysis of the common constructs found across ten intercultural competence assessment instruments.

The results of the analysis imply that these components have worked well and make up the construct of intercultural competence component in teacher education. Therefore, the ICTE-Q is a viable instrument

to be used for those seeking to investigate if teacher education programmes have incorporated intercultural competence in its curriculum. This is especially appropriate if the respondents of the study are proficient in the Malay language as the ICTE-Q has been developed in the said language. However, since the Malay version is not substantially different from the original English version, it is reasonable to state that the latter would be equally viable to be used among English-speaking respondents. Even with the inclusion of the open-ended questions, the ICTE-Q is a relatively user-friendly instrument as it does not take very long and is easily understood by the respondents.

Future work in refining the instrument would be to triangulate the results obtained from the open-ended items with that of the closed ended items to assess the internal or concurrent reliability of the complete instrument. Additionally, interviews could be conducted using the same items among the same group of respondents to gauge equivalent measures of reliability and validity of the items therein. In conclusion, as the study stands, it has made a significant contribution in providing a valid and reliable tool to investigate the incorporation of intercultural competence in teacher education programmes. Intercultural competence is a vital and increasingly meaningful quality to be nurtured in pre-service teachers, that needs to be mindfully designed into the curriculum of teacher education programmes no matter who the provider is, be it either state-run or privately owned institutions.

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SOCIAL SCIENCES & HUMANITIES

Building Higher Order Thinking Skills (Hots) for Pre-Service Vocational Engineering Teachers by Applying a Multi-Method Approach to the Learning Process through Lesson Study

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ABSTRACT

This article aims to examine the implementation of a multi-method approach in the vocational engineering learning process through a Lesson Study to develop higher order thinking skills (HOTS) for pre-service teachers. This is a multiphase mixed methods design which included a series of Lesson Study activities. In the implementation phase, the multi-method learning was started through self-directed learning, followed by collaborative problem-solving by using a mixture of several techniques. The last phase was a summarization session. The results of this study indicate that a multi-method approach has the potential to develop pre-service teachers' HOTS.

INTRODUCTION

Higher order thinking skills (HOTS) is one of the critical abilites found in the learning process, especially among higher education institutions. It constitutes as the highest level in the hierarchy of cognitive process. It includes critical, logical, reflective, metacognitive, and creative thinking. Such skills enable students to face numerous challenges; in an era when there is so much information available, but the time to

process it is limited (Yee et al., 2015), HOTS encourages individuals to interpret, analyse and manipulate information.

HOTS is more difficult to be learnt or taught than other types of skills. However, it is also more valuable because it will bring beneficial when faced with a new different situation compared with the learnt skill. In the information era, mastery of HOTS has become a necessary competency in order to address a variety of information which sometimes contradicts one another (Brierton et al., 2016).

Pre-service vocational engineering teachers are prepared to be taught in vocational secondary schools or Technical and Vocational Education Training (TVET). TVET has aims to make workers be more incisive and enable them to interact better with their job duties (Yusop et al., 2015). In Indonesia, formal vocational education and training are offered at the secondary level through SMK (Sekolah Menengah Kejuruan), under the management of the Directorate General of Senior Secondary Education, which is under assitance of the Ministry of Education and Culture (MOEC). The new mission of MOEC is to increase the number of learners enrolling in SMK schools to achieve a greater proportion (60%) compared to those studying in academic senior secondary high schools or Sekolah Menengah Atas (SMA). This effort is being undertaken to reduce their workers' skill mismatches. Thus, it is expected to increase job creation, and to support the productivity, competitiveness, and growth of the country (Organisation for Economic

Co-operation and Development [OECD], 2015). Furthermore, vocational education and training provide more direct pathways to the labour market (OECD, 2016).

The increasing number of students at vocational institutions should be accompanied by improvements in the quality of vocational education. High-quality vocational education will be achieved if the process of vocational teaching and learning is implemented effectively and met with high standard. Research has shown that the quality of teaching is a decisive factor in improving the learning outcomes of students. The results of a recent review of 20 of the world's top education systems concluded that the quality of the education system could not exceed the quality of its teachers. So, it is suggested that the only way to improve student learning outcomes is to enhance the instructional process managed by teachers (Barber & Mourshed, 2007). Teachers are required to be able to develop the learning process through the learning objectives. In line with the objective of vocational learning, which is to prepare students for work, vocational teachers have to be able to follow the development of science and technology in their field. This capability will be more easily achieved when teachers have HOTS, due to the dynamic nature of science and technology.

To enable the learner to retain HOTS for a longer period of time, or even forever, each particular skill is not applied through a single technique or process; rather, a combination of all of these processes is

employed to develop a unique learning experience. The opportunity to develop critical thinking skills can be obtained if the teacher purposely and persistently practices higher order thinking strategies in the implementation of teaching and learning, for example through open-ended class discussions, real-world problem solving, and encouraging inquiry-oriented experiments (Miri et al., 2007). Teaching collaboratively provides the instructor with an opportunity to improve their teaching practice and makes the professional development of the teacher more effective (Jao & Mcdougall, 2015).

Lesson Study has been used widely in Japan for many decades as a professional development approach that is often credited for the eternal restoration of Japanese learning instruction (Fernandez & Yoshida 2004). This professional development practice engages teachers in the process of systematically examining their teaching to become more effective (Myers, 2013). Lesson Study is a professional learning approach in which a group of teachers works together to: formulate learning objectives and long-term development; plan a design for a research lesson as an attempt to achieve those objectives; carry out the lesson in a classroom, with one team member teaching and the others gathering evidence on student learning and development; and then discuss and debrief the live lessons and evidence gathered during the learning process, and use the findings to improve the quality of both research lessons and lessons in general (Lewis, 2009).

Lewis et al. (2006) called for Lesson Study research in three areas: "(1) expansion of the descriptive knowledge base on Lesson Study; (2) explanation of the Lesson Study's procedure (that results in instructional improvement); and (3) iterative cycles of testing and refinement of Lesson Study". This research was focused on repeating cycles of testing and refinement of Lesson Study by applying a multi-method approach, which comprised a combination of three learning methods, i.e., self-directed learning, collaborative problem-solving, and summarisation, in a learning process to develop students' HOTS. The multi-method approach was employed to optimise the benefits and minimise the disadvantages of each model, especially with the aim of developing the HOTS of pre-service vocational engineering teachers.

The research goals were to answer the following questions: 1) what does the implementation of Lesson Study cycles with multi-method learning for the engineering learning process look like? 2) How effective is Lesson Study with multi-method learning in contributing towards HOTS among pre-service vocational engineering teachers? In this study, the development of HOTS in pre-service vocational engineering teachers through the application of multi-method learning will focus on analytical and critical thinking.

METHODOLOGY

Research Design

This is a multiphase mixed methods design (Creswell, 2014) which was conducted

following a series of Lesson Study activities adapted from Cerbin and Kopp (2011), as shown in Figure 1.

A multiphase mixed methods design was chosen in this research approach because it is suitable with the objective of this research that was to understand the need for an impact of an intervention program, i.e. the lesson study. This program consists of multiple phases which may go back and forth between quantitative and qualitative studies, but they build on each other to address a program objective.

Data obtained from the plan session was a set of the lesson plan. The information obtained based on data in the plan session becomes the basis of the next session, i.e. the implementation stage. At this stage, the gathered data consists of pre-service teacher's paperwork, presentation materials, summaries, and the observation sheets. The result of data analysis from the implementation stage gives information for

the next session that is a debriefing session. Its session delivers transcript as qualitative data, which the information within the transcript is used as the main reason to carry out the next cycle of the lesson study program.

This article focuses on HOTS development in analytical and critical thinking through lesson study research. Analytical skill builds as the ability to make decisions based on the information gathered. Critical thinking is described as the ability in deciding what to believe or do based on reasonable reflective thinking. Pre-service teachers' scores for analytical and critical skill are gained from their collection of articles and the literature reviews that they created relating to the subject matter, the observation during class discussion, and the summaries they made.

To find out how the pre-service teacher understood with the collected article, a rubric for doing a content analysis of the
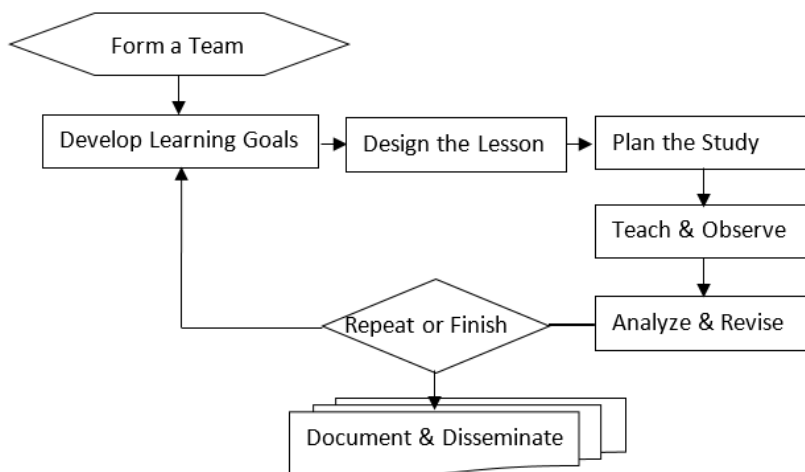

Figure 1. Steps in lesson study

pre-service teacher' written reviews was made. The analysis itself involves an iterative process. The article and the written reviews is read repeatedly, interpreting and reinterpreting the written reviews, and searching for part of the article that corresponds to written reviews. The rubric consists of items for assessing analytical skill in terms of collecting and organising information, analysing information, reading with comprehension, and identifying appropriate materials. While for assessing critical thinking, the rubrics include items to identify the source of information, to compare such information to prior knowledge, and to form conclusions.

The other data regarding to analytical skill are collected from written summaries. Pre-service teachers forced to do such analytical activities described above in order to make it not only brief but also comprehensive one. A rubric for scoring analytical skill based on summaries data consists of several key items in the relevant topic.

The observation sheet provides data regarding critical skill which is collected during class discussion. The focus of the observation is on critical skill ability in terms of identifying conclusions, reasons, and assumptions; the quality of an argument; develop and defend an idea; and draw conclusions (Larsson, 2017). The number of pre-service teachers that is shown those abilities listed on the frequency tables as a part of the observation sheet along with the description of the abilities shown.

Participants

In this study, groups consisting of three Steel Structure engineering instructors collaboratively attempted to enhance HOTS through Lesson Study research. All pre-service vocational engineering teachers attending the Steel Structure course at a Teacher Training and Education Department from a state university in Indonesia (n=68) were invited to participate. The pre-service teachers were in their fourth semester of a 4-year undergraduate pre-service teacher programme.

Procedures

Lesson Study activities was begun with the formation of the team. Once the team was formed, the members formulated lesson objectives as listed in the syllabus. In the next step, the research lesson was planned by the team by designing the type of learning to be applied. Here, learning was designed using a combination of three learning models, i.e., self-directed learning, collaborative problem-based learning, and summarisation. In the implementation phase, the learning process using a multi-method approach begun with self-directed learning, in which pre-service teachers were directed to collect information about the subject matter from various sources using Web-based Instruction. In the next session, collaborative problem-based learning was performed. A mix of several techniques, i.e., Make a Match, Pre-service Teacher Team Achievement Division, and Number Heads Together were used in this session. The last session involved each pre-service teacher summarising the process in their own words.

During the implementation stage, one of the team members served as a teacher and the others as observers. Those tasked with observing the course of the learning process were to gather data using observation guidelines that had been prepared previously (Cerbin & Kopp, 2011). The data observation results were divided into two categories. The first comprised data that came from the pre-service teachers' assignments, i.e., paperwork, presentation materials, summaries, quizzes, and final tests. The remaining data came from pre-service teacher activity observation sheets. In the next stage, the team analyzed the results of the implementation of the learning model and assessed the pre-service teachers' progress towards the learning goals through a debriefing session. If necessary, the team revised the lesson plan to produce the optimal design based on the results of the analysis. The transcripts from this debriefing session were collected.

RESULTS

The Implementation of Lesson Study Cycles with Multi-Method Learning

In the First Cycle of Lesson Study. The first cycle began with self-directed learning; all pre-service teachers had collected related papers from several sources and produced article reviews. However, this session was not taken seriously by most pre-service teachers. The pre-service teachers did not read their articles well. This was reflected from the article reviews, which merely resembled very short summaries.

Collaborative problem-based learning was performed by using a mix of several techniques, i.e., Make a Match, Pre-service Teacher Team Achievement Division, and Number Heads Together. The lesson plans describe clearly each step of the instructional design applied in this lesson study research. Each pre-service teacher was given a random card. Their group number and the problems that must be solved were listed on the card. Pre-service teachers with the same group number were gathered into one group. There were 13 groups involved in the learning activities with each group consists of 5-6 members. The problems to be solved were different for each group member. All the problems were discussed with team members, although each member of the group was responsible for solving the problems stated on their own card. During the solving of various problems, pre-service teachers performed high order thinking actions, from accessing their knowledge of law formulations and the respective conditions of the studied process to drawing connections between the characteristics of the processes already known and those unknown. They then explained and made a quantitative assessment of the results of the study (Politsinsky et al., 2015).

All the members of a group were to be ready if selected to present the results of their work in class at the end of the session. Assessments of discussions and presentations were carried out during the session. Then, each of the pre-service teachers was given a quiz. This quiz was performed to determine the effectiveness

of the learning method, as well as forming part of the achievements of each group. The group with the highest scores was named the best group and given a reward. In the last session, each pre-service teacher had to provide a summary of the process in their own words, and then the final test was taken.

During the collaborative problem-solving method, the activeness of the pre-service teachers was not evenly distributed in the classroom. Only those who already understand the purpose of learning and highly motivated to learn were seen to be active during the learning process. The instructor appeared in dividing their attention throughout the class. Summarisation also did not receive enough attention. Pre-service teachers made their summaries carelessly; moreover, some of them even cheated by copying the peers' summaries.

Based on observations made during the implementation of Lesson Study in the first cycle, the monitoring team then held a debriefing session. In this session, the team analyzed the implementation of the learning process by using a multi-method approach, the difficulties encountered, and the achievement of the pre-service teacher learning outcomes associated with learning objectives. They then agreed to some refinements for the Lesson Study process. Those refinements were: 1) The instructor should more actively cultivate the curiosity of pre-service teachers with the inducement of questions. 2) The classroom needs to be rearranged. The monitoring team needs to be positioned so as not to interfere with the mobility of teachers. The positions of pre-service teachers during the discussion with the group and their position in the summarisation session need to be set so that the purpose of each session can be achieved. 3) The instructor should give equal attention to all pre-service teachers. Pre-service teachers who did not actively need to be given more attention should be motivated to become more active. 4) Time management implementation in the classroom needs to be improved. The instructor should be more active in instructing pre-service teachers to use the time more effectively, especially when switching between sessions.

In the Second Cycle of Lesson Study. The second cycle again started with self-directed learning. This involved pre-service teachers collected articles from the web, and then asked to create a literature review which contained a summary of the content of the article, the strengths, and weaknesses of review articles, and guidance on how to apply the information from the article in the subject course. Through this technique, the pre-service teachers were encouraged to read by the aim of understanding, analyzing and identifying information.

To further streamline the discussion groups, the number of group members in the collaborative problem-based learning sessions was reduced to 3–4 pre-service teachers. The class setting for discussions would be easier for a small group. Instructors needed to be more active in instructing all pre-service teachers to move more quickly when forming groups based on the distribution of the cards.

Before starting classes, pre-service teachers were asked to pose some questions about aspects of the subject to be discussed that they had not understood based on the literature they had read previously. Then, the pre-service teachers exchanged questions and answers via a group quiz game. The group who could answer the most questions correctly would receive a reward. The instructor acted as a judge and also clarified the answers given by the pre-service teachers. With this technique, the questions discussed in class during the problem-based learning session were expected to focus on issues that had not been understood by the pre-service teachers. An outline for summarisation was given to ensure the pre-service teachers' summaries were better planned and more orderly.

The Contribution of Multi-method Learning in Developing HOTS

Pre-service teachers' score on 100 scales related to HOTS studied here were obtained by using the assessment rubrics. The final score was the average from all items which was observed covering the ability in collecting and organizing information, analyzing information, reading with comprehension, identifying appropriate materials, identifying the source of information, comparing such information to prior knowledge, forming conclusions, and drawing up a comprehensive summary.

The scores then were divided into fourth categories involving; "very good" for score 80-100; "good" for score 70-79; "fair" for score 60-69; and "poor" category for score <60. Score distribution for each

criterion was based on the applicable standard assessment in the institution where this study was conducted. Pre-service teachers were graded according to the score achieved. For critical thinking skill derived from the frequency tables, students' scores are based on the number of ability criteria indicated during observation. Pre-service teachers who showed three or more abilities were in the "very good" category. It revealed two other abilities in the "good category", while bringing out one ability was in the fair category, and if it did not show any ability will be categorized as "poor".

The pre-service teachers' score related to the HOTS from the first cycle showed that some of them reached "very good" achievement (21.9%), while 40.6% were deemed "good". Fewer pre-service teachers fell into the "fair" and "poor" categories (25% and 12.5% respectively). Meanwhile, the results of the development of HOTS among pre-service teachers in the second cycle showed that 34.4% had the very good achievement and 28.1% were good, while 31.3% were fair and only 6.3% remained poor.

This research did not mention the initial score because HOTS score here derived from data collected during the lesson study program, which did not apply before. From the two cycles of lesson study conducted, the number of pre-service teachers who reached very good achievement was increasing 12.5%, while the number who placed in the poor level was decreasing 6.2%. However, the paired t- test analysis – found that there was no significant difference

(N= 68, T= -1.38, P= 0.173), between the first cycle score (mean= 71.56, SD= 7.69) and the second cycle score (mean= 73.31, SD=8.75). This showed that although there was an increasing level of HOTS achievement but not significantly made different. Implementing and improving lesson study in the next cycle needs to be done. Therefore, more significant HOTS enhancement can be obtained. .

HOTS was developed through a series of activities, started with self-directed learning, to test pre-service teachers' ability to collect, organise, and analyze information. This learning method also contributes in developing the ability to read with understanding and to identify the materials needed and not. The results were seen in the articles derived from the collected materials and in the literature reviews they produced. The pre-service teachers demonstrated their ability to identify the source of a piece of information, analyze its credibility, reflect the consistency of information, and make conclusion about the subject matter based on the information that they had collected. However, the analytical skills of the pre-service teachers still needed to be improved. Their abilities regarding to analyzing information, reading comprehension, and identifying the materials needed were not refined well. This can be observed from their performance in the quiz, where most pre-service teachers experienced difficulty in solving the problems, despite the questions being related to the articles that they had submitted.

During the collaborative problem-solving method, pre-service teachers enhanced their critical and analytical thinking skills through problem-solving activities, which involved exchanging ideas in a discussion, creating new ideas, and evaluating them. Moreover, they taught and learned with their peers. They also learned how to communicate their understanding, analyze other opinions, receive the appropriate opinions, and to draw suitable conclusions from the data provided. Creating a summary aimed to develop the pre-service teachers' skills in mapping information and, in turn, improve their analytical and critical thinking abilities, as well as to instil a deeper understanding of the meaning of information.

DISCUSSION

The Implementation of Lesson Study Cycles with Multi-method Learning

The implementation of Lesson Study in the daily learning process is in line with efforts being undertaken to achieve high-quality and sustainable professional development of teachers. Lesson Study can be adapted to meet the needs of teachers and to satisfy certain professional learning outcomes (Saito, 2012). Further, Saito (2012) suggested that it was important for teachers to consider how to enhance their quality of learning by discarding unnecessary activities and replacing them with activities that were more meaningful; this strategy must then be applied in daily teaching.

The multi-method approach which was applied in this Lesson Study allowed pre-service teachers to create, integrate, and generalise knowledge, one of the main attributes of learning (Bicknell-Holmes & Hoffman, 2000). This was an active form of learning, which was based on the process and not on facts. The pre-service teachers learned from their mistakes and failures during the process. Feedback was required to ensure pre-service teachers gained a deeper understanding. Such an approach distinguishes between inventive learning and traditional learning (Bonwell, 1998; Mosca & Howard 1997; Papert, 2000).

Pineteh (2012) proposed that lecturers should be able to creatively integrate traditional teaching and learning methods with technological advances so that the learning process would be more engaging. In this Lesson Study, a multi-method approach was applied to the subject of "Steel Structure" to enhance the HOTS of pre-service vocational engineering teachers. The multi-method approach was combined with three learning methods, i.e., self-directed learning, collaborative problem-solving, and summarisation. Through Lesson Study, pre-service teachers were considered to have become more capable of listening and collaborating with peers, as well as having become more confident and respectful (Saito & Atencio, 2013).

Self-directed learning was intended to cultivate self-education among pre-service teachers, in order to reduce their total dependency on the lecturers (Din et al., 2016) and to ensure they are better prepared

for the subject before entering the classroom. Self-directed learning is a central element in higher education and encompasses any learning activities that take place outside of class hours or scheduled events. Independent activities may be in the form of online learning, studying in the library, or group work. Online learning environments help the students to gain knowledge and develop their views and interests in a way that enhances their novel and adaptive thinking (Kapenieks, 2016). In self-directed learning, something about going to happen depends on the individual's commitment and initiative. Individuals select, organize and evaluate their learning activities, which can be performed at anytime, anywhere, by any means, and at any age. Self-directed learning activities can be carried out by teachers in schools at every opportunity.

Collaborative problem-based learning is an educational approach to teaching and learning which involves groups of pre-service teachers working together to solve a problem. The problem-solving process provides an opportunity to understand the topic in more depth and to develop a comprehensive idea based on the realities encountered. The skill of problem-solving is the best criterion for evaluating the level of mastery of learning the material and is a skill that is required by any professional engineer (Politsinsky et al., 2015). Yusop et al. (2015) noted that "Problem-solving is a series of techniques, both cognitive and behavioural that can be applied in various fields or areas to generate solutions". This definition is in line with the character of

HOTS, i.e., that it does not apply only one technique, process, or skill but rather a combination of them. For this reason, this study employed problem-solving as part of the multi-method approach to the learning process. The results of previous researchers (Politsinsky et al., 2015) had indicated that problem-solving was an effective method to teach school and university pre-service teachers the general methods of mental activity, especially analysis.

Summarisation is a part of the learning strategy. Several studies have shown the benefits of summarisation (Anderson & Thiede, 2008; Thiede & Anderson, 2003). Creating a summary involves a process of presenting data from many sources to the user to make an abstract concept easier to understand (Mohan et al., 2016). The most significant increases in pre-service teacher learning outcomes occurred when summarisation took the form of a kind of recitation. This required VGNA (Verbal, Graphical or Geometric, Numeric, and Algebraic) concept activities, in which pre-service teachers were taken out of their passive learning environments and integrated into environments of active learning where, through the use of the VGNA concept activities, they were able to construct knowledge (Watt et al., 2014). Through analysing pre-service teacher's summaries, instructors could pinpoint gaps not only in the teachers' learning but also in their knowledge. The instructors were, thus, more adept at identifying their pre-service teachers' needs in order to achieve the next steps of the learning process (Limbrick et al., 2010).

The Contribution of Multi-method learning in developing HOTS

Learning methods that are appropriate for teaching and learning not only aid the learning process, but also contribute in improving soft skills among pre-service teachers (Esa et al., 2015). To ensure that these soft skills instilled in pre-service teachers, appropriate and better organized instructors are required to be more creative in devising strategies for teaching and learning (Morris, 2009). Kuhn (2005) stated that teaching focussed on improving HOTS was essential to equip pre-service teachers to participate in and contribute to modern democratic societies.

HOTS can be conceptualized as multiple, non-algorithmic modes of thinking that often deliver multiple solutions (Miri et al., 2007). Learning experiences which are considered to involve HOTS include answering questions, decision making, and critical and systemic thinking (Dillon, 2002; Zohar & Dori, 2003; Zoller et al., 2002). Formal education, from elementary school to postgraduate level, strives to produce pre-service teachers who master analytical, problem-solving, and critical thinking skills.

This multi-method approach gave pre-service teachers the opportunity to enhance their analytical skill through diverse activities, such as analyzing texts and evaluating others' opinions. Analytical skill refers to the ability to make decisions, in order to resolve both complex and uncomplicated problems, based on the information gathered. This ability is necessary for workers to solve problems that occur in the workplace and to maintain

productivity, as well as smooth functioning throughout the workplace.

Critical thinking requires a variety of skills, such as the ability to identify the source of information, to analyze its credibility, to compare such information to prior knowledge, and to form conclusions (Linn, 2000). Instructors should facilitate and encourage pre-service teachers' creative and critical thinking skills, and not concentrate too much or be too dependent on textbooks and their schools' aspirations, which are usually exam-oriented (Kabilan, 2000).

Pre-service teachers from any disciplines need to familiarise themselves with thinking analytically and critically. Phang et al. (2011) stated that all engineers should be inquisitive, analytical and critical. This statement was based on the fact that all engineers had to deal with a variety of theoretical concepts expressed in models, such as physical models of building structure systems, mechanical and electrical systems, and many others. These models should be embodied in forms that can be easily realised into actual structures. The significance of developing engineering pre-service teachers' critical thinking in their professional careers was recognized by Andreu-Andres et al. (2009), Kobzeva (2015) and Melles (2008).

In the globalization era, there is rapid dissemination of diverse ideas, techniques of production, and results of production. In relation to the world of education, this rapid process demands quick action, both from schools and pre-service teachers, to process information and apply it actively in the learning process. Through this learning process, pre-service teachers can apply the knowledge they have gained to new situations encountered in real life, by applying the skill of problem-solving. This method is known as problem-based learning and is usually undertaken collaboratively or jointly. Grover (2014) defined collaborative learning as "an active learning technique where pre-service teachers work and learn together in groups to accomplish shared goals". This technique provides pre-service teachers with the opportunity to enhance their critical skills through activities, such as exchanging ideas in a discussion, teaching, and learning with peers. Collaborative learning encourages the development of critical thinking through discussion, clarification of ideas, and the evaluation of other people's ideas. This type of learning is beneficial in improving critical thinking and problem-solving skills (Gokhale, 1995). A pre-service teacher with a high level of critical thinking usually will be more successful in defining and solving problems (Susar et al., 2015). The ability to solve problems can be gained from creative thinking which, according to Jonāne (2015), has a powerful connection to the development of meaningful learning and transfer skills.

Research has shown that problem-based learning develops pre-service teachers' attitudes such that they are more positive and encouraging in their approach to learning and helps pre-service teachers to retain knowledge longer. With a problem-based

learning approach in a collaborative learning setting, learners have the opportunity to communicate with each other, exchange diverse ideas and knowledge, or develop questions in a conceptual framework. Collaborative learning activities do not supersede lectures by the teacher, listening, or note-taking; those activities were retained and formed the basis of discussion group activities (Smith & Mc Gregor, 1992).

Politsinsky et al. (2015) stated that "Problem-solving allows: - understanding and learning the basic laws and equations, forming of the idea about their peculiarities and boundaries of application; - developing the skills and ability to use general laws for solving specific and practical tasks. The success in problem-solving is determined by the skill to perform analysis of the engineering situation, described in the problem, which is based on the skill to sort out the main thing".

Activities carried out during the educational process are directed to cultivate the ability of pre-service teachers such that they are not only able to acquire knowledge and understand ideas but can also synthesise thoughts and evaluate concepts (Brierton et al., 2016). One method of instilling HOTS among pre-service teachers is by encouraging them to actively participate in educational discourse. This term refers to activities involving discussion and the exchange of ideas, either verbal or written. In educational discourse, pre-service teachers discuss ideas, teach their peers, and learn with each other. In this research, this was accomplished through the collaborative problem-based session. This method provides an opportunity for pre-service teachers to communicate their understanding, as well as to build others' ideas (Barak & Rafaeli, 2004).

Summarisation is the process in which one presents a summary of a topic by extracting important information from textual sources (Mohan et al., 2016). In this study, summarisation was found to be helpful in developing pre-service teacher HOTS, especially the skills of analyzing and identifying information. The attainment of all of the pre-service teachers over time was associated with their involvement in Lesson Study (Had & Jopling, 2016).

CONCLUSION

Based on the above discussion, a multi-method approach to a learning process has the potential to develop the HOTS of pre-service teachers in terms of analytical and critical thinking. Self-directed learning enhanced analytical and critical thinking skills through activities involving identifying the source of information, analyzing its credibility, reflecting the consistency of information, and making conclusions. Collaborative problem-solving similarly enhanced these skills through activities in which the teachers exchanged ideas in a discussion, analyzed others' opinions, identified the appropriate opinions, and came to a conclusion with regard to diverse ideas. Summarisation was also found to be helpful in developing skills relating to analyze and identify information. Applying a multi-method approach that is tailored

to the characteristics and conditions of the pre-service teachers in each of the learning environments will improve their HOTS. The contribution of this article is to provide teachers and lecturers with information on how to design and implement a multi-method approach in their classroom learning to develop the HOTS of learners.

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Innovate Higher Education to Enhance Graduate Employability

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ABSTRACT

The Researcher Links Workshop was designed on how to innovate higher education to enhance graduate employability. A total of 34 early career researchers consisted of 20, 13, and one from Thailand, United Kingdom, and Vietnam respectively was selected as workshop participants. Researcher employed focus-group interview as a means of qualitative data collection amongst participants. These participants came to share and discuss scientifically what should be done to secure win-win solutions for improving the quality of higher education, increasing graduates' employability, and boosting the economy. The 34 participants were identified as influential change agents in transforming their teaching, learning environments, and research that reflecting on their pedagogical practice in working with students and industries. Thematic analysis was used to analyze individual data, as well as focus-group data. Since the workshop was planned to achieve the main aims including forming networking, knowledge transfer and change, research skills development as well as spreading effects related to innovative research, teaching, and industrial links, a study was carried out to measure the impacts from this workshop. The results revealed that there were five different mechanisms by which to enhance graduate employability, namely employers' involvement in course design; using technology to enhance employability; preparing graduates to apply theory in practice, educational challenges to the global manufacturing industry, and soft skills development to enhance employability. In conclusion, the results

contribute significantly to knowledge with regard to the development of the employability agenda in practice.

INTRODUCTION

University graduates' employability has become a major concern of higher education institutions, their graduates, and society. Employability is referred as a multi-dimensional concept. Knight (2002) and Yorke (2003) defined employability as a synergic blend of personal abilities, skills of numerous types and subject understanding. Many previous researchers showed evidence that there was a vibrant association between graduate employability and their participation in authentic learning undertakings (Finch et al., 2013; Smith et al., 2014; Sumanasiri et al., 2015). In other words, once lecturers learn of their students' learning potential through a series of knowledge-exchange learning activities and relevant systems theories and practices, in return, they will work collectively to transform the higher education institutions innovatively toward enhancing their students' employability.

Mason et al. (2009) referred 'employability' as 'work-readiness' in term of skills, acquaintance, assertiveness, and viable understanding proprietorship thus supported university graduates to create fruitful aids to organizational intentions immediately after initial employment. The construction between higher education and the economy is long-lasting and it is considered as a global issue. Therefore, the principal role of higher education is to convert graduates by improving their acquaintance, skills, approaches, and abilities and simultaneously permitting them as life-long, critical, and reflective learners (Harvey, 2000). This attention in employability is allied with innovative human capital theories and economic enactment. The higher education system is, therefore, being navigated to channel greater prominence on the graduates' employability (Maharasoa & Hay, 2001).

A Researcher Links Workshop titled as 'Innovate Higher Education to Enhance Graduate Employability' was aimed at how to innovate higher education for graduate employability in the knowledge economy which was conducted from 31st July to 3rd August 2017 at Asia Hotel Bangkok, Thailand. A total of 34 early career researchers consisted of 20 from Thailand, 13 from the United Kingdom, and one from Vietnam joined the workshop to share and discuss scientifically what should be done to secure win-win solutions for improving the quality of higher education, increasing students' employability, and boosting the economy. Since this Newton Fund Researcher Links Workshop was aimed to build the United Kingdom and Thailand collaborations centered on shared research and innovation challenges, the immediate benefit of the workshop is to provide higher education and policy makers a big picture of the interconnected

among research, teaching, and industrial partnerships that has been neglected in Thailand for so long. In addition, the long-term benefit of the workshop is to promote further collaborations between the United Kingdom and Thai researchers in connection with industries in the area of higher education innovation for sustainable development.

Literature Review

Holmes (2001) found that there was a necessity for an unconventional method to recognizing the complication of human conduct because most of the employability studies were based on skill approach. In order to identify this alternative approach for employability, undergraduate curriculums in higher education institutions must be enhanced. This is further supported by Knight and Yorke (2002) that employability could be inserted in any subject curriculum deprived of conceding academic autonomy or stakeholder prospects of present academic significance. Consequently, Knight and Yorke presented the USEM (Understanding, Skills, Efficacy beliefs, and Meta-cognition) model and reflected as a main progress in employability investigations with respect to additional constructs including skills, subject understanding, meta-cognition, and personal potentials.

Brown et al. (2003) studied on the concern of academics pertaining to evolving common skills and causing upsurges in employability. Brown et al. questioned the discerning behind the key skills and cost-effectiveness development initiatives.

Hence, Brown et al. enquired the realism of foremost curriculum deviations in a setting of inadequate aid, and suggested additional responsiveness is assumed in the direction of post-graduates induction programs than the pre-graduation period. Besides, Tomlinson (2007) highlighted that the switch from university to workplace entailed a dynamic participation for graduates who deliberated that employability was a vital matter that must be magnificently accomplished. Sumanasiri et al. (2015) further stated that employability advance process comprised enhancements in graduate profile, credentials, attitude, and labor market strategies while the tensions, pressures, and disappointment management also performed a crucial role as well.

Finch et al.'s (2013) study clearly demonstrated that employers placed the highest rate on soft skills and lowest rate on academic reputation. They further acknowledged the employability factors in descending order of priority was listening skills, interpersonal skills, verbal communication skills, critical thinking skills, professionalism, written communication skills, creative thinking skills, adaptability, professional confidence, job-specific competencies, leadership skills, work experience, job-specific technical skills, academic performance, program reputation, knowledge of software, and institutional reputation. In short, their findings indicated that enhancements to new graduates' employment must emphasis on learning consequences which were associated to soft skills development.

RESEARCH OBJECTIVES

To conclude the above literature review associated to the graduate employability, the researcher found the different interpretations on stakeholders' perceived employability concept. Employability hinges on not only the graduates' attributes for instance subject knowledge, practice, skills, and character qualities, but also on the faculty, curriculum, and instruction in university systems, in addition on the companies who employ the graduates and their prospects. However, only limited number of studies has engrossed on significant and conceptualization stages of employability (Mason et al., 2009).

This study was triggered by the internationalization of higher education and current socio-economic development of Thailand, where higher education institution is struggling to compete with its partners in the Asian region in terms of graduate employability. On this line of reasoning, this study aims to innovate higher education through developing learning, research, and teaching capacity to enhance students' employability.

This four-day workshop was essentially sought to interrogate the extent to which two different cultures participants share their understandings and expectations of employability; and how diverse and varied understandings and expectations of employability inform the way higher education societies and cultures respond to students' employability challenges.

METHODS

The researcher employed a qualitative method by way of a logical particular method utilized to pronounce experiences and situations to give them meaning (Burns & Grove, 2003). The rationale for using this research design was to discover and pronounce the views and experiences of higher education practitioners regarding their innovative methods to enhance graduate employability. A qualitative approach was suitable to seizure the views and experiences during several discussion sessions throughout the four-day workshop. The researcher utilized Morse and Field's (1996) approach which intricated three phases, namely the conceptual, narrative, and interpretative phases.

In the conceptual phase, the researcher conducted a literature review to explain the concept and content of graduate employability. It was needed for the researcher to do linking to put aside any preconceived ideas about the enhancement of graduate employability while developing her research questions. The narrative phase elaborated arrangement the research design and the researcher herself would be the core data collection instrument. A preliminary study was piloted with three participants who encountered the sampling standards and would not take part in the actual study. Finally, the interpretation phase is the experiential research phase involved data collection, analysis, and interpretation. Data collection comprised qualitative evidence that was collected during the discussion sessions. The researcher correspondingly explored articles to comprehend the setting of the enhancement of graduate

employability, for the purpose of providing a view of reality.

The research sample was all the 34 participants who had registered as participants of the Researcher Links Workshop. They comprised 13 United Kingdom participants, 20 Thai participants, and one Vietnamese participant. These participants must meet the criteria of the workshop set by the Newton Fund in collaboration between Thailand Research Fund and British Council that is they were early career researchers who had been awarded their Ph.D. not more than 10 years prior to the workshop or to have equivalent experience, with allowances made for career breaks. If a researcher did not hold a Ph.D. but had research experience equivalent to a Ph.D. holder and worked in a field where a Ph.D. was not a pre-requisite for established research activity, they could still be considered eligible. Participants must from non-profit organizations. A carefully selected sample was carried out by Thai and United Kingdom workshop coordinators respectively. Table 1 shows the list of workshop participants and their institutions.

Data were collected during the six discussion sessions after those participants presented their research verbally through the four-day workshop. Attaining data from participants with diverse practice enriches the evidence and therefore accumulative the reliability of the data (Parahoo, 1997). A workshop discussion is an interaction between one or more participants and more than one participant for the purpose of assembling data (Parahoo, 1997). The researcher utilized this method for the determination of stimulating impressions, thoughts, and views about graduate employability enhancements linked to higher education (Holloway & Wheeler, 2002).

In this research, the researcher herself was the principal data collection instrument because the data from participants were arguments in the setting of the research problem (Holloway & Wheeler, 2002). This method permitted larger autonomy in case responses, therefore, the participants would deliver detailed evidence concerning the graduate employability phenomenon. To guarantee the reliability of the data, the researcher video recorded those participants' views and experiences along the six discussion sessions. In order to allow flexibility in the data collection, the participants were not influenced by the researcher's preceding knowledge of the phenomenon, but by their individual understanding (Polit et al., 2001). The method used to analyze the qualitative data was thematic analysis**. Thematic analysis is a method of identifying, analyzing, and reporting patterns **(**themes**) within data **(**Braun & Clarke, 2006**). Researcher measured and examined the occurrence, connotations, and associations of such arguments and ideas, then made implications about the messages within the transcripts**.

RESULTS

Results of the six discussion sessions are presented in accordance with the two research objectives which are indicated

Table 1

Workshop participants and their institutions

Country	Institution	Participant indication	No of participants
Thailand	Khon Kaen University	P11, P12, P13, P14, P15, P19	6
Thailand	Chiang Mai University	P2, P3, P10	3
Thailand	Kasetsart University	P4, P8, P17	3
Thailand	Shinawatra University	P7, P20	2
Thailand	Stanford International University	P1	1
Thailand	Mae Fah Luang University	P5	1
Thailand	University of Phaoyao	P6	1
Thailand	Chulalongkorn University	P9	1
Thailand	Ubon Ratchathani University	P18	1
Thailand	Nhongnakamwittayakorn School	P16	1
United Kingdom	University of Nottingham	P23, P27	2
United Kingdom	University of Westminster	P30, P32	2
United Kingdom	University of the West of England	P21	1
United Kingdom	Fanshawe College	P22	1
United Kingdom	University of Brighton	P24	1
United Kingdom	University of Bath	P25	1
United Kingdom	De Montfort University Leicester	P26	1
United Kingdom	London Deanery	P28	1
United Kingdom	Robert Gordon University	P29	1
United Kingdom	Southampton University	P31	1
United Kingdom	Higher Education Academy	P33	1
Vietnam	Nguyen Tat Thanh University	P34	1

above. The research objectives provided the structure and focus of workshop discussion. A number of recurring themes emerged. The initial result is the participants' understanding and expectations of employability. This is followed by how diverse and varied understandings and expectations of employability inform the way higher education societies and cultures respond to students' employability challenges according to the participants' views and experiences. The following is the summary of such themes and reflects on some of the key results of the workshop discussion.

Participants' Understanding and Expectations of Employability

Majority of participants were very positive toward their higher education performance in terms of graduate employability. Generally, the United Kingdom participants defined graduate employability as 77.5% of the graduates consistently outperformed the higher education sector in professional or managerial jobs after six months of their graduation or 95.6% of the graduates were in work or further study after six months of their graduation while 99.1% of the graduates were in employment or further study three and a half years after graduation, compared to the national average of United Kingdom as 97%.

The qualitative results discovered extensive variances between universities and between countries in the techniques that teaching staff required to deliver employability skills or improving practices. Majority of them stated that they focused on teaching communications, presentation, and other generic skills to enhance their students' employability. Conversely, those participants who were from social sciences field still had a habit of concentrating on preparing their students with the abilities they taught as vital for an upright practitioner in the conviction that these abilities themselves were transferable into various professions. These were indicated in the following verbatim data:

"I like to see the subjects that I teach as vocationally oriented, however, there was variation in how this prejudiced the conveyance of employability skills instruction." (P2)

"For instance, the design courses all clearly hunted to prepare students with employability skills, to some extent because many of our graduates go in a very reasonable economic situation…" (P9)

"In my university, as long as the students can get employment or further study, we consider that we have equipped our graduates with sufficient employability." (P22)

"Employability should be an aim of any teaching, with the purpose of increasing the graduate's probabilities of gaining occupation and being successful in his or her profession." (P1)

The Way Higher Education Respond to Students' Employability Challenges

(i) Employers' involvement in course design

Majority of the participants highlighted that employers' involvements in course design and delivery contributing in graduate employability such as their comments on the significance of course content to future employment prospects, providing material and ideas of graduate projects, and giving guest lectures. In some cases, an employer/industry advisory group happened through recognized attachment, it mostly be influenced by personal relations between employer agents and higher education staff. This point of view was raised by P33.

"Four of the universities in the UK consisting of The University of Manchester, Newcastle University, University of Leeds,

and Northumbria University Newcastle were involved in High Education Academy Embedding Employability Strategic Enhancement Program (SEP) 2015. This program encompasses institutional and discipline led projects, High Education Academy consultant support, network events, and research, case studies and resources. Currently, there are 37 high education institutions utilized the employability framework and High Education Academy acts as industry advisory group." (P33)

P8 added that the current drivers of change need for knowledgeability within business employees and global market transparency and developments. Therefore, she said that the strategic level intention was providing market opportunities and growth but operational level capability were included staff capability and capacity, technological systems for processing, the flexibility of curriculum design and delivery.

"To my opinion, the course and program designers at university level should implement strategy according to the required standard within operational constraints." (P8)

(ii) Using technology to enhance employability

P25 shared his experience on how to facilitate underprivileged students in their transition to the workplace using technology to enhance employability. P25 mentioned that his university had provided help to assist underprivileged students by giving guidance on how to produce curriculum vitae, cover letter, and also attended their career interviews.

"Continue with the constant email support and putting on the sessions, being pro-active, treating each student as an individual and having the keenness to help." (P25)

This view has been further supported by P1 who mentioned that graduate's resume, interview, essays, references could all work to enhance their employability. P1 studied the e-learning and its relationship to the employability of graduates from hybrid MBA program.

"Critical thinking can be promoted via online learning, e.g. strategies such as learning reflections and discussion boards." (P1)

In addition, P13 added that placement talks or workshop delivered by the companies found to be useful to enhance employability.

"To my opinion, such workshops or placement talks should include the topics like how to use LinkedIn, write the job application, their confidence while going for their interviews." (P13)

Furthermore, P14 shared her experience on how to enhance employability by having speed meetings with employers, company presentations, placement fair, and placement office open day.

(iii) Preparing graduates to apply theory in practice

According to P33, learning and assessment is a 'process' over time which creates value that goes beyond the moment of change. P33 added that:

"Making graduate employable, lecturers should add further to the initial value of

their learning. However, lecturers have to realize the value of graduate capability."

"First of all, we should consider the value of curriculum design that associated with teaching practice. Then we establish a sense of the reality by applying the sense-making theory to curriculum design. This will create knowledgeability that is the intention of what we know and what we are able to do"

P32 also had the same points of view on this matter. She emphasized that the practical application in conjunction with theories was essential in preparing students to meet the demands of today's labor market. According to P32:

"University trading centers or trading rooms has brought the real world business platform to the classroom. It is of course powerful and sophisticated. The theory comes to life through real and simulated exercise and projects. For example, creates training laboratories, offer unique experiential learning cycle, and facilitate interdisciplinary."

"The roles of real-world business platforms can enhance the existing curriculum, provide linkage to the business community, and supply in-house training. This will provide our students with the needed competencies in a professional setting."

(iv) Educational challenges to the global manufacturing industry

P31 found that the current higher education society had less interest in manufacturing related subjects. Gender inequality can be one of the main factors because there is a continually low recruitment of women in engineering. According to P31's research findings show that:

"Lack of employees with the right skills to fill the positions. Many people still perceive working in manufacturing firms are having low income and long working hours. On top of that, the retiring workforce is declining the recruitment."

"In order to improve the links between academia and industry, several events are required such as the establishment of Centers of Excellence, Studentships (e.g. Industrial Case Awards), Industrial Workshops, Work Experience or Internships and Promotion of Manufacturing Careers to students at the university." (P33)

(v) Soft skills development is important to enhance employability

P5 had carried out the employer satisfaction survey and graduate job survey from the year 2013 to 2015. Her research findings showed that graduate's study field fitted with the job had become the key reason for the graduates to obtain employment and the percentage was constantly increasing from 42% to 55% for the consecutive year. Besides, soft skills such as communication skills, good personality, and computer skills are the essential shared attributes between employers and graduates in employability enhancement.

"Our SWOT analysis shows that communicative skills, computer skills, interpersonal skills, and knowledge are the strengths of my institution. However, graduates are weak in their thinking skills.

In order to enhance employability, lecturers should go for training. Time, cost, and human resources are our threats." (P5)

In addition, P1 agreed with P5 that strong communication skills could enhance graduate employability. P1 mentioned that soft skills, people skills or emotional intelligence were the strengths of her MBA students. According to P1:

"Recruiters have noticed that even students from the best university in Thailand can't always communicate well or don't know how to express their concerns tactfully during presentations."

"For example 'Airport test' where the interviewer gauges whether he or she would enjoy being chatting with you during a layover or would rather be swallowed up by baggage claim. Show that those MBA students have those soft skills that future employers will value highly"

DISCUSSION AND CONCLUSION

Currently, there are the significant means dedicated to the determinations to cultivate graduate employability either in Thailand or United Kingdom universities. In this article, the researcher has assessed the impacts of diverse types of higher education skills' inventiveness on graduates' working performance. Utilizing the comprehensive data gathered from the Researcher Links Workshop discussion session, the researcher distinguishes between five different mechanisms by which to enhance graduate employability: employers' involvement in course design; using technology to enhance employability; preparing graduates to apply theory in practice, educational challenges to the global manufacturing industry, and soft skills development to enhance employability.

The results revealed that innovative technologies and improvements in the higher education system are regularly believed of as drivers for enhanced educational outcomes in terms of graduate employability. This implies that innovative capacity in the economy requires innovation within the educational sector itself to be improved. In other words, innovations in higher education teaching methods have to be invented and implemented by the individual lecturers. Only high-quality teachers who are able to bring the best knowledge and skills as well as the most relevant evidence from experiences in the real working environments into the classroom. The results are in alignment with Brown et al. (2003), Finch et al. (2013), and Sumanasiri et al.'s (2015) results.

The current technological improvements have changed the skills demanded in the workplace. When the demand for the skill and knowledge forms deviations in the employment, the higher education sector should counter respectively to ensure high employability and innovation in the economy. On this line of reasoning, the higher educational sector must respond by adjusting the content, the curriculum design, and the learning environments to fit the employers' requirement. The results further corresponding to the past researchers such as Finch et al. (2013), Knight and Yorke (2002), Mason et al. (2009), and Smith et al.'s (2014) results.

The results of this study revealed that innovations in teaching methods have to be a more intensive use of technology like computer and e-learning and have universally increased graduate employability. The evidence also clearly suggests that soft skills development like personal traits and character of graduates should be stimulated in an educational setting. The researcher argues that many policies can stimulate such changes and thus increase the innovative capacity of the higher education system, such as employers' involvement in curriculum design, increasing competition forces at higher education level by providing more autonomy to the institutions and more internationalization, and activating important stakeholders. It can be concluded that contemporary higher education is expected to facilitate a wider range of knowledge and skills development than ever before as human capital is the key to economic well-being (Pavlin, 2011).

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SOCIAL SCIENCES & HUMANITIES

Reinventing *Pesantren*'s Moderation Culture to Build a Democratic Society in the Post-Reform Republic of Indonesia

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ABSTRACT

The study aims to analyze problems faced by *pesantren* (Islamic boarding schools in Indonesia) in the Post-Reform Indonesia by employing a historical-critical analysis approach. By relying on the related literature, the writer focuses on some serious problems faced by *pesantren* today, i.e. the emergence of a number of rigid religious expressions contrary to democratic values and the culture of *pesantren*. As argued in this paper, *pesantren* fundamentally has values inherent in the democratic society. From a historical perspective, *pesantren* since its inception has demonstrated the nature of tolerance by accepting diversity of the community. The *pesantren's* moderation culture should be managed properly in order to create an understanding for mutual respect in a pluralistic society. At this point, *pesantren* as a tool to ignite social engineering needs to do a reformulation of its education system to form a democratic and civilized Muslim society.

Keywords: Democracy, moderation, *Pesantren*, radicalism, reform

INTRODUCTION

With the fall of President Soeharto on May 21, 1998, Indonesia, as believed by many people, experienced a number of changes, such as political stability, economic growth, and cessation of social and ethnic conflicts (Platzdasch, 2009). The conflicts appear to have intensified in the era of *reformasi*, in the two years since the fall of the Soeharto regime (Wilson, 2001). On one hand, this situation does confirm the existence of

pesantren to participate in voicing the values of democracy, pluralism, and human rights. However, on the other hand, it also gives a fresh breeze for the growth of transnational ideological movements which are castrated because the government at that time treated Islam merely as a religion and approached it as an ideological as well as political movement (Effendy, 1998). However, in the Reformist era, the government opened the door of democracy widely. This led to transnational ideology which evolved so rapidly and generated a new conflict between the pro-democracy groups and the counter-democracy groups. In fact, sometimes the presence of transnational movements is counter-productive and works as a hurdle to formation of a civil society and to implementation of democracy. Frequently, this situation also drags a SARA- (tribe, tradition, race, and religion) based conflict and leads to violence in the name of religion.

In his research, Helfstein (2010) showed that the Islamist movement in Indonesia was strongly rooted in early Islamist and *jihadist* thinking. The emergence of radical thoughts that always interpret *jihad* as *qital,* or fighting with arms, is indeed contrary to the teachings of Indonesian Islam famed with tolerance and peace. Such an interpretation is certainly very different from the perspective of *Kyais* (teachers) in *pesantren*. The term *jihad* does not necessarily mean war, but it is derived from the word *al-juhd* which means putting (hard)

efforts and earnestness. It can also mean "*trouble*" (Umar, 2008). Sometimes *jihad* is interpreted as "*to mobilize all abilities to fend off and confront an enemy that does not appear*" namely evil desires of *nafs* or ego (El Guyanie, 2010). This kind of *jihad* has seemingly proven to give birth to Islam in Indonesia, which is so peaceful.

The phenomenon of radicalism[1] has now become a worry to researchers, *kyiais*, and the Muslim community in general because it is often associated with *pesantren*. This fact is really strange considering the number of terrorists who become followers of ISIS (Islamic State of Iraq and Syam) are *pesantren* alumni. However, *pesantren* of this type is relatively small in number and they exhibit a set of ideologies and cultural values which are far different from the *mainstream* of *pesantren*. Though the non-mainstream *pesantrens* are few in number when compared to *pesantren* of moderate Islam (*al-wasathiyyah al-Islamiyya*), according to Wahid (2001), the voice of this group is impactful and seems to dominate political discourse in Indonesia.

Indeed, generalization and stigmatization of *pesantren* with disrespectful labels, such as the source of radicalism and terrorism, and attacking the *pesantren* are not new

[1] According to Rijal (2010), phenomenon of radicalism is product of the 20th Century in the moslem world particularly in the Middle East. Radicalism is the product of crisis identity faced by Moslems that trigger a resistant behaviour to the Western Countries.

subjects.[2] *Pesantren*, historically, has been connoted negatively by some people who are not responsible, such as people belonging to conservative, traditional, and closed institutions (Lukens-Bull, 2000; Rahardjo, 1974). In fact, *pesantren* in the history of education in Indonesia has never stopped developing and has always been dynamic, evolving, and moderate. The doctrines of *pesantren* that have a historical link with the spread of Islamic propaganda (*da'wah*) conducted by *Walisongo* (the nine saints) always attach to the values of humanity, brotherhood, and respect for diversity. The *pesantren's* education model of non-violence always sows peace and tolerance, acculturated with local culture. Therefore, with the openness and moderation invested, *pesantren* shows uniqueness as an institution that has always answered the actual problems of humanity.

As an old education system in Indonesia, *pesantren* has values that are always attached to the changing times. The *pesantren's* education system has always imparted the principals of humanism in every generation whereby these students are expected to maintain the continuity of history and ideology of the nation for the sake of civilization, culture, and humanity, in addition to being religious people (*tafaqquh fi al-din*). That is, *pesantren* always instill

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[2] See the synthesis from Bruinessen (2004), that formulates typology of *pesantren* namely, traditionalist *pesantren* and Islamist *pesantren*. In fact, Islamist *pesantren* follows the ideology of radical Islam Movement; however, substantial and essential Islamic teaching is taught in traditional *pesantren*.

a great responsibility for their students to be able to align the interests of education with the existing developments to keep up with other nations. The vision and mission of *pesantren* for religion, humanity, and state should be constantly held and passed on by *pesantren* institutions in the present era. This is especially to overcome and keep the *pesantren* education system from the infiltration of the pro-radicalism networks that threaten the government and society. This situation is a challenge for the *Kyais* as a form of responsibility to not only educate the students to have good manners, moderate character and value the diversity, but also promote a *counter discourse* against any form of radicalism that occurs in the name of *pesantren*.

The researcher aims to highlight the Reform Era with its political nuances. His second aim is to justify a thesis proposed by Hefner (2000) that held the dynamics of religion and society in the modern age were marked by the emergence of two phenomena. The first is the spread of democratic ideas to different communities and cultures around the world while the second is the reappearance of issues of ethnicity and religion in public affairs, such as the rise of Islamic movements in the Muslim world. The truth of this statement can be seen in Indonesia, especially in the Post-Reform era that gave rise to religious and social developments characterized by the emergence of various trends of thought and unique religious movements to manage conflicts.

METHODS

This is a retrospective and introspective study of the phenomenon of *pesantren*. To address the objective of this case study, an in-depth critical analysis of the history of *pesantren* as well as its *status qua* was conducted. The data source consisted of the related literature such as *kitab kuning,* journals, books in Arabic, English and Indonesian languages. The historical facts came from the library or directly from *pesantren*. A critical review and analysis of the data followed. Data analysis was interpretive. More specifically, it was based on William Leo Lueey's method in which all testimonies from a certain period are collected and evaluated in order to compile facts proven to have causality and then presented in a scientific description (Lueey, 1958). The data collection and analysis procedures involved collecting, evaluating, verifying, and synthesizing evidence to enforce the facts and obtain strong conclusions. In order to do this, *pesantrens*' activities were recorded as comprehensively and accurately as possible, and then the reasons behind those activities were analyzed. To obtain valid and reliable data and results, a panel of experts validated the data collection and analysis procedures as well as the findings.

RESULTS AND DISCUSSION

An Overview of the Post-Reform Indonesia

In the Post-Reform era, Indonesian society is confronted with various problems that, on one hand, test its maturity as a democratic society, while on the other, give rise to serious issues, such as fanaticism, radicalism, discrimination against minorities, and the growth of intolerance. In the United Nations Forum in Geneva in 2012, Indonesia gained appreciation in the human rights performance. However, still Indonesia needs serious work and improvement regarding escalation of religious intolerance and lack of protection of minorities (Baqir et al., 2013).

This reality is supported by a number of frequent events which reflect a lack of respect for human rights, such as diversity, and freedom of speech, and flourishing the seeds of terrorism in Indonesia. Suicide bombing activities ruin the image of countries and nations. Radicalism has been troubling the people and government of Indonesia in many ways. In order to solve this issue during the Bali bombing, the government through the Decree of Chief of Indonesian Police No. Pol.: Skep/756/X/2005 formed Densus 88 with the aim of maintaining the security of the State from terrorist attacks and stopping crime against humanity. From an Islamic perspective, terrorism is a tragedy that is contrary to the values of Islam, i.e. being tolerant, loving, and merciful to the world. The question is why there are people willing to sacrifice their lives and commit savage, cruel, and violent acts. Such radicalistic issues are compounded by the religious sentiments deliberately blown to tearing the unity of Indonesia as a society.

There is a desolate sociological fact in the country known as the *emerald of the equator* in the Post-Reform era. When the

faucet of democracy is turned on, it seems to provide fresh air to the fundamentalist and radical religious groups. The condition that should be used to exchange ideas, build the nation, and promote common prosperity is misused by the radical groups to recruit and exploit younger people to be narrow-minded, and intolerant—adversely affecting their core national identity. This group is skilled, intelligent, fond of using justification by different means, and has strong overseas networks. According to Blinder (2001), although the groups categorized as fundamentalists are small in numbers, they have very high motivation and determination and they are capable of forming militant cadres who are ready to sacrifice their body and soul.

Attitude and perspective of fundamentalist groups, according to experts, are typically characterized by literal interpretation of the religious texts and refusing contextual understanding, rejecting pluralism and relativism, monopolizing the truth on religious interpretation and considering their own interpretation as the best neglecting the others; they are identical with bigotry, exclusivism, intolerance, radicalism, and militancy. It seems fundamentalists have made their social and religious paradigm as an ideology following certain characteristics. First, there is an ideology formulated and adhered by the followers with the intention of achieving a particular goal. Second, there is an ideology that is used to achieve their political goals, usually aimed at encouraging, supporting, and strengthening violent behavior (Sumbulah, 2009).

The emergence of the phenomenon of religious expressions, which is rigid and self-righteous, in the present era is often exhibited by our society through social media, such as Facebook, WhatsApp, Twitter, and other social networks. These issues are potential causes of frictions among members belonging to various religious backgrounds[3]. Moreover, this religious *immaturity* is exploited by the irresponsible people in a sense that it ignites the sentiments of people who already had the seeds of hatred, to undermine the State symbols or kill other groups of the unbelievers; it is certainly very dangerous, like the fire in the husk.

Pesantren: The Source of Peace

Everyone agrees that *pesantren* is the oldest form of Islamic education in Indonesia, but it is unknown when it began. However, based on a number of statements from experts, the history of the *pesantren* establishment coincided with the growth of Islam in Java around the 15th and 16th A.D., about the same time as *Walisongo's da'wah* (propaganda) was taking place (Mas'ud et al., 2002). The primary characteristic of learning in *pesantren* is that it offers much

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[3] According to Bakri (2004), rationale of radicalism was born and developed due to the religious emotion, cultural factor, and factor of anti-western ideology. Some factors emerge because of an understanding that West is accused as the cause of the decline of moslems with their political strategy and secular culture brought by them. Besides, there are also phenomena of economy and politics. Another argument reveals that radicalism emerges due to excessive capitalism.

more emphasis on the development of a moral character and indigenous Javanese culture. Therefore, the face of Islam that was transmitted by the *Kyais* in *pesantren* is basically an inclusive Islam and spreads peace on earth (*Rahmatan li l-'Alamin*).

This was because the *Kyais* usually pass on the teachings of *Walisongo* who always taught good manners, tolerance and respect towards local cultures. *Da'wah* of *Walisongo* always offered a wide range of changes and social reconstruction for indigenous people without disturbing the local culture. There are at least three reasons why indigenous people so fast and easily accepted Islam. First, Islam is contextual. That is, Islam is understood as a doctrine associated with the context of time and place. Islam as a doctrine is always dynamic and people can easily adjust the changes taking place. Second, Islam is tolerant. That is, the contextualization of Islam can be understood as the result of interpretation or *Ijtihad*. Thirdly, Islam respects tradition. It is, on its character, not hostile to local traditions. Rather, the traditions serve as a means of vitalization of Islamic values that are familiar with the lives of its adherents (Sutiyono, 2010).

Therefore, on the arrival the *Walis* (guardians or saints) in Java, the Javanese culture did not fade away; rather, it grew and was consolidated. Although the Demak Sultanate, founded in the 16th century by the first king named Raden Patah (1475-1518 AD), applied the Islamic law with the *Quran* as source of the law reflecting the success of Islamic propagation, this did not mean that Javanese tradition and civilization perished. It can be stated that under the Demak Kingdom's civilization there was a continuation of the ancient Javanese Hindu civilization as claimed by de Graaf & Pigeaud (1985). Transition from the Majapahit Kingdom to the Demak Empire was used by *Walisongo* (the nine saints) to do the Islamization and turn elements of *Kejawen* (Java-related cultures) to the teachings of Islam. After the collapse of the Majapahit Empire in the early 17th century, the ruling dynasty was the Mataram Dynasty (whose territory covered an area of present Yogyakarta). The greatest king in Java in the post-Majapahit era was Sultan Agung who became successful in reconciling the intersection of the Javanese palace and the Islamic traditions (Ricklefs, 2013).

Along with the establishment of Islamic kingdoms, *Walisongo* established a model of education as a place to galvanize the *santris*, students. This was a proof of the nature of their preaching, which is flexible and accommodating. Thus, in making of educational models they also tried to reconcile Islam with the existing cultures. This kind of education system came to be known as *Pesantren*. *Pesantren* education system is considered as a modification of Hindu temples (Wahjoetomo, 1997). Steenbrink (1994) also considered *pesantren* as an institution similar to the Hindu tradition which was religious in nature. The *Kyais* are not paid but have great respect. They also live far from cities. Although *pesantren* is often associated with the Hindu-imitating education, called

as *padepokan* or the hermitage, it has a very noticeable difference. *Pesantren* does not recognize the caste system and nearly all students can learn in it. The system of Hindu hermitage teaches students from only special castes, i.e. the Brahmins and Kshatriya (Ditjen Bimbingan Islam, 1985) while the rest are largely ignored.

Considering the history of *pesantren* which is closely related to the tolerant teachings of *Walisongo*, it is counterproductive to regard *pesantren* as a source of terrorism enticing hatred against non-Muslims and attacking the country's symbols –especially after bombings in several places in Indonesia. It must be acknowledged that some terrorists, according to some experts (Coolsaet, 2008; Solahudin, 2013) are persons who have a relationship with one of the *pesantrens* in Central Java (*Pesantren* Ngruki) or with an alumnus from the *secondary pesantrens* (Ngruki). Even Amrozy Cs, the Bali-1 bomber gaining international attention, also provided recognition that he and his colleagues were alumni of *pesantren*. However, it is not wise if we hastily generalize that all *pesantren* alumni are terrorists. There are various types of *pesantren* in Indonesia, with different ideologies (Ma'arif, 2011). The *Pesantrens* have also experienced a rapid growth of dynamics which is evident.

The Reformulation of *Pesantren*

In order to ensure peace, education based on local wisdom in *pesantren* is imperative to re-think the entire concept of education that allows bringing the students to have open and inclusive thoughts and be able to accept the reality of social differences. It is an educational concept that seeks specifically to distance insularity and exclusivity. Moreover, *pesantren* education is expected to develop sense of responsibility for the continuation of their lives, society, country, and all humanity with peace and mutual respect.

According to Haryatmoko (2008), Islamic education has at least four ideal goals, including: (1) the acquisition of knowledge and skills (competencies) or the ability to respond to market demand, (2) humanistic orientation, (3) responding to the challenges of social, economic, and justice issues, and (4) the progress of science.

Of the four educational goals, the second point becomes important for education process as it promotes humanism. It is also important to note that Islamic education should uphold the rights of learners to acquire knowledge and information. Besides, Islamic education should also strengthen the spirit of nationalism of the learners. Moreover, based on history, Islam and nationalism have colored the development of the system of Islamic education in Indonesia. Since Islam came to Indonesia through the Dutch colonial period, through the Islamic education, Muslims have been trying to realize the values of Islam in public life, in addition to the Islamic nationalism, civil society, and democracy (Djamas, 2009). According to Madjid (1998), democracy is an ideology, not only because of principal considerations, i.e. the

values of democracy have been justified and supported by the spirit of Islamic teachings, but also because of its function as the rules of the open political game.

Moreover, in reality, there is synchronization between nationalism, democracy, and Islamic education, as could be traced in the early independence of the Republic of Indonesia dealing with the contribution of Muslim leaders. It also proves that nationalism, democracy, and Islamic education have a contribution that should not be considered trivial as they are the foundation of a personally qualified personality and ready to live in a pluralistic society in order to achieve harmony, peace, and unity with the principle of love for others. Islamic Nationalism, according to Purwoko (2001), is the determining factor that binds the spirit and loyalty to create an ideal State. In addition, the growth and development of nationalism have produced many independent countries around the world. This is because nationalism has played a very important and positive role in supporting the unity and democracy. As a result, the State can implement the national development as an effort to increase prosperity and improve the quality of education, especially the Islamic education (Purwoko, 2001).

The approaches used in *pesantren* should focus on the communicative and flowing approach full of tenderness. Kyai Ashari (1993*)*, in the book of *Adabu al-'Alim wa al-Muta'allim*, prescribed approaches to teaching and learning with an emphasis on ethics and morality. For example, a *Kyai* should love his students, and *vice versa*.

Schools of thought, culture, and ethnicity of the *santri*, or students, can also be used as material for discussion by comparing them with the schools, culture, religion, ethnicity, and beliefs of other people. This puts a positive momentum to boost cultural and religious diversity. In this context, it is the time for *pesantren* to redefine its curriculum that is moderate and responsive to contemporary issues. There should be no more curriculum of *pesantren* supporting or triggering religious radicalism, such as interpreting the word *jihad* with *qital* (war) and killing innocent people. Rather, *jihad* in Islam actually has connotation with seriousness and perseverance in realizing everything that is taken up as a destiny, a symbol of honor and sacrifice to others, and against any form of injustice that occurs in the community. The word *jihad* literally is derived from the word *jahada* that means "shedding the ability" (Asfar, 2003). *Jihad* should not be used to force people to embrace Islam, but to liberate all forms of oppression on earth regardless of any religion (Arkoun, 2001).

An important issue that cannot be forgotten, in addition to the factors above, is the support from teachers, clerics, and *Kyais* who are broad-minded. They are, in addition to the required competence of extensive religious knowledge, expected to have national and local wisdom. All of this needs to be done in order to create a harmonious and friendly religious life, mutual respect,

and interaction with each other in this beloved Republic. All of these steps can be immediately applied in *pesantren*, so that the label as the source of radicalism may disappear, a label that is very contrary to Islamic tradition and not in accordance with the teachings of Islam which is *rahmatan li l-'alamin.*

Some Important Characters Emphasized by *Pesantren*

In the context of Indonesia, *pesantren* as a sub-culture is understood to have a value system, in addition to its own central value. With contextual understanding of the *kitab kuning* (literally means yellow book) and other contemporary literatures, *pesantren* communities acculturate local culture with the values of *pesantren*. As an institution of the original product of the Archipelago, *pesantren* showed characteristic of *gotong royong* (voluntarily shared work) which is a part of Indonesian tradition. Other values of self-reliance developed by pesantren are independence, cooperation, patriotism, peace, tolerance, consultation, and equality.

The goal of the establishment of *pesantren* is to elevate morality, heighten spirit, and appreciate spiritual values and humanity (Dhofier, 1994). This is associated with the goals of education at the time of the Prophet that was to shape faithful companions and *Ummat* (people), and devoted servants to God as His caliph on the Earth who brought grace, peace, and prosperity (Majid, 2012). The educational institutions, including *pesantren*, which had been believed by many experts to be able to

form pious individuals, are unable to bring about a productive change in society.

Therefore, the idea of reinventing the culture of moderation in *pesantren* finds its significance in order to respond to the problems, especially related to culture of anarchism, which always appears one after another in the Republic and always uses the name of *pesantren*. In addition, the culture of moderation is also important for the sake of overcoming a number of humanitarian issues and restoring the face of Indonesian people who were formerly known as religious people and friendly with valuable cultures coming from religion and values of the intellect. For this purpose, *pesantren* should emphasize the creation of a complete generation, covering not only religious sciences, but also social intelligence, such as loving and caring for fellow human beings.

The values existing in *pesantren* are deemed successful in forming a positive character on the students because *pesantren* implements holistic education, such as learning, teaching, and character building or discipline. Some of these values are relevant to be explored and developed as a form of reinforcement of the noble ideals of the Nation. Some values in *pesantren* began to be neglected; thus, they need to be revived for a bright society in the near future. When emphasized and taught, those values will certainly contribute to realization of the State of Indonesia endowed with God blessing, or *baldatun thayyibatun wa rabbun ghafuur* (Octavia et al., 2014).

In addition, *pesantren* must design an educational system that is indispensable

in building the structure of a democratic and civil society.[4] The moderation culture should be realized in every *pesantren*. In addition to building peace education and saving the future of *pesantren's* students, all parties, and key stakeholders must cooperate with mutual introspection by trying to make smart breakthroughs to counteract all violent movements and vigilantes. *Pesantren* also requires a breakthrough in the learning practice to be able to transmit and internalize the expected values and finally create students with noble character. This expectation becomes important because, from the perspective of education, *pesantren* should serve as a fertile garden where the seeds of kindness grow; rather than, vicious hatred by labeling others as infidel and confronting the State.

In this regard, the importance of *pesantren* education and training based on local wisdom is an effort to humanize humans, by encouraging them to morality, and respect the tradition that has become *cultural identity* in society. The process of transmission and internalization of values

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[4] We know that education is the effective instrument in the practice of blocking the current religious radicalism. A study conducted by Rokhmat (2012) was more concerned with implementing Islamic education. The implementation of religious education should run through strategy of preventive de-radicalization, preservative de-radicalization of moderate Islam, and curative de-radicalization. Religious education is the most appropriate solution in the process of de-radicalization; for instance, teaching-learning process in *pesantren*.

and education based on local wisdom in *pesantren* is, perhaps, as expected by Al-Ghulayani (1949). That is, education is a place to instill noble manners (*gharsu al-akhlaqi al-fadhilati*) among students.

Indeed, there are some values that are typical features of a civilized society. These values must be implemented in the Islamic educational system until they become a culture:

Promoting dialogue. Changes in society towards the paradigm of modern society that is open and without barrier gives an opportunity to the formation of world order that shares peace and mutual respect in society, particularly between the West and Islamic society which, according to Ahmed (2003), frequently show disagreement and conflict. This is caused by the idea of a clash of civilizations to portray Muslims as the main enemy of the West, and posits Islam as a barbaric civilization that threatens the West. Being a civilized society that prefers dialogues can be realized if the morality of the modern society is not as feared by philosopher Habermas (1975), that is, the society turns into a crystallization of principle of subjectivism and becomes selfish and materialistic measuring everything materialistically. This has become a real factor of the damage and destruction of civilization in the contemporary world. This is clear if we see the emergence of the phenomenon of religious violence and terrorism, radicalism and Islamic State of Iraq and al-Sham (ISIS), which according to the results of some research (Solahudin,

2013), are caused more by economic and political motives.

Strengthening tolerance. The religious education must prepare a generation that could apply democracy, fairness, legal sovereignty, and friendliness to differences. Borrowing Gus Dur's statements, the purpose of Islamic education is to realize the ideals of true Islam, namely the establishment of an egalitarian society, which sums up the freedom and responsibility of the public within the framework of the mechanism of *shura* and equality principles, and upholds tolerance (Masdar, 1999).

Creating social piety. In the case of Islam, for example, religious adherents need to always give priority to support the *akhlakul karimah*, or good manner, in a democratic society and shape Muslim personality completely. This is according to the nature of Islam that is called "*omnipresence*" (Rahman, 1966). Hence, the presence of Islam becomes a true moral guide for human action (Rahman, 1966). It is an ideal character of Muslim who is always coming up with actions fully supported by the religious teachings from *al-Quran* and *al-Hadith*, believes in the presence of Allah SWT, the equality of individuals based on *Taqwa*, and the concept of *Rahmatan li l-'Alamin*.

CONCLUSION

There is a crucial problem that needs immediate attention and response for its solution by *pesantren* when dealing with the issues of modernity, including the emergence of a number of transnational post-reform ideologies, which seem to be contrary to the character and disposition of *pesantren*. One of the main things, which cannot be ignored, is shifting the paradigm. In this new paradigm, *pesantren* needs to be developed in order to hold a strategic point, that is, in the framework of the establishment of civil society and deliberative society.

In addition, *pesantren* must continue to explore the indigenous values that have proved to offer positive contributions to the Republic of Indonesia, such as moderation, *tasamuh*, and recognition to diversity. *Pesantren* should also be committed to the formation of a civilized society that is able to uphold the humanitarian issues, foster tolerance and freedom of speech, emphasize dialogue, and hold keen awareness of nationalism and social harmony.

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Motherhood and Academic Careers in Indonesia

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ABSTRACT

Most literature on the effect of family and parenthood for gendered academic career and the continuous underrepresentation of female academic staff among senior academics demonstrates similar findings. Commitments such as family and child rearing have been identified as an obstacle to academic career advancement for women, though far less so for men. This article argues that women in academic careers in Indonesia accept double burden of working as lecturers and doing their domestic works voluntarily to balance practicing their religious principles, societal norms and commitment for their career as their aspiration for modern life. Using in-depth interviews of 15 female academics from two universities in Jakarta, this study finds that women in academia have accepted the co-existence of motherhood and academic careers. An academic career is considered the best profession that enables women to play their dual roles as professionals and mothers.

Keywords: Academic career, gender gap, motherhood, religious values

INTRODUCTION

This article discusses how female academics in Indonesia balance motherhood to their careers. In general, research findings show that gendered institutions within academic careers are still maintained, and this is observed in a variety of ways (Maliniak et al., 2013; O'Connor, 2014; O'Connor et al., 2015; Turner & Mairesse, 2005; van den Brink & Benchop, 2012; van der Lee & Ellemers, 2015). A gendered

academic career has been associated with an unequal recruitment process, and lack of transparency and accountability (van den Brink et al., 2010). Unlike other careers, an academic career requires a PhD degree and most female academics complete their PhDs after 30 years of age, and this coincides with childcare responsibilities (Pyke, 2013). Some female academics choose to accept the challenges and risk their career by having a family and children although they know how disruptive it can be to their careers (Beddoes & Pawley 2014).

Child-rearing pose a tremendous challenge for academics as it is time consuming and will have an affect on time for research (Beddoes & Pawley 2014; Walsh & Turnbull, 2016). Despite the availability of numerous policies recommended from previous studies to improve the situation, Beddoes and Pawley (2014) argued there had only been insignificant changes.

Generally, neo liberalism has intensified gendered university and academic career, wherein male professors are expected to engage in academic work without any disturbance from other activities such as domestic job. Academic career and family may both be considered as "greedy institutions" since they both require full commitment and "undivided and exclusive loyalty" (Coser, 1974, as cited in Wendel & Ward, 2006). Women usually consider their family as their main priority with their careers coming in second place, and they are more likely to be expected to choose family commitments than men do. An academic career, to a certain extent, is only appropriate

for those capable of providing practically all of their time and interest for academic work.

While there have been many studies of women and gendered academic career, these studies mostly focused on the western context and developed countries (Beddoes & Pawley, 2014; Cervia & Biancheri, 2017; Mason & Goulden 2004; Walsh & Turnbull 2016; Wolfinger et al., 2009). There are still a limited number of studies on gender, motherhood and academic career advancement from non-western context such as Indonesia. The available studies on Indonesia, for instance, is a study from Kholis (2012) that examined the effect gender had on career productivity and success. The study concluded that women and men differed substantially only for publication. Additionally, Murniati's study (2012) asserted that senior female lecturers were capable of reaching some of the highest positions in university leadership as a result of their individual commitment, strong determination to succeed, and personal initiative. However, the extent to which women deal with double responsibility both in academic and domestic life in Indonesia are still lacking. This study, therefore, aims to fill the gaps in the literature by exploring women's experiences in balancing their motherhood role and academic career.

The paper is structured as follows. The first two section focuses on the introduction of the study and overview of academic careers in Indonesia. While the third section focuses on the method of the study, the fourth and fifth sections discuss the results of the study. The results are presented in

three sub topic of discussion, following three sub topics developed for the interview. Finally, the last section provides conclusion of the study.

ACADEMIC LIFE AND ACADEMIC CAREERS IN INDONESIA

In comparison to liberal countries' higher education systems and academic career advancement, Indonesia has developed quite a different system of universities, academic life and academic careers. The current secular higher education system is managed and governed under the Ministry of Research & Technology and Higher Education (MoRTHE) and the Ministry of Religious Affairs (MoRA). In addition to this arrangement, the education system is further separated into public and private institutions (Wicaksono & Friawan, 2011).

Prior to 1999, the state exercised control over the recruitment process, duties, and wages of permanent academic staff holding academic tenure in public universities who all unquestionably were Indonesian civil servants. The promotion system for academic staff is based on regulations that are aligned with civil service ranks and regulations pertaining to members of teaching staff. According to government regulation no.12 year 2012 they will initially be employed bearing the rank of III b at the very least as it is afforded based on their education qualifications. They will sequentially rise in rank to III c and d, then continues to IV a,b,c, d, and e. Additionally, cumulative credit points (KUM) also serve as the basis of civil servant promotion

covering three main activities: teaching, research, and community service (Clark & Gardiner, 1991).

In 1999 and 2009 the Indonesian government issued the following policies: BHMN/*Badan HukumMilik Negara* (State Owned Legal Entity) and BPH/*Badan Hukum Pendidikan* (Education Legal Entity) respectively. The government had reduced subsidies and made four prominent public universities into BHMNs. However, in 2010, the Constitutional Court declared the BHMN and BPH as unconstitutional, yet Lawno.12 year 2012 on higher education reinstatedthe policy and renamed the BHMN and BPH into PTNBH/*Perguruan Tinggi BerbadanHukum* (State Higher Education Legal Entity) (Susanti, 2011).

RESEARCH METHOD

A method of using in-depth interview was applied in this study, wherein data were collected to gain information in an unstructured way, therefore, the prompts consisted of a list of opened-ended or closed questions. There were at least three topics for the interview: *first,* the influence of culture, norm, and religious belief for motherhood and family life, *second,* experience and perception on academic career in comparison to other careers such as how they start and choose their careers, *third,* perception and experience on motherhood penalty and women as secondary earners.

This article is based on in-depth interviews conducted with 15 participants from two notable state universities in

Jakarta, with a variety of criteria pertaining to age and school/department and 60% of them are from the religious university. Those universities (Syarif Hidayatullah State University and University of Indonesia) are chosen to represent two criteria of universisty in Indonesia: religious and seculer university, organised by Ministry of Religious Affairs (MoRA) and Ministry of Research & Technology and Higher Education (MoRTHE) respectively. However, this focuses only on public universities because they have clearer academic career advancement system by following civil servant system. Both are in Jakarta as I believe Jakarta as the capital city is a very important location to shape a more progressive female academic careers and life than other cities.

Although the conducted interviews included academic staff members of a secular university, most of the respondents were unsurprisingly Muslims. The participants interviewed for this study represents the age group of between 40-50 years old and they generally occupy middle or senior positions in their academic careers respectively. The fact that this research focuses on participants who had undergone the experience of promotional procedures had inevitably led to this limitation (the age structure my participants are clustered in).

RESULT

Perceptions on Religious Values, Motherhood and Domestic Role

Women's expectations concerning their position in the family indicates the need to adjust modern aspirations to accommodate the religious values they adhere to. As an example, many women undoubtedly believe they are obligated to submit to their husband and that it is imperative for them to obtain the husband's consent in pursuing their career. This is particularly the case for female academic staff who are employed at a university with religious affiliation. As one 40-year-old respondent stated,

> *"I personally have determined to implement religious teaching from God and the Prophet Muhammad, and I always try to contemplate on what I have and have not done."*

The permission given by a husband allowing his wife to pursue her career is stipulated as one of the fundamental tenets of Islamic teaching for women. This belief stemmed from Islamic teachings concerning the rights husbands and wives are entitled to, and it is based on the prophetic tradition, known as Sunnah, that forbids wives to leave their house without their husband's consent.

The woman above provided a specific note that her commitment to practicing her religious teachings and beliefs did not prevent her whatsoever from being critical to some of those beliefs and from engaging in a rational assessment of religious matters. However, she had ultimately decided not to adhere to her rational mind as God's instruction was, in her opinion, clear and well-defined.

She further mentioned that she had completed her master's degree, despite

having to struggle to convince her husband that she remained a good wife and mother. Her husband never prohibited her from pursuing a master's degree, yet he was constantly concerned that gaining a higher degree would lead to waning respect for him. She was, eventually, able to prove to him that she was capable of maintaining her religious values that concerned affording her husband the respect and treatment he had in the family as an *Imam* (leader). His extended family would provoke him at times by mentioning that better education led women to have lack of respect for their husband.

As a result, she genuinely felt grateful to her husband for allowing her to work, earn money, and had a career. Without his given support she would not have been able to work at the university and became a member of the academic staff. She had no desire of working without his permission, as she did not intend to divorce him. Since she was able to convince her husband that she would remain pious when she took her master's degree, it was not difficult for her to gain her husband's permission and full support for pursuing her PhD.

Traditional gender relationships are still observed to be the dominant form of familial relationship for female academics. This is in accordance to the pattern of domestic work that is predominantly based on hierarchical-male domination. A participant from a religious university stated:

> "I am not concerned about what others say since I still consider husbands, as men, have a more elevated status than wives. As a couple, I regard my husband as a friend, yet I still afford him respect as the leader in our family."

Most of the female academic participants were aware that they and their husband shared domestic duties respectively. Their husband would on occasion give them a hand, especially in cleaning and washing, but very seldom in cooking or ironing. In numerous cases observed, a number of husbands still expected to be afforded with special attention denoting their superior familial status, whereas wives were obligated to fulfil their duty of cooking and serving the entire family, simply to demonstrate the authority a husband has over his wife. Wives might occasionally feel happy to meet all those expectations, but they would at times find them to be burdensome.

In general, all of the informants bearing the role of wife and mother, who are thus responsible for domestic work in their families, receive support and assistance from a domestic worker or an extended family member. A thirty-nine-year-old academic from an Islamic state university reported,

> "I usually cook before going to the university. I employ a domestic worker to clean the house and wash clothes. I would rather cook and enjoy my role as a queen in my own home. When my domestic worker comes to work in the morning, I make sure that all the dishes have been washed. My husband, as the breadwinner and head of the family, is a remarkable partner for me. I am overjoyed that my spouse and I co-operate and work together to

properly carry out these chores. My husband cleans the house while I prepare breakfast. He can do all the house chores, other than cooking, washing dishes, and ironing."

Married male academics in Indonesia, on the other hand, are able to focus on their career since there is no need for them to spend time on domestic work. By and large, a reinforcement of both gender and class positions with which women seem comfortable/complicit is obviously present. They are in alignment to gender stereotypes and in some cases they further extend those stereotypes.

Academic Careers as an Ideal Career for Women in Indonesia

Findings of the study indicate that an academic career in Indonesia has the potential of being considered as a "family-friendly occupation" for female academics and a "low income profession" for male academics. The following excerpts taken from participant interviews suggest that many women, given the support of their partner, choose to become civil servants. Both spouses expect to maintain the traditional division of labour and to adopt modern values in such a way that women are still able to secure additional income without neglecting their main priority, which is family life. A forty-year-old female lecturer at a secular university told her story as such:

"Prior to choosing to pursuit an academic career, I had worked in another field (private sector). When I had planned to get married, my fiancé suggested that I seek an academic career since working in the private sector

would require us to work from about 08.00 in the morning until 04.00 or 05.00 in the evening. My fiancé mentioned, "if you work very hard all day long in such a way, who then will take care of the family and kids?"

The idea of maintaining both family and career is highlighted by a participant from a religious university who is slightly above 50. In her opinion, women should have a career aside from their role as homemakers, in spite of the belief in Islam that generating income is not an obligation that applies to women. However, she further asserts that income is considered as a symbol of social dignity (particularly those obtained from a white collar and skilled job) and it also strengthens one's confidence; it makes women radiate intelligence and have better character, and it can also help women avoid nonconductive activities such as chatting or gossiping.

According to the same informant, middle class women mostly adhere to principles pertaining to a noble life that is grounded upon religion, in which marrying and having children are key. This may mean that a woman is able to anticipate and plan for a job once they are married, but under the condition that family will always be the top priority. In line to this pattern, some of the participants consider academic career as the ideal type of occupation women can pursue due to the fact that time management in such a job allows room for flexibility, affording women with the desired outcome of having both a career and a family. One of the respondents, a thirty-nine-year-old women academic who works at a religious university put it this way:

"I consider the academic environment to be very children friendly. When I was breast-feeding, I was able to provide breast milk to my children unrestrictedly, I was able to take them to the university, or return home anytime I like since my home is not far from the university. When my children are grown, I would still be able to accompany them in their learning. I think teaching activity is highly flexible."

Several reports were obtained from the participants that their decisions in choosing academic career were influenced by their husband, otherwise the decision may have been due to their having a baby or young children rendering them unable to manage their time if they had continued pursuing their career in the private sector.

Many people consider an academic career with civil servant status as a low paying profession, and the difference in salary among the ranks under the civil servant system is not considerably significant. Career in academia requires high education level as one of the requirements for employment, yet the basic salary received is not very different from other civil servant positions—such as a teacher or administrative staff in various ministries or public institutions—whose education qualifications tend to be much lower.

Another female academic staff interviewed acknowledged that the salary she initially received from working at the university was merely half her salary at her former office in the private sector. However, she had numerous ample opportunities to gain income from various projects outside the university. It has previously been argued that additional work for academic staff, especially non-administrative work, can substantially boost their income (Clark & Gardiner, 1991). A forty-year-old from a secular university expressed the transition she experienced in the following:

"I considered my salary to be quite low during my initial year, as it was approximately half to what I got at the private company, yet I currently think that I earn quite a substantial sum compared to those working in private companies. This is due to the fact that we have numerous projects, working with companies, conducting consultation work, so I gained extra money from those activities."

The income academics earn, in her opinion, is dependent on each individual's efforts in generating income from activities related to their personal expertise concerning their particular field of study at the university.

Perception on Motherhood Penalty and Women as Secondary Earners

The discussions in the above passages show that female academics decided to pursue an academic career because of its flexibility in relation to time arrangement, and the feature of the occupation which is considerably family friendly. It can, thus, be assumed that the wage gap, the motherhood penalty, and gender inequality in income are inevitable. The motherhood penalty suggests that having children and raising them will have an effect on the accumulation of women's

human capital, which subsequently leads to women getting lower salaries than men. This matter is substantiated as several female respondents had stated that they do not seriously consider planning their careers with the aim of achieving the academic rank of professor. Women academics in Indonesia would most likely give priority to their family or their husband's career and strive to maintain the traditional relationship they have with their husband. A thirty-eight-year old female academic described her position as follows:

> *"I prioritize my family over my career... because if I were to achieve the highest career position possible, yetincapable of managing my family, for me, it will be a matter of grave concern. I must be responsible for my children's accomplishments at school."*

Similarly, a senior female academic in her 50s, who was deeply involved in issues relating to women movement, chose to support her husband's wish to obtain higher education and she had sacrificed her opportunity as she thought that her family would consequently have a better life by allowing her husband to acquire a higher level of education.

The motherhood penalty has been found to be harsher for the 20 to 30-year-old age group, and it eventually becomes less profound by women in their 40s to50s (Kahn, et al., 2014). Likewise, Agüero et al. (2012) contended that the motherhood penalty in developing countries was greater for women employees with infants and young children. The situation changes, however, when daughters become into adolescents, particularly among the low-educated sample group, due to the fact that an older daughter may provide positive contributions to lowering the motherhood wage penalty as they stay home and are, culturally, obligated to assist in carrying out domestic work.

One of the informants working at a religious university who was thirty-nine had this to say:

> *"I think I have to admit that… even though my husband never prohibited me from doing something, or never not let me participate in some activities, during the night I still need to take care of my son, by putting him to sleep, something which he (my husband) rarely does, or he does only during the weekend. Although I know it is not time for work, but I sometimes still use that family time to do some work. Ideally, when we are at home, we should do something else, not work, but it also difficult to finish all the work during working hours."*

Nevertheless, according to some of the respondents, being in a traditional relationship does not prevent them from having the confidence to move up in their careers. Younger female academics in their late 30s still embrace the attitude of respecting and giving priority to their husbands as the family head and leader, but they most likely receive considerable support from their husband concerning their

goal of obtaining the highest educational qualification. They are more assured and confident of their career and they are able to clearly say that at a certain point in time they will ultimately achieve a professorship. A number of female academic respondents in their 40s do not feel that their articles the write are undervalued in comparison to those written by men. A young (thirty-eight-year-old) female academic at a religious university mentioned that she would be able to apply for a professorship within five years:

> *"I feel quite confident and I think that I am quite proficient in this profession. I believe that within 5 years I would be capable of applying for my professorship with all the requirementsready."*

Some female academics do not take the wage penalty or motherhood penalty into much consideration because they remain under the support of their husband. A thirty-eight-year-old respondent from a religious university feels that she is fortunate to be holding her position as an academic staff member, and she is of firm belief that her occupation is not being maintained solely for economic reasons, as her husband provides sufficient financial support for their family.

> *"I am grateful to God that my husband has a good salary, so that my work is more for self-actualisation, for providing others, aside from myself and my closest family, with assistance."*

In the same line as the above, a forty-year-old informant from a secular university has not once shared her salary with her husband due to her adherence to the cultural norm that the husband is the breadwinner of the family, and that he does not have authority over the income his wife makes. That income is for her to do as she please.

> *"Concerning money, my husband still supports our family, and I have never handed my salary to him. My salary is for myself, and I consider that as consequential to the promise he made of not expecting any income from me."*

DISCUSSION

Not different from other Indonesian women, female scholars in Indonesia live with male domination in every facet of their lives (Blackwood, 1995; Robinson, 2009; Sohn, 2015; Suryakusuma, 1996). The obstacles to female academic careers in Indonesia are more apparent (Haeruddin, 2016; Murniati, 2012). They struggle in negotiating their beliefs concerning their rights of participating in career development. Religious and cultural values control them, both individually and socially (Aisyah & Parker, 2014; Dunn & Kellison, 2010). Even so, most female academics accept these restraints, which may be regarded as obstacles to the advancement of one's academic career including the traditional division of labour and motherhood, and they have made it obvious that they believe they have voluntarily embraced these constraints (Afiyanti & Solberg, 2014; Corfield, 2010; Murniati, 2012; Utomo, 2004).

Such situation indicates that there is a majority of female academics in Indonesia who construe their relationships with their husbands and male academic counterparts within a functionalist theoretical framework. Female academics abide to the principles in which the family has a distinctive function different to other institutions, particularly economic institutions. It is common understanding that an economic institution tends to be grounded on rational exchange and calculation, whereas contrastingly, the development of family life is established upon emotional and effectual behaviour, a type of social action driven by non-material interests (Weber, 1978).

In this study, academic career enhancement in Indonesia tends to be nearly similar to career promotion in the civil service system (Azmi et al., 2012). As of late, more and more women are challenging their spouse and family, and are negotiating with them to assure them that they are capable ofmanaging both a career and family. This indicates that women's determination of upholding traditions in Indonesia does not necessarily imply that they entirely accept patriarchal culture. They may be resistant to it albeit with more supple and non-radical strategies. Additionally, this research reinforces former studiesdemonstrating that numerous women gain advantagefrom family support and their socio economic status when advancing their careers, although they do need to put in twice the effort men do to achieve better positions in their career (Murniati, 2012; Tlaiss & Kauser, 2011).

Despite traditional gender relationship remaining robust and strong, this study reinforces Luke's findings (1998, 2001) that domestic jobs among the middle and upper class are often onerous. In the case of Indonesia, routine familial tasks and domestic responsibilities are relatively easy to manage by women from the middle and upper classes because of low wage domestic worker availability. The presence of domestic workers in Asian families has led to less work-family conflict among career women because they can rely on the workers to conduct their routine household chores (Caparas, 2011; Murniati, 2012; Utomo, 2004). Accordingly, the fact that decisions women make rely on the given consent of her husband does not necessarily impede women from improving their skills. Support women acquire from parents and relatives allows them to leave their children while pursuing their study away from home.

Following Hakim (2006), female academics in Indonesia have preferences similar to many women elsewhere, i.e. becoming a woman figure who is adaptive and prefers to combine work and family. They see certain occupations that facilitate work-family balance as desirable. In this regard, working as a civil servant is regarded to be the best choice, as Azmi et al. (2012) found that various benefits were provided through the public servant system such as child care and time management flexibility. Additionally, being a civil servant affords high job security and guarantees a long career-path from initial employment to retirement, it also

has fewer occupational demand than the private sector and employees rarely face dismissal. Concerning salary, men and women are treated equally by the civil servant system and they are not expected to undertake high geographic mobility to secure promotion throughout their career. Civil servants, especially academic staff, most likely remain in a single institution until retirement, unless they deliberately propose to be transferred to another region for family reasons. Meanwhile, it is highly common for private sector personnel to undergo regional relocation, as it is not uncommon for promotions to entail the need of relocating to another area.

Women do make decisions in moving from the private sector to an academic career in public institutions, despite having to accept substantial salary reduction. This confirms Utomo's argument (2012) that women would most likely choose an occupation that allows them to maintain the balance of family life, which may entail working in a less demanding occupation with a stable income. As secondary earners, women are able to adjust to the moderate income received as a civil servant. As Filmer and Lindauer (2001) found, civil servants with high school qualification or lower receive higher income than private sector employees with similar educational qualifications. Conversely, civil servants with higher educational qualifications (diploma and above) receive lower salary in the civil service system than employees bearing similar qualifications in the private sector. However, according to the World

Bank (2003, as cited in Kristiansen & Ramli, 2006), various benefits (such as monthly certification, monthly remuneration based on attendance, or remuneration for professorship) have recently started to be given to Indonesian civil servants, as a consequence, their occupation should no longer be categorised as being underpaid. Female academics represent a group of women who are often not centred on the home (Hakim, 2006). Although their priority remains towards family life and their children, they still want to work without having to fully be committed to their career.

Women with an academic career, in the Indonesian context, is quite unique in comparison to those pursuing the same goal in developed and liberal countries. Child rearing and familial commitments have been specified as a barrier to academic career advancement for women, though far less so for men (Baker, 2012). Indeed, having a family would more likely increase social capital for male academics as the family will be inclined to prioritise a male's (husband's) career over that of a female's (wife's) (Baker, 2010). Monosson (2008) posited that some female academics wanted both career and family, but the academic environment was established upon male and masculine values, wherein female academics were thus expected to behave like their male academic counterparts. Recently, Baker (2012) argued that being childfree had become a more common phenomenon among female academics than male. Grottenthaler (2003) observed that many female academics had postponed

motherhood until they felt considerably secure in their careers only to find it was too late for them to have children. Female academics remains to have a tendency of bearing greater responsibility in domestic work than males do (Baker, 2012).

CONCLUSION

Given the influence of strong religious beliefs among female academics in Indonesia, female academics rarely critique issues relating to unequal division of labour in their families. They prefer to compromise and negotiate with their husbands rather than opting for other alternatives that may have unfavourable impact upon their family life. Additionally, they hardly ever choose separation when confronting their husbands with problems that are caused by their choice to pursue their career.

This indicates that the pattern of female academic in Indonesia is quite different from that of the West. In the West, one of the most prevalent characteristics of female academics wanting to progressively advance their careers is being single, unmarried or childfree. According to past literature it may be concluded that women without child are more likely to have better education, better income and better jobs (Baker, 2012). On the other hand, being single or childfree remains to be a rare occurrence in Indonesia as the bond of marriage (which implies child-rearing) is still regarded with utmost importance (Situmorang, 2007).

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Factors that Influence Woman–Leader Identity Conflict among Indonesian Women Leaders

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ABSTRACT

Men are sometimes treated as higher than women, and men's qualities are also sometimes promoted as being superior to those of women. This stereotype can be assumed to affect how women view themselves when they assume a leadership role. This study aims to investigate the role of gender identity, importance of identity and patriarchal belief on identity conflict on women leaders. An online survey was conducted in two stages to reduce common method bias, with the final stage involving 163 women leaders. The reliability of the instruments ranged from 0.81 to 0.89, indicating high consistency in their measurement of constructs. It was found that (1) positive gender identity is negatively related to identity conflict for women leaders and (2) patriarchal belief is positively related to identity conflict among women leaders. No relationship was identified between the importance of gender identity and woman–leader identity conflict. This paper contributes to current debates on women leaders by demonstrating that women who identify positively with their gender will not experience identity conflict in their role as leader; instead, identity conflict for women leaders arises through externally induced patriarchal belief.

INTRODUCTION

"*Women should earn less because they are shorter, they are weaker, and less intelligent*" said Janusz Korwin-Mikke, a Polish Politician in the European Parliament, March 2017 (Baker & Burke, 2017). This statement is a representative expression of

the stereotype that men are more appropriate than women for leadership roles; hence, women are often relegated to supportive or backup roles (Diekman & Eagly, 2008; Eagly & Karau, 2002; Swim & Hyers, 2009). The influence of gender stereotypes on the proportion women leaders worldwide is evident from the United Nations' data on world leadership: women account for only one in twenty positions as head-of-state (Sinaga, 2016). However, the current situation for women leaders in Indonesia is more complicated. On the one hand, Riantoputra and Gatari (2017) found that Indonesia had reached the 6th highest in the proportion of women senior managers in the world, suggesting that a large number of women were able to attain positions as leaders. Duarsa and Riantoputra (2017), in their research about leadership effectiveness in Bali, a multicultural city in Indonesia, found that perceptions of leadership effectiveness were unrelated to gender. Their research implied that in multicultural cities in Indonesia, people tended to be more open to the possibility of women leaders. However, this tendency is not accepted everywhere in Indonesia. In many other regions, it seems that the attainment of leader roles by women is coupled with a paternalistic and traditional culture that limits women's participation as leaders (Riantoputra & Gatari, 2017). The influence of negative attitudes toward women leaders can be seen from the case of men's refusal to accept a woman to occupy the leadership position in Kesultanan Yogyakarta (Sahana, 2015). Briefly, there is

a possibility for support as well as constraint for women leaders in Indonesia.

The stereotype that men are more appropriate for leadership positions stems from gender stereotypes that assign more communal characteristics to women, such as being warm, caring, cooperative, and selfless (Eagly et al., 2000). More agentic characteristics are ascribed to men, such as being assertive, being competitive, and solving problems, i.e., traits associated with the characteristics of successful leaders (Eagly et al., 2000; Martell et al., 1998). Due to comparisons between communal and agentic characteristics, a woman leader can ultimately be led to feel that one of her identities (either as a woman or leader) contradicts the meanings, norms, and demands that align with her other identities, leading her to experience identity conflict (Ashforth & Mael, 1989; Settles, 2004).

Karelaia and Guillen (2014) argued that identity conflict existed when women leaders sense a discrepancy in their identification with their roles as women and their roles as leaders. Because of the negative implications of identity conflict in terms of both physical and psychological harm, research on identity conflict becomes very important (Hirsh & Kang, 2015) such as stress triggers (Dickerson & Kemeny, 2004; van Eck et al., 1996), ill health for reasons ranging from indigestion to heart disease (Lahey, 2009; Smith & MacKenzie, 2006), decreased cognitive function, decreased performance, and low psychological well-being (Karelaia & Guillen, 2014; Settles, 2004).

The current research aims at increasing the understanding of identity conflict in the organizational context, which has only been studied by Settles (2004) and Karelaia and Guillen (2014); thus, this paper is the first to focus on identity conflict in an organizational context in Asia. The specific focus is on male-dominated organizations and organizations with almost equal numbers of male and female employees, because prejudice and negative attitude toward women leaders is more prevalent in these two types of organizations (Kanter, 1977).

Woman–Leader Identity Conflict

In social identity theory, all individuals in a society associate themselves with certain social groups or self-categorize in some way, in a process called "identification" (Turner et al., 1987). Thus, identity is formed through the process of categorization and identification. Tajfel (1982) defined social identity as part of the individual self-concept related to membership in certain social categories.

Over time, individuals develop not just one, but several identities (Hirsh & Kang, 2015). When a person feels that his or her identities are incongruent and contradict each other, he/she experiences an identity conflict. Ashforth and Mael (1989) defined this conflict of identity as a conflict between "values, beliefs, norms, and demands" attached to individual and group identities. In women leaders, identity conflict occurs when they sense an identity discrepancy between their roles as women and as leaders

(Karelaia & Guillen, 2014). Women leaders tend to exhibit greater agentic behavior so that they will be judged to be more effective, which then leads to disapproval from others, resulting in identity conflict (Eagly et al., 2003; Rosette & Tost, 2010; Rudman & Glick, 1999).

According to previous research, several factors can trigger identity conflict (e.g., numbers of identity and representation of women in the organization). However, the focus of the present study is on positive gender identity, the importance of gender identity, and patriarchal belief (Figure 1). The first two factors were chosen because they had recently been investigated by Settles (2004) and Karelaia and Guillen (2014) in organizational contexts. The third was chosen because Indonesia is largely a patriarchal culture (Nashir, 2017). Belief in the patriarchal system can shape values and attitudes that affect individual perceptions of leadership (Ayman et al., 2012); therefore, it is also believed to trigger identity conflict.

Positive Gender Identity

A positive individual evaluation of one's gender is defined as positive gender identity (Karelaia & Guillen, 2014) and comprises two components: private regard (the individual's self-evaluation as it relates to their gender) and 2) public regard (the individual's perception of others' evaluation of their gender) (Ashmore et al., 2004). Crocker et al.'s (1994) study found that in Asians, private and public regard were highly correlated and, thus, these components could be measured as one
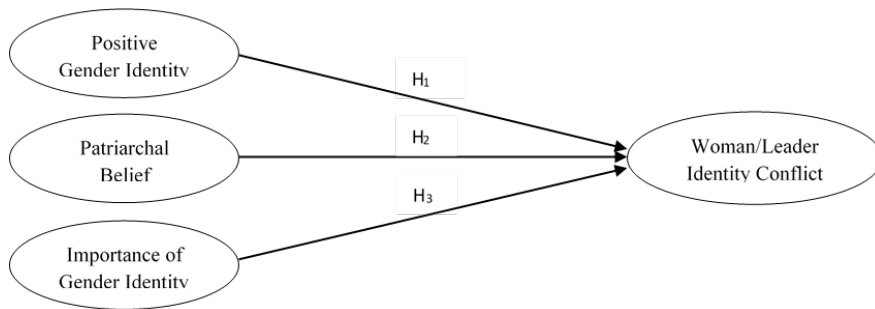
Figure 1. Research model

factor. As evaluation is the source of self-esteem in individuals, gender identity is an important attribute (Crocker & Luhtanen, 1990).

Gender private regard can enhance or maintain a woman's positive feelings regarding her role in dealing with gender-related negative experiences (Settles et al., 2016). Women with positive gender identity will have fewer thoughts and experiences that threaten their self-evaluation as a good leader (Karelaia & Guillen, 2014). Self-esteem tends to be derived from others' judgments rather than through individual evaluations for those raised in a collective culture (Heine et al., 1999); thus, other people's positive judgments on their identities is very important and can influence the development of the individual's identity (Blumer, 1969). Roberts and Nolen-Hoeksema (1994) suggested that women view the evaluation of others as accurate evaluations of their performance and they were more strongly influenced by it than were men. Settles et al. (2016) showed that for women scientists engaged in male-dominated fields, identity conflict could occur in those who believed that others negatively perceived women.

Briefly, when a woman leader believes that her gender characteristics do not prevent her from becoming a successful leader, she feels that her identity as a woman is aligned with her identity as a leader. Therefore, this paper proposes the following hypothesis:

H_1: Positive gender identity negatively influences woman–leader identity conflict.

Patriarchal Beliefs

In Indonesia, the family is a source of identity development that can stimulate positive identity for women as leaders (Riantoputra & Gatari, 2017). However, the 1974 Constitution of the Republic of Indonesia states explicitly that the role of women is to perform domestic duties. This regulation, together with the importance of family for Indonesian women, places women in a difficult position to develop their identity as leaders. Furthermore, the data from Badan Pusat Statistik [Central bureau of Statistic] (2015) show that 40% of Indonesians are Javanese. In Javanese culture, women are considered as *kanca winking*, having the functions of *macak* (dressing up), *masak* (cooking), and *manak*

(giving birth) (Laksono, 2015). This point of view bears a close relation to the patriarchal culture from which it comes and portrays men as the ultimate authoritative figures and at the core of social organization (Walby, 1990). Patriarchal belief is transmitted explicitly and implicitly on the social level through statements such that women should not work in positions of power because they are inferior to men or are incompetent (Yoon et al., 2015). This persistent message can diminish a woman's evaluation of her abilities (Denissen, 2010) and makes her feel that her identity as a woman conflicts with her identity as a leader (Karelaia & Guillen, 2014).

Wong (2005) found that women in senior management positions suppressed their feminine identities to underline their competence and capabilities. Thus, women experience a contradictory situation wherein they must meet conflicting expectations, presenting themselves as both feminine and masculine in their work role (Denissen, 2010). Patriarchal belief in situations where women might display these masculine and feminine qualities could eventually lead to identity conflict in women leaders. Therefore, this paper hypothesizes the following:

H_2: Patriarchal belief positively influences woman–leader identity conflict.

Importance of Gender Identity

Those with multiple identities often rank those identities according to the degree of importance each identity bears on their self-image, a phenomenon called "importance of identity" (Stryker & Serpe, 1994). The extent to which an identity is psychologically important for an individual can influence whether that identity is perceived to be contrary to another identity (Thoits, 1983). The more important the identity feature that is conflicted, the less commitment they can assign to that identity, thereby increasing negative emotion and forming a gap between expectations and reality (Brook et al., 2008).

Settles (2004) found that when a female scientist made her gender identity her most important identity, the perception of identity conflict would increase because most students and instructors in science fields were men and were dominated by masculine culture (Robinson & McIlwee, 1991; Seymour, 1995). Female scientists with a female-focused self-concept come to feel as if that self-concept is incompatible with their work environment. McCoy and Major (2003) found that women with low gender identity centrality could evade discrimination and psychological distress. As a result of the foregoing, it was concluded that when a woman leader puts her gender identity above her identity as a leader, she feels an increasing identity conflict because the leader identity is more closely associated with men and masculine characteristics (Eagly et al., 2000). This paper presents the following hypothesis:

H_3: Importance of gender identity positively influences woman–leader identity conflict.

MATERIALS AND METHODS

Procedure and Sample

The sample was selected from women leaders who had subordinates and did not work in female-dominated organizations (organizations with > 65% female employees) (Kanter, 1977). This research did not seek or accept participant data from female-dominated organizations because the organizational culture in such institutions would be consistent with there being a majority of women, thus making it, generally speaking, a friendlier environment for women and more difficult to examine identity conflicts.

To test our three hypotheses, this research conducted two stages of data collection using an online survey. The research used an online questionnaire due to the difficulty in obtaining permission to conduct a two-stage study directly involving the companies. The first stage obtained data for the predictors and the second stage collected data on the outcome variable. A total of 700 questionnaire links were sent through social media networks for two weeks in the first stage. Then, 229 of those who completed the first-stage questionnaire were sent a second-stage questionnaire link via e-mail one week after they submitted the first-stage questionnaire. Complete responses for the first and second stages were obtained from 163 women leaders so that the overall response rate was 23.3%. The survey contained items in Indonesian language.

Measurement

The predictors in this research were positive gender identity, patriarchal belief, and importance of gender identity, and the outcome variable was woman–leader identity conflict. All items used a six-point Likert-type scale (1 = strongly disagree and 6 = strongly agree). Each variable in this research was measured using a previously validated scale. This research applied back-to-back translation and conducted confirmatory factor analysis before the data were analyzed, and the test results showed that all instruments had goodness-of-fit indices ranging from 0.98 to 1.00, indicating that all instruments used were valid.

Woman-leader Identity Conflict

The degree of woman-leader identity conflict was measured using a six-item version of the Woman-Leader Identity Conflict Scale that had previously demonstrated good reliability ($\alpha = 0.76$; Karelaia & Guillen, 2014). This research added four items that fitted with the definition of woman-leader identity conflict, thus, increasing the reliability ($\alpha = 0.82$). The following is an example of a statement item: "Being a manager/leader does not conflict with my being a woman." The higher score indicates that the respondent perceived a greater degree of woman-leader identity conflict.

Positive Gender Identity

To measure positive gender identity, this research used the Collective Self-Esteem Scale (CSES, taking the private regard and

public regard sub-scales, with four items for each sub-scale) from Luhtanen and Crocker (1992). The eight items that were the same as those in the original version have shown good reliability in prior research ($\alpha = 0.80$ for each sub-scale; Luhtanen & Crocker, 1992). In this research, only six items that had good internal consistency ($\alpha = 0.81$) (e.g., "I feel good being a woman" were used to measure private regard and "In general, others respect women" to measure public regard). The higher score indicates a more positive evaluation of participants' gender identities.

Patriarchal Belief

Patriarchal belief was measured using the 11-item Patriarchal Belief Scale that has been found to have good reliability in a prior study ($\alpha = 0.73$; Figueredo et al., 2001). In this study, one item was dropped (due to lack of internal consistency), bringing the item number to 10 (e.g., "The ultimate authority in the house is the father/husband") and increasing reliability ($\alpha = 0.88$). The higher score indicates greater belief in the authority of males in social organizations.

Importance of Gender Identity

Importance of gender identity was measured using a modified version of the CSES (the identity sub-scale) from Luhtanen and Crocker (1992). The four items that were in the original version had shown good reliability in a previous study ($\alpha = .86$; Luhtanen & Crocker, 1992). This study added four items that fitted with the definition of importance of gender identity,

bringing the item number to seven (e.g., "Identity as a woman is an important reflection of who I am") with good internal consistency ($\alpha = 0.89$). The higher score indicates that gender identity is essential for the individual's self-concept.

Control Variables

The purpose of using control variables is to eliminate relationships or to control certain variables such that the relationship between the predictors and the outcome variable is not influenced by other unspecified variables (Arikunto, 2006). Control variables are obtained from theory and bivariate correlations significant to woman–leader identity conflict. Age, educational level, marital status, and tenure as a leader (in years) were the control variables in this study.

In this research, to reduce the common method bias, this research took temporal separation by means to allow a one-week lag between the measurement of the predictors and the outcome variable (Podsakoff et al., 2003). Additionally, psychological separation was also implemented by using different cover stories to make it appear that the measurement of the predictors was not connected with or related to the measurement of the outcome variable (Podsakoff et al., 2003).

RESULTS

Table 1 shows that participants were from many cities throughout Indonesia. Most of them were from the island of Java (76.7%) while the remaining came from several

other big islands (23.3%). Most of them worked in the consultancy and service (14.7%) and finance and banking industries (13%) while the remainder represented a variety of other industries. Most participants worked in a male-dominated organization (76.6%) and less than 25% worked in neutral organizations (organizations with an equal number of male and female workers). Furthermore, Table 2 shows the age range of to be 27-33 years old (M_{age} = 31.37, SD_{age} = 6.733) and 66.9% had at least a bachelor's degree. The sample was married (51.5%) and unmarried (48.5%) in almost equal proportions. The participants' average tenure as a leader was 4.5 years (SD = 4.36), with one having 24 years of experience.

All measurement instruments used in this research used a measurement scale ranging from 1 to 6. Table 2 demonstrates that the sample has a relatively low woman-leader identity conflict. However,

participants showed quite high mean values for their degree of positive gender identity, patriarchal belief, and importance of gender identity.

Table 2 shows that age (r = -0.391, p < 0.01), educational level (r = -0.192, p < 0.05), marital status (r = -0.264, p < 0.01), and tenure as a leader (r = -0.445, p < 0.01) were negatively related to woman–leader identity conflict. Based on these results, it can be concluded that younger women leaders, with lower educational levels and lower tenure as leaders, experience a higher degree of identity conflict. Variables that have a significant relationship with identity conflict can be controlled in the regression analysis. Table 2 also shows that there are negative significant correlations between positive gender identity (r = -0.414, p < 0.01) and importance of gender identity (r = -0.206, p < 0.01) with woman–leader identity conflict. This means that the more

Table 1

Participant demographics

Demographic Aspects	Total	Percentage
Type of Organization:		
Male-dominated	115	76.6%
Neutral	48	23.3%
Residence of Participants:		
Java	125	76.7%
Sumatera	31	19%
Kalimantan	4	2.4%
Sulawesi	3	1.9%
Type of Company:		
Finance & Banking	21	13%
FMCG	14	8.5%
Mining, Oil, & Gas	13	8%
Retail	10	6%
Consultant and Services	24	14.7%
Others	81	49.8%

Table 2
Descriptive statistics

	Variables	Mean	SD	1	2	3	4	5	6	7	8
1	Age (years)	31.37	6.73	1							
2	Educational Level	3.26	0.56	0.293**	1						
3	Marital Status	-	-	0.492**	0.106	1					
4	Tenure as a leader (in year)	4.54	4.36	0.754**	0.282**	0.323**	1				
5	Positive gender identity	5.08	0.61	0.203**	0.093	0.087	0.234**	1			
6	Patriarchal belief	3.53	1.04	-0.195*	-0.159*	-0.060	-0.075	0.108	1		
7	Importance of gender identity	4.83	0.76	0.151	0.056	0.162*	0.209**	0.611**	0.185*	1	
8	Woman/Leader identity conflict	2.18	0.70	-0.391**	-0.192*	-0.264**	-0.445**	-0.414**	0.202**	-0.206**	1

Notes: N = 163; **p $<$ 0.01 and *p $<$ 0.05

positively women leaders perceive their gender and believe that others perceive their gender in a positive way, the less identity conflict they experience. Additionally, the more important gender identity was for women leaders, the less identity conflict they felt. One variable did have a positive significant correlation with woman–leader identity conflict, namely, patriarchal belief ($r = 0.202$, $p < 0.05$). This suggests that the more individuals believe that men are superior to women, the greater the identity conflict they feel.

Hierarchical multiple regression analysis is needed to compute the variance of the predictors on the outcome variable. Because regression analysis can be used with the assumption that residue in the population is normally distributed (Field, 2013), a data normality test was conducted. Based on those results, the Kolmogorov–Smirnov significance value was $p = 0.20$. This means that the residue in the data obtained was normally distributed ($p > 0.05$).

Regression analysis was done in two stages: the control variables first followed by the predictors. Hierarchical multiple regression analysis was done in the first stage with the inclusion of demographic variables that showed significant correlations with woman–leader identity conflict in bivariate correlation analysis (e.g., age, level of education, marital status, and tenure as a leader). In the second stage, positive gender identity, patriarchal belief, and importance of gender identity were inserted in the regression.

Of the two models listed in Table 3, the second-stage model is considered to be best for the prediction of the variance of woman–leader identity conflict. This is because the model in stage two has a higher R^2 than the first stage model, which is 0.365 ($F = 11.815$). These results indicate that demographic variables, positive gender identity, patriarchal belief, and importance of gender identity can contribute 36.5% of the variance of woman-leader identity conflict. The contribution of predictors without demographic variables to the variance of woman-leader identity conflict is 14.5%.

From regression analysis, it was found that there were no significant effects of age ($\beta_{age} = 0.054$, $p > 0.05$), educational level ($\beta_{education} = -0.033$, $p > 0.05$), or marital status ($\beta_{status} = -0.146$, $p > 0.05$) toward woman–leader identity conflict. On the other hand, tenure as a leader ($\beta_{tenure} = -0.338$, $p < 0.01$) had significant negative effect on woman–leader identity conflict. Table 3 also suggests that there are no significant effects of the importance of gender identity ($\beta_{importance} = 0.096$, $p > 0.05$; i.e., H_3 is not supported) on woman–leader identity conflict. However, this research found significant negative effects of positive gender identity ($\beta_{pgi} = -0.410$, $p < 0.01$; i.e., H_1 is supported) on woman–leader identity conflict. This indicates that the more positively a woman leader perceives her gender identity and feels that others perceive her gender identity positively, the less identity conflict she feels. There was also a significant positive effect of patriarchal belief ($\beta_{belief} = 0.200$, $p < 0.01$;

Table 3

Hierarchical multiple regression

	β Stage 1	β Stage 2
Age	-0.045	0.054
Educational level	-0.067	-0.033
Marital status	-0.121	-0.146
Tenure as a leader	-0.353**	-0.338**
Positive gender identity		-0.410**
Patriarchal belief		0.200**
Importance of gender identity		0.096
R^2	0.220	0.365
ΔR^2	0.220	0.145
F	11.127	11.815
df1, df2	4,158	3,155

Notes: **N** = 163; ****p** < .01 and ***p** < 0.05

i.e., H_2 is supported) on woman–leader identity conflict. This means that the more women leaders believe that men are superior to women, the greater the identity conflict that they feel.

DISCUSSIONS

This research found that positive gender identity, patriarchal belief, and importance of gender identity accounted for 14.5% of the variance in woman–leader identity conflict, indicating that other variables may affect woman–leader identity conflict. This is a task set for future studies. Variables such as tenure as a leader can be tested as it was found to have a significant influence, in spite of the fact that it was controlled. Chan and Drasgow (2001) found that employment as a leader was positively associated with leadership potency as perceived by the

environment and the individual's supervisor. It implies that tenure as leaders act as affirmation of the individual's capability to lead, and it can prevent the occurrence of identity conflict in women leaders.

Regression analyses demonstrate that when women leaders positively viewed their feminine identity, their identity conflict was reduced. In other words, when someone is comfortable with their identity as a woman, they will experience less woman–leader identity conflict. This is because having a positive social identity allows individuals to maintain the perception that they are worthy (Hogg et al., 2004). The more positive a woman's social identity, the greater access they have to individual resources of self-affirmation that will allow them to better cope with thoughts and experiences that threaten their own identity (Dutton et

al., 2010). The more positive their social identity, the greater freedom they feel in their methods and techniques of leading and the more likely it is that they can develop ways of leading to make them feel comfortable and authentic (Ibarra et al., 2010). Positive gender identity can also reduce the need to suppress gender-typical behaviors, thereby reducing the tension and fatigue that result from this self-regulatory process (Vohs et al., 2005).

Among other predictors, positive gender identity has the strongest association with identity conflict. This implies that this variable is very important; suggesting the importance for further research to examine this variable using various research designs. Quasi-experimental research, like the study conducted by Karelaia and Guillen (2014), can be performed but with different manipulation techniques. Quasi-experimental designs are important for discovering causality among variables (Cozby & Bates, 2012). This can render it easier for practitioners who are attempting to design ways to improve women's positive identity.

This paper also shows that patriarchal belief can increase woman–leader identity conflict. As explained by Matsumoto and Juang (2013), beliefs are influenced by how strongly individuals' cultural values have been instilled and this may affect perceptions of gender difference. Current research shows that in Indonesia, patriarchal belief remains a real force to this day (Nashir, 2017). The 1974 law on marriage (subsection 34, clause 1) clearly defines the different roles of men and women. Furthermore, patriarchal values are still preserved in Indonesia and usually as an interpretation of religious teachings that place men in a higher position than women.

However, it seems that the effect of patriarchal belief is not similar for everyone in Indonesia. As explained by Riantoputra and Gatari (2017) that in Indonesia coexist culture that empower women—that helps Indonesia to be the 6th highest women leaders in the world–as well as culture that disempower women—such as revealed in the law on marriage. For this reason, patriarchal belief is vital for further investigation into the conflicts of women leaders in organizations in Indonesia. It is possible that patriarchal belief serves as a trigger for not granting women leadership positions, especially in male-dominated organizations where women are not prototypical leaders (see Riyadi et al., 2019). For future research into patriarchal beliefs, the use of the Patriarchal Belief Scale employed in this study is recommended. The Patriarchal Belief Scale can also be used to measure the sub-scale institutional power of men as developed by Yoon et al. (2015).

No significant effect was found between the importance of gender identity and woman–leader identity conflict. This is inconsistent with the results of the study conducted by Settles (2004). There are several possible explanations for this. First, the aspect of the importance of their gender identity makes women comfortable with themselves and, thus, leads them to focus on the positive aspects of their identity

as women, thereby helping them to avoid negative consequences (Sellers & Shelton, 2003). However, high identity centrality does not protect against the pressures caused by sexism (Szymanski & Lewis, 2016). This is because individuals who consider gender to be an important aspect in their self-concept may, to control feelings of depression, anger, fatigue, and conflict with others associated with discrimination, let go of that identity when they experience sexism (Brondolo et al., 2009).

Non-significant results can also occur because identity as a leader is also important for individuals. When two conflicting identities are judged to be equally important, individuals will tend to separate them and assign each a role to play among those required by the individual (Settles et al., 2002). This role separation by women leaders changes according to their varied contexts and prevents identity conflict (Settles et al., 2002). This is because the separation of roles between being a woman and being a leader comes about by focusing on fulfilling the roles and tasks of each such that they can perform well in both (Settles et al., 2002). This statement is in line with the concept of "Bifurcation of Consciousness" given by Dorothy E. Smith, where women will split their consciousness in two to establish themselves as knowledgeable and competent beings within society and as leaders (Mann, 2008). In other words, it seems that for Indonesian women, their identity as a woman is separated from their identity as a leader. A study on women leaders in Indonesia by Riantoputra et al.

(2017) showed that in a multicultural urban area in Indonesia, positive leader identity was not related to gender but rather to the traits of the leaders. This aspect warrants further investigation.

Finally, organizational context (i.e., female-dominated, male-dominated, and neutral organizations) may influence identity conflict of women leaders. Current research focuses on male-dominated organizations (with a few neutral organizations); however, future research may want to investigate the impact of organizational context on women leader's identity conflict.

Limitations and Strengths

A limitation of this research is its use of a cross-sectional study design. Such a design impedes drawing proper conclusions about causality. It is advisable for future studies to design experimental or longitudinal studies to determine what causal relationships can be found among the research variables (Cozby & Bates, 2012).

This research has several strengths. First, the dataset in this study was collected in two stages, using a temporal separation technique (where data regarding predictors and the outcome variable were taken at separate times) and psychological separation (by making different questionnaire titles and cover stories, and not giving information that stage one and stage two questionnaires were interrelated). This was intended to avoid hypothesis guessing, which could be a source of bias (Podsakoff et al., 2003). Additionally, the number sampled was quite large. Taking data in two stages

usually produces a large response only in the first stage that decreases greatly in the second stage (Fuchs, 2012). In this study, 229 questionnaires were returned in the first stage and 163 in the second stage. The second-stage response rate obtained from those who had responded in the first stage was quite high (71.1%). Another strength of this study is its use of measurement instruments with good levels of reliability and with Cronbach's alpha ranging from .81 to .89 (Kaplan & Sacuzzo, 2005), which minimized errors in the results (Kumar, 2011).

Practical Implications

As positive gender identity was found to be important for reducing identity conflict, strategies should be implemented to maintain positive gender identity. Such strategies begin by equal opportunities in the selection process. Further, celebrations of gender identity as women should be encouraged. For example, by conducting seminars on the strengths of women leaders, or by choosing the best women leaders in a particular year. Providing other equal opportunities for female employees is strongly recommended.

The results of the research also indicate that employment as a leader is also important in reducing identity conflict in women leaders. For women with shorter tenures as leader, the development of identity as a leader can be encouraged through leadership training. This is based on the results of research showing that the longer one's tenure as a leader, the less woman–leader

identity conflict will occur. A certain period of work as a leader can help individuals develop their identities as a leader.

CONCLUSIONS

The increasing number of women serving as leaders in organizations has not completely changed the stigma of gender differences; in other words, individuals still tend to perceive the characteristics of women and those of successful leaders as contradictory. Few studies have examined factors affecting identity conflicts in women leaders. Using a rigorous research method to limit common method bias, the findings of this research indicate that positive gender identity can decrease identity conflict in women leaders, whereas patriarchal belief may increase identity conflict. The results of this study can contribute to the development of literature on identity within the organization.

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Exploring Halal Dining Experience and its Influence on Social Cohesion in Malaysia

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ABSTRACT

Dining is a fundamental biological need which serves as a social function for binding people in a society. It is a human sociality that people eat together; however, it could turn to be very complex in a multi-religious society where people have different dietary requirements prescribed by their religions. Limited studies reveal halal dining practices and its influence on social cohesion in a multi-religious society. In this study, we investigated and explored how Muslims uphold their religious commitment of halal dining within the inter-religious context and how non-Muslims perceive halal dining and participate in this commensality. This study aims to explore the behavioral patterns of halal dining experiences among urban millennials in a multi-religious societal context. The study was undertaken to measure the influence of halal dining experience on the socialization process between Muslims and non-Muslims which may affect the condition of social cohesion among them. This study also attempts to explore the inclusiveness of halal diners and their interactions. Adopting a qualitative approach, interviews were conducted among Muslims and non-Muslims urbanite millennials residing in Klang Valley. This study finds that dining dissimilarities challenge aspects of multi-religiosity but do not cause a major disruption in building a cohesive society. Thus, the issue that comes to fore is the manner in which people positively or negatively deal with their differences during commensality. The outcome of this research aspires to serve as a reflection of

halal dining experience in a multi-religious society towards building a cohesive and united society.

INTRODUCTION

The 11th Malaysia Plan (2016-2020) stresses on enhancing social cohesion and national unity by providing platforms for shared experiences, shared values and social interaction among diverse groups in Malaysia (Economic Planning Unit, 2015). We believe dining is one of the most common and effective platforms to enhance social cohesion. However, in a multi-religious society, dining could be one of the challenges in developing a sustainable cohesive and united society. This is due to the differences in dining practices, for example, Muslims generally observe halal requirements in dining, while non-Muslims such as Hindus and Buddhists may practice their own dietary requirements.

In Malaysia, the synergy of dining and social cohesion has been discussed in the context of *mamak* food (Indian Muslims' food) dining as a socialization process among the diverse groups of Malaysians (Olmedo & Shamsul, 2015). It seems that current research trends on halal focus more on the halal industry and consumption behavior among consumers (Ahmed, 2008; Aiedah & Ros Aiza, 2017; Bonne et al., 2007; Maheran et al., 2009). Nevertheless, several studies explore the role of religion on halal consumption among the majority of Muslim society (Aiedah et al., 2015; Alam, 2011; Fischer, 2011; Rezai et al., 2012; Riaz & Chaudry, 2004), as well as among the non-Muslim dominated society (Bonne et al., 2007; Fischer, 2008).

However, limited studies focus on the impact of halal on socialization and social cohesion in a society, particularly in a Muslim dominated society. As for the Muslim-minority populated countries, few studies were found discussing the halal dining and socialization in Singapore (Marancci, 2012; Nasir & Pereira, 2008; Nasir et al., 2010; Tong & Turner, 2008). Considering the fact that dining not only serves as an individual need but also a commensality that binds people (Fischer, 2011; Tuomainen, 2014), we believe studying the understanding and practices of halal dining in a multi-religious country like Malaysia is pertinent for us to understand the effects that it might have on socialization and social cohesion.

The aim of this paper is to explore the halal dining practices as a comprehensive analytical tool for analyzing the socialization practices which synergize the national social cohesion. We would like to delve deeper into halal dining experiences among Muslims and non-Muslims and how it affects the state of social cohesion within a community. This study also explores how Muslims uphold their religious commitments of halal dining within a multi-religious context. In addition, how non-Muslims perceive and participate in halal dining practices among Muslims and its influence on social cohesion are analyzed.

METHODS

Previous research had revealed 75.6% of Malaysians who admitted to being racist or having shades of racism were from the urban area (Centre for A Better Tomorrow, 2016). This is quite alarming and potentially destructive to the social being of the Malaysian society. Therefore, this study focused on urbanites in Klang Valley as informants. Klang Valley is a good representative location for this study due to the multi-religious population residing in this area with relatively active dining socialization among them.

The study was conducted among millennials who were born in 1982 - 2004 (Howe & Strauss, 1992) due to the fact that this group of young generation actively socialized with others and have a tendency to dine out frequently (Regine, 2011). We employed a qualitative research design using a semi-structured interview conducted among 25 informants. 12 Muslims and 13 non-Muslim informants from a diverse ethnic and religious background participated in this study. Informants were randomly chosen on the basis of two characteristics; first, millennials who were born between 1982-2004, and second, those who reside in the Klang Valley. Fifteen of our informants were young working adults and 10 of our informants were students in Public and Private Universities in Malaysia. Informants' profiles have been summarized in Table 1.

Table 1

Profile of informants

Informant	Age	Religion	Gender	Occupation
1	26	Muslim	male	marketing executive
2	33	Muslim	female	manger real-estate business
3	27	Muslim	female	kindergarten teacher
4	23	Muslim	female	kindergarten teacher
5	29	non-Muslim	male	hotelier
6	25	non-Muslim	male	hotelier
7	23	Muslim	female	work position was not disclosed
8	29	non-Muslim	male	work position was not disclosed
9	29	non-Muslim	male	work position was not disclosed
10	26	Muslim	female	work position was not disclosed
11	30	non-Muslim	female	work position was not disclosed
12	25	Muslim	female	work position was not disclosed
13	26	non-Muslim	male	supervisor
14	22	Muslim	male	work position was not disclosed
15	20	Muslim	male	work position was not disclosed
16	20	non-Muslim	male	student
17	20	non-Muslim	female	student

Table 1 *(Continued)*

Informant	Age	Religion	Gender	Occupation
18	19	Muslim	female	student
19	19	non-Muslim	male	student
20	19	non-Muslim	male	student
21	19	non-Muslim	female	student
22	22	Muslim	female	student
23	19	non-Muslim	male	student
24	20	non-Muslim	female	student
25	19	Muslim	male	student

Interviews were conducted in the English language and the Malay language depending on the informant's language proficiency. The interview consists of nine structured main questions on halal dining understanding and halal dining experiences including the aspect of interaction, inclusiveness, shared values as well as socialization experience in halal dining. Interviewers asked the main questions to all informants with the flexibility to rephrase the questions when necessary and change the sequence depending on the informants' response. Interviews were audio recorded with the informants' consent, transcribed verbatim and checked for accuracy by the respective interviewers. Data were analysed according to the thematic analysis approach and were independently coded line-by-line to generate primary codes and themes.

Conceptualizing Social Cohesion

There is no precise definition in conceptualizing social cohesion, it may have varied meanings to different people, as it could be viewed as both a process and an outcome (Wooley, 1998). A research conducted in Canada conceptualized social cohesion as a continuing process of developing a society of shared values, shared challenges and equal opportunity built on a sense of trust, hope, and reciprocity (Berger-Schmitt, 2000).

In this study, we conceptualize social cohesion as "the act or condition of sticking together, a tendency to cohere" (Allen, 1990) among members of the society. This concept dwells on intangibles, such as the sense of belonging, attachment to the group, willingness to participate and to share outcomes. The multi-dimensions of social cohesion studied in this research incorporate three important elements of cohesive society namely; absence of social exclusion, interaction and connection frequency (Elster, 1989) as well as the quality of social interaction which is based on language, religious, cultural and traditional group identity.

FINDINGS AND DISCUSSIONS

The Concept, Certification and Perceptions about Halal

The notion of halal should be conceptualized first in understanding the practices of halal dining in a society. Halal, an Arabic word which has been used globally, indicates lawful and permissibility and no restrictions found from the sources of Shariah; al-Quran and al-Sunnah. Technically, this implies that halal products are not made of, or does not contain any part of the prohibited ingredients and are free from any non-halal origins throughout the "seed to plate process". Even though our discussion in this research is on halal dining which refers to food and drinks, but technically halal covers non-food products as well, such as halal services, pharmaceuticals, personal care, finance and so on.

Al-Qaradāwi (1994) interpreted halal with an Islamic jurisprudence principle of the fundamental of things and actions that were permissible in Islam. The permissibility remains except if it is prohibited by a sound and explicit evidence from the sources of Shariah mainly from the al-Quran and al-Sunnah. The natural permissibility embraces all aspects of Muslim life, for example, food and drinks as well as matters of human speech and action in their daily life.

In the Malaysian context, halal is not only applicable to religious or individual matters, but it has become Federal and State government priorities for an economic, social and religious purpose. Halal has been institutionalized through two major institutions that anchor the halal industry and consumption are Malaysia's Department of Islamic Development (JAKIM) and Halal Industry Development Corporation (HDC). Both of these institutions have strengthened the framework of the halal industry, halal standard and halal consumption in the country.

Despite the principle of halal being universal, its understanding and practices have been shaped by the elements of culture, local norms, and politics. In Malaysia, religious personal domain, social norms, the halal logo were found among determinants influencing halal dining (Aiedah et al., 2015). In addition, halal institutionalization and halal framework that are structured by the government have shaped a significant portion of the halal understanding and practices in the Malaysian society. During our research, we gather that a large number of non-Muslim informants actually understand the concept of halal due to their socialization with Muslims and through information that is widely available in the country. Nine of the non-Muslim informants associated the halal concept with a halal certification by the government, as quoted below:

Informant 6, a 25-year old non-Muslim Chinese informant who works in a hotel stated: "Based on my understanding, halal food means that the animals must be slaughtered and food are prepared as according to halal procedure and must be certified by the JAKIM. There will be a sticker outside of the restaurants [to] indicate halal food [is served]".

Informant 8, a 29-year old Chinese male who graduated from the Hospitality and Tourism school shared the same understanding: "What I understand about halal food is food that [the food is] certified by JAKIM, after going through certain

process[es]. Like a restaurant or hotel, if they want to declare halal [service is available] they have to go through [an] application"

A 26-year old non-Muslim male, informant 13 articulated: "Halal food is prepared according to the halal standard by JAKIM. It follows rules of the Quran. I studied this in the University".

Similarly, research conducted by Marranci (2012) also revealed that the halal logo had influenced halal dining understanding and practices of both Muslims and non-Muslims in Singapore. Since, both Malaysia and Singapore have an established halal certification standard, it has influenced halal understanding and practices to some Muslims and non-Muslims.

Ever since halal has become a Malaysian national agenda, halal knowledge has been easily accessible in the country through online and offline resources provided by the governmental institutions, non-governmental organizations, and individuals. Thus, we believe that halal understanding in Malaysia is very much influenced by the halal institutions. In this study, we found that all our Muslim informants acknowledged that they learned about halal from their family informally, through socialization and they continued to learn more about it at school and university. Many of the Muslim informants could explain halal ingredients, religious processes of halal for example, the slaughtering process of animal, and the basics of halal certification.

Due to halal institutionalization and industry demands, the halal knowledge has been embedded in many academic courses, for example, in Culinary and Business courses. Informant 8, studied about the concept of halal during his Bachelor degree and the knowledge that he gained made him realize that halal is a positive concept which is associated with hygiene and food safety. This is aligned with a study conducted in Sarawak which revealed that positive attitudes about halal among non-Muslims is attributed to health and hygiene factors (Mathew et al., 2014). This possibly ascribes to the fact that the Malaysian halal certification complies with the Hazard Analysis and Critical Control Points (HACCP) standard of quality to ensure food safety, and aligns with the Good Manufacturing Practices (GMP) which also obliges with the hygiene requirement.

The most common response made by both Muslim and non-Muslim informants is that they associate halal with the slaughtering process, halal logo and pork-free food. This shows that religious interpretation and state interventions influence societal understanding, consumption practices and indirectly influence dining socialization among Muslims and non-Muslims. Thus, we argue that even though Muslims and non-Muslims have different beliefs about food consumption, yet they have a few common understanding about the concept of halal which indicates that they have some shared values.

Exclusion and Interaction in Halal Dining

Inclusiveness of halal dining is best to be viewed from two sides of the same coin;

which implies both Muslims and non-Muslims feel accepted and are not excluded by other members of the society due to their dining practices. This research employs data from Muslim and non-Muslim informants to provide a better view of how the millennial deal with inclusiveness and managing their dining differences. We found in this study that inclusiveness can be projected when non-Muslims respect halal requirements while dining together with Muslim fellows and Muslims respecting the non-halal dining practiced among non-Muslims.

Previous literature has proven the influence of friendships on eating patterns. The presence of peers and eating behaviors of others may influence the choice of food (Higgs & Thomas, 2016; Patrick & Nicklas, 2005) and bring the spirit of togetherness and inclusiveness among friends and members of society (Absolom & Roberts, 2011). In many urban cultures, commensality is a courtship process between couples and family members in a process of knowing each other and creating a relationship (Fischer, 2011). Informant 1, 26-year old Muslim male informant who works as a marketing executive in Kuala Lumpur revealed the inclusiveness of his friends in respecting his halal dining requirement; "During Christmas when my friends organized [a] Christmas party, they cooked halal food just because of me, I felt appreciated". In addition, Informant 3, a Muslim female who works as kindergarten teacher also commented that her Hindu friends respected her halal dining requirement while dining out together and she herself avoided eating beef as a respect to her Hindu friends.

Informant 20, a non-Muslim Chinese who works in Kuala Lumpur, shared his positive experience of socializing with friends from diverse ethnic and religious backgrounds during halal dining, he said "When I go for halal dining, I [am] able to meet a lot of people from difference race and sometimes I just strike up conversation especially at night when I go to *mamak* (Indian Muslims) restaurants". The immense influence of socialization in a *mamak* restaurant has been analysed by Olmedo and Shamsul (2015) which revealed that the *mamak* restaurant served as a dining platform that transcends ethnic boundaries and social status. In our study, we notice that halal dining is used as a platform for commensality and socialization between Muslims and non-Muslims. Our informants mentioned different halal dining spaces that commonly served as a gathering space between Muslims and non-Muslims namely the *mamak* restaurants, food courts and halal restaurants.

When we investigate more in-depth information during interview sessions, we found that few of the Muslim informants felt that despite socializing with other religious believers, occasionally they felt that they were excluded by non-Muslims due to their halal requirement in dining. Informant 1, also shared his experience in college days: "From my experience, during my diploma, I felt isolated from my non-Muslim friends because I was the only Muslim in the class, for example when they went out to eat they did not invite me, so I felt I was excluded from the group".

Informant 2, a Muslim female informant who had just completed her Master degree also shared: "They (non-Muslim friends)

would come to me and say 'Oh, I am sorry I cannot invite you for lunch because we are going to the non-halal restaurant, so sometimes I felt a bit left out". She shared her feeling on this matter during our interview: "To be honest, I did encounter exclusion in my diploma class, I felt offended and upset but I did mention to them about what I felt, at least they should inform me where they were going. I said just to inform me that does not mean I would follow you, but at least to acknowledge my existence".

We found that from the non-Muslim informant's point of views, they did not invite the Muslims friend due to the non-halal food constraints that practice by Muslims. Informant 11, a 30-year old non-Muslim young working adult informant said: "I mean sometimes for us to accept halal dining is okay, but for the Muslims to join us may be difficult for them because they are a bit skeptical, well, some are like very obligated to halal. So, even though we want to try something new in a pork-free but a non-certified halal shop but they would stop us from going there".

The second element that we analyzed with regards to halal dining and social cohesion in this study is social interaction. Social interaction is evolved around the frequency (Elster, 1989) and quality of interaction among social groups. Quality interaction may not be very frequent but it can give a positive impact in building a cohesive society. Good communication, interaction, and openness are important in managing different expectations and beliefs. From our interviews, we perceive that positive interaction is a crucial matter in managing differences in dining. Ten of the Muslim informants assured that they could

accommodate non-Muslims consuming non-halal in the society. However four Muslim informants expressed that even though they could accommodate non-Muslims to eat non-halal, they were not comfortable to eat together in a non-halal food environment especially where pork is served at the restaurant. A Muslim female, Informant 22, who graduated from a Public University in Selangor commented that "I feel not comfortable to eat together if my friend eats non-halal food, but so far my friends understand and they never bring non-halal food to eat together even [when] we stay at the same house, they never cook non-halal food in our kitchen".

However, out of 13 non-Muslim informants, two of them felt that there were boundaries between Muslims and non-Muslims in dining socialization, especially in the case of where Muslims do not accept the non-halal food dining among non-Muslims. Informant 5 narrated; "Sometimes you know, we, Chinese do not want to eat *mamak* food every day right, we want to go and eat something else, but we got one Malay colleague, we always have to cater to him to eat together with us. To be together, sometimes it creates a barrier".

From our findings, it is clearly shown that informants who felt that there was a boundary between Muslims and non-Muslims during dining are a minority compared to the majority of informants who could positively manage their dining differences. Most of all, dining differences could be managed by both parties through openness in communication, tolerance, and maturity in respecting others' beliefs and practices.

Managing Dining Differences among Muslims and Non-Muslims

Previous studies demonstrated that Muslims generally displayed a positive attitude about halal food and possessed relatively strong intention to consume halal food (Aiedah et al., 2015; Bonne, 2007; Rezai et al., 2012). Even though, from the Islamic point of view halal is a broad aspect, but halal awareness is more intense on food consumption which has resulted on the escalating growth of the halal food industry as the highest sector compared to other halal products and services (Shikoh, 2015).

Some differences have emerged between Muslims and non-Muslims due to difference in perception and level of halal sensitivity that they have about halal food. For example, consuming pork and alcohol are both considered non-halal, but some Muslims have no issues with dining in a restaurant which serves alcohol as opposed to a restaurant that serves pork. Nevertheless, many Muslims refrain from dining at the restaurants which serve alcohol or pork and non-certified halal restaurants to avoid themselves from being involved with *syubhah*. This point reflects the concept of *syubhah* in Islam which means doubtful about the status of halal or haram and the Prophet advised Muslims to avoid it. The basis of avoiding *syubhah* is grounded in the hadith of the Prophet (peace be on him). An-Nu'man ibn Basheer reported: I heard the Messenger of Allah, peace, and blessings be upon him, said:

Translation: The halal is clear and the ḥarām is clear. Between the two there are doubtful matters concerning which people do not know whether they are halal or ḥarām. One who avoids them in order to safeguard his religion and his honor is safe, *while if someone engages in a part of them he may be doing something ḥarām, like one who grazes his animals near the hima (the grounds reserved for animals belonging to the King which are out of bounds for others' animals); it is thus quite likely that some of his animals will stray into it. Truly, every king has a hima, and the hima of Allah is what He has prohibited (*Al-Busti (1993), *Saḥiḥ Ibn Hibban, Kitab al-Hadhor wa al-Ibahah Zakara 'Amru bi Mujanabati Syubahat Sitrahu, Hadith no. 5685).

In this perspective, Muslims rely on halal certification in deciding on whether the restaurant is halal or non-halal. Thus, in the absence of halal certification, some Muslims tend to take a vigilant effort by avoiding the food because it may fall under the ruling of *syubhah*. However, some may view that pork-free restaurants are acceptable and suitable dining sphere to socialize with their Muslim friends. Sometimes differences in understanding halal could lead to an argument in deciding a dining sphere. In the Islamic perspective, alcoholic drinks are not permissible for consumption unless during a condition of necessity (the concept of *darurah[1]*). Therefore, those who rigorously practice halal in their dining would try to avoid alcoholic drinks to be served during dining sessions.

Informant 13, a non-Muslim informant and works in Kuala Lumpur articulated that: to be honest, when I say there is no pork and no lard, they would say but it was only

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[1] Al Zuhayli (1997) defines *darurah* as permission to allow Muslims to commit a prohibited acts as well as to omit or delay an obligation due to in fear of injury to one's life, organs, lineage, reason or his property.

written there no pork and no lard but there is no halal certification, so for me, what is the problem? Sometimes there were a bit of argument between us".

A female Muslim who lives in Subang Jaya, Informant 2, shared her experiences during her Bachelor degree study in a Private University: "When we finish one semester, my friends (non-Muslims) would throw a party. So there were times that I did not follow them because they would go to a bar or club to drink. They wanted to socialize in their own way. Some of them who did not understand and might think of me of being very conservative, you know like why are you so boring, so they might have this judgment towards me. But after a while, they understood me. So they were willing to have two parties, like one for the halal one without alcohol, we just gathered in a restaurant to have pizza and soft drinks. And then at night, they would go for the non-halal one".

Informant 12 who works and graduated from a Public University in Kuala Lumpur, narrated her story: "I had an experience [when] I went out with my non-Muslim Indian friends and she suggested we eat in the restaurant that serves alcoholic drinks but no pork, she said many Malays also eat there, but I feel doubtful and I said I am not comfortable to eat there, and she said if you not comfortable it is ok we go and eat somewhere else, she understands me".

We would agree with Marranci (2012) that some non-Muslim may perceive the practice of defensive dining as antisocial, as revealed in the quotation above. But this matter has to be understood from the essence of the Islamic consumption as it involves Muslims. Crow (2013) mentioned that Islamic consumption integrated with the sense of rationality and faith, as the consumption was a part of religion. From the Muslims' point of view, they are practising the religion and translating it as their way of life. Muslims are accountable for their consumption as prescribed in the al-Quran. The al-Quran mentions in Surah al-Takāthur on the Islamic consumption.

Translation: Then, shall you be questioned that day about the joy you indulged in. (The al-Qur'an 102:8)

Interestingly, we have come across few non-Muslim interviewees who understood quite well about halal and seem to have less conflict in managing different commensal practices. For example, Informant 9, a non-Muslim young working adult who has many Muslim friends and colleagues said: "Ok let's say I went to a food court and they have some non-halal store, I won't buy non-halal food if I am eating with them because, maybe they won't mind but I have to respect them somehow, I mean as a person, we need to respect each other even though if I really like that food (non-halal food), but I can buy it for next time, I have to respect my friends or colleagues or..anyone..."

We notice that knowledge about halal and multi-religious socialization does influence how our informants manage their dining differences. Non-Muslim informants who associate more with Muslims tend to accept their dining differences with less conflict. Similarly, Muslims who usually

socialize with non-Muslims tend to be more understanding of their non-Muslim friend's non-halal consumption without compromising their own belief. In this view, Informant 3 pointed out that: "We have to respect each other, it is how we Muslims carry ourselves, if we respect the non-Muslims' dining, they would respect ours and vice-versa. It is more on mutual understanding."

It is within these dynamics, we conclude that even though halal is derived from the Islamic concept but its understanding has gone beyond the Muslims' sphere. Halal institutionalization in Malaysia has impacted the understanding and expectation of halal, which has covered aspects of hygiene, good manufacturing practices, and food safety. In addition, the differences in expectation and understanding of halal dining might also impact the commensal practices between Muslims and non-Muslims and indirectly influence the state of social cohesion in the society.

CONCLUSION

Commensality is a basic practice of Malaysian society that could be a strategy to achieve a cohesive society as it is aimed in the 11th Malaysian Plan. Even though differences in dining may affect social cohesion, we argue that the dissimilarity is not the main hindrance of social cohesion but how people manage their complexity. Divergence in a multi-religious society must be handled with tolerance and maturity in achieving a cohesive society whereas in this context Muslims and non-Muslims are free

to maintain their preferred dining practices without offending each other's practices. In this case, we agree with Nasir and Pereira (2008) and Nasir et al. (2010) that integration which is part of social cohesion could be achieved by adopting a defensive halal dining practice instead of an offensive one. This could be succeeded through the spirit of inclusiveness, positive interaction, acceptance and respect in managing dining differences. However, informants in this qualitative study are limited and do not represent the entire population. Therefore, the findings are not generalizable but could be used to provide contextualized understanding and analysis of halal dining experiences and its connection to the social cohesion aspect in the multireligious society Malaysia.

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SOCIAL SCIENCES & HUMANITIES

Millennials in the University: An Inquiry on Burnout among Filipino University Students

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ABSTRACT

Most students in the universities at present are considered millennials. Typically, this generational cohort is born from 1981 onwards. Considering their behavioral temperament, they are accused of being entitled and deficient in motivation and accountability. Further, other generations perceive millennials as having less desirable work behaviors and beliefs. At present, there is a dearth of scholarship on Filipino millennials and their experience of burnout. The present inquiry determined the extent to which Filipino millennial university students experienced burnout and how it was possibly inflected by gender or academic specialization. Additionally, academic achievement and workload were considered factors in the experience of burnout. The Maslach Burnout Inventory – Student Survey was utilized in this study with 249 respondents from a private university in Manila, Philippines. Results reveal that workload is positively correlated to exhaustion and, to some extent, cynicism. Likewise, academic achievement positively influences academic efficacy, which buffers the experience of exhaustion and cynicism. Regardless of gender and academic specialization, Filipino millennial university students seem not to be experiencing burnout. The analysis further shows that the respondents' academic efficacy is moderately high. On the other hand, exhaustion and cynicism range from moderately low to average.

Keywords: Academic achievement, academic efficacy, burnout, exhaustion, cynicism, millennials, university students

INTRODUCTION

At present, most students in universities are classified as millennials. While some studies may suggest a slightly different year classification, this generational cohort is typically born from 1981 onwards (Bucuta, 2015; Delcampo et al., 2011; Velasco & De Chavez, 2018). There is generally a lack of consensus among scholars regarding the scope of the millennial generation. For example, Sullivan and Heitmeyer (2008) typified millennials as individuals born from 1977 to 1994. Zemke et al. (2000) argued that millennials were born from 1980 to 2000. Nevertheless, a way of thinking about the millennial generation is that they are the cohort that came after the Baby Boomers and Generation X. Delcampo et al. (2011) delineated baby boomers as being born approximately from 1946 to 1964 and Generation X as born approximately from 1965 to 1980.

The literature suggests that millennials are characterized by their inclination toward the use of technology. Considered digital natives, the lives of millennials are intertwined with information and communication enabled by digital technology. Hershatter and Epstein (2010) argued that the "sixth sense" of millennials was technology. Howe and Strauss (2007) opined that millennials were more confident and trusting than the preceding generations; however, millennials were also perceived as "pampered, risk averse, and dependent". Despite the subtle differences in the year segmentation of the millennial cohort, they are called the "hero generation" or the "me generation". Barnes (2009) explained this twofold view on millennials:

They have been described as being the next great "hero" generation, indicating their traits as being extraordinarily well rounded, having high self-esteem, being civic-minded, and raised to believe they could do anything. Others describe them as the next "me generation," indicating their self-focus, expectation of entitlement, and desire for fame and fortune." (p. 61)

Considering their behavioral temperament, millennial university students seem to lack drive, motivation, and accountability (Alexander & Sysko, 2015). Likewise, Jerome, Scales, Whithem, and Quain (2014) posited that other generations perceived millennials as having less desirable work behaviors and beliefs. Given the divergence in the depiction and perception of millennials vis-à-vis their behavior at work, Alsop (2008) revealed that employers were bothered by millennials' proclivity toward modifying their work to fit their lives as compared to adapting their lives to their work.

In the Philippines, there is dearth of scholarship on millennials and how they experience burnout. Maslach (1993) defined burnout as a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment. Herbert Freudenberger in Kocaekşi (2016) illumined that burnout was extreme tiredness derived from the increased demand on energy, resources, and strength. It may also be considered a "systemic disconnect between a person and expectations at an

activity and how this disconnect expresses itself emotionally and physically" (Galbraith & Merill, 2012).

Research on burnout, as Jacobs and Dodd (2003) illumined, originally focused on occupational groups such as human service workers, teacher, psychologists, and nurses. Few investigations have been done in examining the concept of burnout among college students. As revealed in the inquiry, some symptoms of burnout include decreased motivation and work satisfaction. Likewise, the chances for health impairments, social conflict, and diminished efficiency are higher. The aim of the study was to explore the relationship between social support and the three components of burnout as conceptualized by Maslach and Jackson (1981), which were emotional exhaustion, depersonalization, and reduced personal accomplishment.

The participants in the study of Jacob and Dodd (2003) were 149 undergraduate students enrolled in a private mid-sized university in the US. Maslach and Jackson's (1981) Burnout Inventory, General Temperament Survey, and the Multidimensional Scale of Perceived Social Support were administered to the participants. The results showed that the respondents exhibited moderate to high levels of emotional exhaustion and personal accomplishment. Conversely, the level of depersonalization is low to moderate. Further, results revealed that those with negative temperament were inclined to experience burnout. A negative temperament "reflects the feelings of chronic stress and

nervousness, the experience of strong negative emotions, and worrying" (Maslach & Jackson, 1981). Thus, having a negative temperament leads to impaired concentration and disrupted sleep. Conversely, having a positive temperament influences personal accomplishment. The study particularly identified optimism as a buffer against stressors and frustration. Social support derived from friends mitigates the effects of burnout. Specifically, support from friends is linked to having lower levels of depersonalization and higher levels of personal accomplishment. Notably, subjective workload is more closely related to the three aspects of burnout rather than the objective workload. Subjective workload is the feeling that one's academic and extracurricular load is heavy. On the other hand, objective workload is the actual load of academics, employment, and extracurricular activities. Jacobs and Dodd (2003) further explained:

Students who were not experiencing burnout felt as though they were overcommitted, even though they were enrolled in similar academic loads and were participating in extracurricular activities less frequently than did students who were not experiencing burnout. (p. 299)

As such, burnout is the disjuncture between perceived work and its acceptable magnitude. Aside from the demands of work, burnout has social manifestations as well. Welch et al. (1982) revealed that the social symptoms of burnout might include having a judgmental outlook on one's self and others, blaming others for one's

predicament, and a general mistrust of other people.

Galbraith and Merill (2012) examined the interaction between work-related burnout and academic burnout of working college students. Personal, academic, and environmental stressors such as grade, course load, and other requirements were linked to the experience of burnout. Furthermore, there was an inverse relationship between burnout and social support. Three hundred forty undergraduate business students in a mid-sized public university participated in the study. The modified Maslach Burnout Scale – General Survey (MBI-GS) was administered at the start and end of the semester in order to conduct a longitudinal analysis. In the first administration of the MBI-GS, the language was modified to refer to academic activities. For the second facet, the MBI-GS was reworded to refer to work-related activities.

The variables examined in the study included number of hours rendered in a week, pay rate, night hours worked, hours of study per week, and involvement in university credit internship. Likewise, overall GPA and expected GPA were gathered. Results showed that academic exhaustion, cynicism, and efficacy increased throughout the term. Considering work-related cynicism, it increased during the semester. However, work exhaustion and efficacy significantly decreased throughout the semester. This occurrence revealed that working students had a tendency to put less priority on work to concentrate on academic obligations. The analysis also revealed

that females exhibited more academic exhaustion than males. Students with lower GPA and individuals who anticipated their GPA to decrease showed higher levels of academic exhaustion. Exhaustion as one of the manifestations of burnout was negatively correlated with engagement.

Consequently, there are interactions taking place between academic burnout and work-related burnout. Gender seems to have an impact on academic and work-related burnout. Female university students tend to have higher academic burnout. This is also claimed by other studies such as Misra and McKean (2000), and Weckworth and Flynn (2006). Galbraith and Merill (2012) suggested that student services should not only focus on the mitigation of exhaustion (e.g. recreation centers and psychological services) but also cynicism. Programs should be developed to improve students' "sense of accomplishment, perception of significance, and enthusiasm for involvement" (Galbraith & Merill, 2012).

Similar to the aforementioned studies, Kocaekşi (2016) explored the experience of burnout of college students in Turkey. Burnout is considered to be a crucial cognitive variable that affects the teaching and learning experience in the university. Hence, the primary goal of the inquiry was to assess the burnout level of students enrolled in Anadolu University Faculty of Sport Science. The Maslach Burnout Inventory student form was utilized, and 153 respondents participated in the study. The subscales of the burnout inventory were compared in terms of gender, class

level, and department. Results revealed that there was a statistical difference in terms of gender, specifically, women experience more emotional exhaustion than men.

In Spain, Gálan et al. (2011) examined burnout among pre-clinical and clinical years of medical students. The participants in the study were third year (preclinical) and sixth year students (final year) from the School of Medicine in Seville. Two hundred seventy students successfully completed the process. Results showed that one out of four medical students were at risk of burnout and the occurrence increased from third year to the sixth year of training. The medicine curriculum and demography of students were highlighted in the study. Students at the School of Medicine in Seville were relegated to bystander roles despite the rotation in varying clinical departments. Factors that were associated with burnout among students of medicine include curricular factors, personal life events, and the learning environment. Burnout in the medicine program may possibly lead to unprofessional conduct, suicidal ideation, and even dropping out from the program.

In the present inquiry, the millennial year segmentation delineated by Delcampo et al. (2011) was adapted. In this sense, millennials are individuals born from 1981 to 2000. At this point, most students enrolled in higher education institutions in the Philippines are classified as millennials. However, this generational cohort has not been studied expansively in terms of work-related behaviors and other associated areas. Likewise, most research on burnout

focused on occupational groups such as human service workers and educators. The current inquiry therefore seeks to examine how burnout is experienced by millennials in the context of the university. Specifically, these are the research questions:

1. To what extent do millennials in the university experience burnout?
2. How does the experience of burnout differ between gender and academic specialization?
3. What is the relationship among academic workload, academic achievement, and burnout?

The millennial generational cohort is increasingly becoming a significant subject of study in different disciplines. Millennials, as depicted in popular culture, are with a set of beliefs that are deemed different from preceding generations. As noted by Alsop (2008), millennials are perceived as having undesirable work-related behaviors such as such blatantly projecting their sense of entitlement and practicing cavalier work behaviors. In the context of the university, the study of millennials will shed light on how educational and organizational processes can be improved to enhance the productivity of university students. The results of the study will assist educators and administrators in formulating strategies and programs that mitigate student burnout.

MATERIAL AND METHOD

One of the most notable instruments that measure burnout is the Maslach Burnout Inventory (MBI), which contains three dimensions – emotional exhaustion,

depersonalization, and reduced personal accomplishment (Maslach & Jackson, 1981). Hu and Schaufeli (2009) further delineated the inventory:

The MBI includes three dimensions that constitute burnout: emotional exhaustion, which refers to feelings of being depleted of one's emotional resources, representing the basic individual stress component of the syndrome; depersonalization, which refers to negative, cynical, or excessively detached responses to other people at work, representing the interpersonal component of burnout; and reduced personal accomplishment, which refers to feelings of decline in one's competence and productivity and to a lowered sense of efficacy, representing the self-evaluation component of burnout. (p. 394)

The Maslach Burnout Inventory has several iterations for various contexts: MBI – Human Services Survey (MBI-SS), MBI – Educators Survey (MBI-ES), MBI – General Survey (MBI-GS), and MBI – Student Survey (MBI-SS).

Hu and Schaufeli (2009), on the MBI-SS, maintained that students are not necessarily employed or hold jobs. Nevertheless, students participate and engage in structured work-like activities such as attending classes and completing assignments. The Maslach Burnout Inventory – Student Survey contains three facets: emotional exhaustion, cynicism, and academic efficacy. Cynicism is similar to depersonalization. Likewise, academic efficacy holds similarity with personal accomplishment.

The present inquiry utilized the Maslach Burnout Inventory – Student Survey since the respondents are students enrolled in a university. The MBI-SS contains 15 questions, specifically, five items for emotional exhaustion, four items for cynicism, and six items for academic efficacy (Hu & Shaufeli, 2009). Each item of the MBI-SS was answered through a Likert scale ranging from 0 – Never to 6 – Always. In this study, workload is operationalized through the number of units enrolled by each respondent. Moreover, academic achievement is operationalized through the student's grade point average (GPA).

Table 1

Frequency profile of respondents by gender and academic specialization

Gender	Frequency
Male	173
Female	76

Academic Specialization	Frequency
Information Technology	186
Engineering	63

Table 1 shows the summary of the respondents as classified by gender and academic specialization. Students who are enrolled in Far Eastern University – Institute of Technology in Manila, Philippines participated in the study. Through purposive sampling, 249 students were chosen to participate in the inquiry; all respondents are born from 1995 onwards. To analyze the data, SPSS was utilized. Specifically, in determining the relationship among the variables, Spearman rank-order correlation coefficient was utilized.

RESULTS AND DISCUSSION

Table 2 shows the overall descriptive statistics for the units enrolled, grade point average, study hours, and the subscales of the MBI-SS. As shown in the table, the average units enrolled is 17.64, the average study hours per week excluding class hours is 10.69. Moreover, the average GPA of the respondents is 3.5. As noted in the grading system of the Institute, the highest possible GPA is 4.0. Considering the subscales of the MBI-SS, the mean for exhaustion is 2.24, which is considered average. For cynicism, the mean is 3.20, which is also average. On the other hand, the mean for academic efficacy is 4.01, which is moderately high. On the aggregate level, the findings are not indicative that the respondents are experiencing burnout.

Table 3 shows the descriptive statistics of the respondents in terms of the number of units enrolled, study hours, GPA, and the subscales of the MBI-SS; classified in terms of gender. For male student, the average unit

Table 2

Aggregate descriptive statistics

	n	Minimum	Maximum	Mean	Std. Deviation
Units Enrolled	249	3	24	17.64	3.40
Study Hours	249	1	72	10.69	10.80
GPA	249	1	3.5	2.24	0.59
Exhaustion	249	0	6	3.20	1.17
Cynicism	249	1	6	1.97	1.20
Academic Efficacy	249	1	6	4.01	0.94

Table 3

Descriptive statistics by gender

Male	n	Minimum	Maximum	Mean	Std. Deviation
Units Enrolled	173	3	24	17.63	3.44
Study Hours	173	1	72	11.17	11.73

Table 3 *(Continued)*

Male	n	Minimum	Maximum	Mean	Std. Deviation
GPA	173	1	3.5	2.20	0.60
Exhaustion	173	0	6	3.19	1.19
Cynicism	173	0	6	2.02	1.18
Academic Efficacy	173	1	6	4.00	0.94

Female	n	Minimum	Maximum	Mean	Std. Deviation
Units Enrolled	76	9	22	17.70	3.30
Study Hours	76	2	36	9.35	8.16
GPA	76	1	3.2	2.34	0.53
Exhaustion	76	1	6	3.23	1.10
Cynicism	76	0	5	1.81	1.25
Academic Efficacy	76	1	6	4.13	0.93

enrolled is 17.63 and the average study hour is 11.17. Considering GPA, male students have an average of 2.20. Female students, with an average of 17.70 almost have the same units enrolled with male students. However, female students reported to have less study hours, which is 9.35 hours per week, as compared to male students. Considering the GPA, which stands as the measure for academic achievement in this study, female students have a minutely higher score at 2.34.

Considering the subscales of the MBI-SS for male students, exhaustion is at 3.19, which is average. Cynicism for male students is at 2.02, which is also considered average. As for academic efficacy, male students are reported to have a mean of 4.00, which is considered moderately high. Exhaustion for female students is at 3.23,

which is average. Focusing on cynicism, the mean for female student is 1.81, which is considered moderately low. Academic efficacy, for female students, is at 4.13, which is moderately high. The claim of Misra and McKean (2000) and Weckworth and Flynn (2006) that females tend to experience more academic exhaustion is confirmed. Despite the subtle differences in the results of the MBI-SS, both male and female students are less likely experiencing burnout.

Table 4 shows the descriptive statistics of the respondents in terms of the units enrolled, study hours, GPA, and the subscales of the MBI-SS; classified in terms of academic specialization. Students who are in the information technology program have a mean of 17.76 in terms of the units enrolled. The study hour for information

Table 4

Descriptive statistics by academic specialization

Information Technology	n	Minimum	Maximum	Mean	Std. Deviation
Units Enrolled	186	7	24	17.76	3.42
Study Hours	186	1	72	10.93	11.12
GPA	186	1	3.5	2.26	0.59
Exhaustion	186	0	6	3.24	1.24
Cynicism	186	0	6	1.97	1.27
Academic Efficacy	186	1	6	3.95	1.00
Engineering	n	Minimum	Maximum	Mean	Std. Deviation
Units Enrolled	63	3	22.50	17.38	3.37
Study Hours	63	1	72	10.17	10.56
GPA	63	1	3.5	2.19	0.60
Exhaustion	63	0	6	3.10	1.00
Cynicism	63	0	5	2.00	1.04
Academic Efficacy	63	1	5	4.15	0.78

technology students is at an average of 10.93. Considering GPA, students in the information technology program have a mean of 2.26. Students in the engineering program have a slightly lower mean for the units enrolled and study hours as compared to information technology students, it is at 17.38 and 10.17 respectively. Conversely, students in the engineering program have lower mean GPA at 2.26 as compared to information technology students.

Considering the subscales of the MBI-SS for information technology students, the mean for exhaustion is 3.24 and academic efficacy is 3.95, both of which is average. Conversely, cynicism for information technology students is at 1.97, which is moderately low. For engineering students, the mean for exhaustion is 3.10 and cynicism is 2.00, both of which is average. On the other hand, the mean for academic efficacy for engineering students is 4.15, which is moderately high. Despite the subtle differences in terms of exhaustion, cynicism, and academic efficacy of engineering and information technology students, it is not indicative burnout.

Table 5 shows the overall correlation of the units enrolled, GPA, study hours, and the subscales of the MBI-SS. Results reveal that the number of units enrolled is positively correlated with the experiences of exhaustion, $r_s = 0.151$, $p < 0.05$. This partially confirms that claims of Galbraith

Table 5

Overall correlation of units enrolled, GPA, and MBI-SS subscales

	Exhaustion	Cynicism	Academic Efficacy
Units Enrolled	0.151*	0.048	0.025
GPA	-0.094	-0.180**	0.308**
Study Hours	0.075	-0.106	-0.20

Note: *p < 0.05 and **p < 0.01

and Merill (2012) that one's academic load increases the likelihood of experiencing exhaustion. On the other hand, GPA is negatively correlated with cynicism, r_s= -0.180, p < 0.05; however, GPA is positively correlated with academic efficacy, r_s 0.308, p < 0.01. It is foreseeable that the number of units enrolled, which is considered the academic workload, influences one's experience of exhaustion. Higher academic achievement for the respondents more likely leads to a positive outlook in terms of their academic progress. Furthermore, higher academic achievement also leads to a higher sense of efficacy in terms of fulfilling their academic work.

Table 6 shows the correlation of the units enrolled, GPA, study hours, and the subscales of the MBI-SS by gender. For male students, GPA is positively correlated with exhaustion r_s = 0.221, p < 0.01 and academic efficacy r_s = 0.345, p < 0.01. However, GPA for male students is negatively correlated with cynicism, r_s= -0.169, p < 0.05. Hence, academic achievement for male students influences one's experience of exhaustion. Also, higher academic achievement leads to a more positive outlook of one's academic work. Similar with the aggregate correlation between GPA and academic efficacy, male student with higher academic achievement have a greater sense of academic efficacy. For female students, no significant correlations were discovered.

Table 6

Correlation of units enrolled, GPA, and MBI-SS subscales by gender

Male	Exhaustion	Cynicism	Academic Efficacy
Units Enrolled	0.141	0.039	0.103
GPA	0.221**	-0.169*	0.345**
Study Hours	0.079	-0.084	-0.071
Female			
Units Enrolled	-0.181	0.082	-0.193
GPA	0.538	0.066	-0.207
Study Hours	0.055	-0.214	-0.105

Note: *p < 0.05 and **p <0.01

Table 7 shows the correlation of the units enrolled, GPA, study hours, and the subscales of the MBI-SS by academic specialization. For information technology students, the units enrolled is positively correlated with exhaustion, $r_s = 0.190$, $p < 0.05$. On the other hand, for engineering students, the correlation between grade point average and exhaustion is negative, $r_s = -0.256$, $p < 0.05$. It is conceivable that higher workloads lead to greater exhaustion as shown in the case of information technology students. For engineering students, higher academic achievement more likely leads to lower exhaustion since academic achievement positively influences their sense of efficacy.

Considering the correlation between GPA and academic efficacy of both information technology and engineering students, such is positively correlated: $r_s = 0.315$, $p < 0.01$ and $r_s = 0.316$, $p < 0.01$ respectively. Focusing on engineering students, the correlation between GPA and cynicism is negative, $r_s = -0.295$, $p < 0.01$.

Hence, this further confirms that academic achievement has an effect on one's academic efficacy. Therefore, higher achievement leads to greater efficacy.

CONCLUSION AND RECOMMENDATIONS

This study explored and analyzed the concept of burnout as experienced by millennial university students. As mentioned earlier, all respondents were born from 1995 onwards, which fitted the millennial category as posited by Delcampo et al. (2011) and Velasco and De Chavez (2018). Millennials have been subjected to interesting depictions in popular culture as having cavalier work attitudes, behaviors, and having a great sense of entitlement. In this sense, the current exploration on burnout vis-à-vis millennials sheds light on how they respond to various aspects of academic work.

According to Hu and Shaufeli (2009), having high scores on exhaustion and cynicism and low scores on academic efficacy is indicative of burnout. Based

Table 7

Correlation of units enrolled, GPA, and burnout subscales by academic specialization

Information Technology	Exhaustion	Cynicism	Academic Efficacy
Units Enrolled	0.190*	0.075	0.012
GPA	-0.040	-0.141	0.315**
Study Hours	0.122	-0.097	0.003
Engineering			
Units Enrolled	0.032	-0.015	-0.050
GPA	-0.256*	-0.295**	0.316**
Study Hours	-0.067	-0.125	0.096

Note: *$p < 0.05$ and **$p < 0.01$

on the results, Filipino millennials in the university seem not to be experiencing burnout. Upon probing further, regardless of gender or academic specialization (i.e. engineering or information technology), the data shows that exhaustion and cynicism are moderately low to average. On the other hand, academic efficacy ranges from average to moderately high. Perhaps, this can be attributed to the respondents' ability to see the connection between their academics and personal growth thus fending burnout. It is revealed that workload as represented by the amount of units enrolled increases the likelihood of experiencing exhaustion and, to some extent, cynicism. However, such is mitigated by academic achievement. The respondents' academic achievement is linked positively with academic efficacy. Hence, despite having a seemingly tremendous workload, positive results in their GPA buffers the feelings of exhaustion and cynicism.

The number of hours dedicated to studying outside their class hours is the variable that the does not influence the experience of burnout. This specific variable shows no significant interaction with exhaustion, cynicism, or academic efficacy. Given that GPA buffers exhaustion and cynicism, this reveals that millennial university students possibly put a premium on their academic work. As long as they perceive that their GPAs are leaning toward the positive side, they are less likely to experience burnout. However, this may also present several problems. Putting too much importance on academic

achievement leads to a narrow experience of a university education. Specifically, they might neglect other aspects such as participating in extracurricular activities and professional development programs. Simply put, millennial university students in the Philippines may have the tendency toward being exceedingly conscious about their GPAs. As noted in the results, academic achievement buffers their experience of exhaustion and cynicism from academic tasks. This would eventuate to grade inflation in higher education institutions since students would appeal for higher grades.

Overall, this study examined burnout vis-à-vis millennial university students in the Philippines. Likewise, the interactions among workload, academic achievement, study hours, and burnout were analyzed. The results are not indicative of burnout since exhaustion and cynicism are lower than academic efficacy. Nevertheless, academic workload intensifies the feelings of exhaustion and cynicism. Conversely, academic achievement increases academic efficacy, which conceivably buffers feelings of exhaustion and cynicism. Therefore, the following recommendations are made to enrich this area of study and improve university services for millennial students:

- The university should provide more alternative assessment of student's academic work to widen their repertoire and conceptions of academic achievement. At present, millennial university students, for the most part, consider their GPA

as the apex of their university life. Hence, there should be courses or academic tasks that should not be marked through the GPA. Perhaps, industry apprenticeship aside from the actual formal internship should be encouraged to diversify one's learning source. This should not be marked as part of the GPA but simply through completion of hours. In this sense, this would give students an alternative learning experience at the same time be considered an academic achievement beyond the GPA.

- The university should also encourage students to participate in extracurricular activities, which would also enrich their academic life. Participating in extracurricular activities and subsequently meeting friends and acquaintances can also buffer the experience of burnout. It can be a considered a diversion for one's immense academic workload. Galbraith and Merill (2012) opined that social support from friends mitigated the experience of burnout.

- Given that academic workload increases the experience of exhaustion and cynicism. Academic advising, therefore, should be made consistently accessible. The university should provide an academic adviser in each department. This would ensure that students are appropriately guided in selecting the combination and number of courses to take each term. Advise should be given with respect to how much students can acceptably accomplish in a given term without compromising their ability to cope.

- In succeeding inquiries, a qualitative approach in the study of burnout vis-à-vis millennial university students may prove to be productive. Explorations on the antecedents of exhaustion and cynicism will further elucidate on this area of inquiry.

- In the current study, only students in the engineering and information technology programs participated. Getting a wider set of respondents from other academic specializations would enrich the results of the study. Perhaps, examining millennial university students vis-à-vis burnout in the areas of business, humanities, or social sciences would yield different results.

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Good Governance for *Zakat* Institutions in Indonesia: A Confirmatory Factor Analysis

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ABSTRACT

Good governance is a crucial issue in the performance of *zakat* institutions, as *zakat* institutions are non-profit public organizations that are trusted by the community. In Indonesia, the huge potential of securing *zakat* funds by *zakat* institutions is currently not optimized due to the lack of public trust. By utilizing a Confirmatory Factor Analysis model, this research aimed to examine dimensions of the principles of good governance namely, transparency, accountability, responsibility, independence and fairness practiced among *zakat* institutions. Data was obtained from interviews with leaders and staff of *zakat* institutions in Indonesia. Findings of the study suggest that the dimension of transparency contributed most to good governance followed by accountability, responsibility, and independence. It can be concluded that good governance in *zakat* institutions has been well implemented only in some aspects but not in totality. This research could be used to create guidelines on *zakat* management governance while serving as a reference for formulating policies related to the standardization of good governance in *zakat* institutions.

Keywords: Confirmatory Factor Analysis (CFA), good governance, performance, *zakat* institutions

INTRODUCTION

Good governance is an important concern in the context of *zakat* institutions. As public organizations, *zakat* institutions, especially in terms of their performance,

management, and service they provide, must at all times be able to garner public trust. Currently, the urgency to implement good governance in various public institutions is driven by the need to promote effective and efficient managerial performance to protect the interest of the board of directors, management, stakeholders, shareholders, and customers (Organization for Economic Co-operation and Development [OECD], 2004; Pillai & Al-Malkawi, 2017; Spear et al., 2009). However, *Sharia* governance as

practiced by *zakat* institutions is different from conventional corporate governance. *Sharia* Governance targets compliance with *Sharia* principles as its main objective (Bhatti & Bhatti, 2010; Hasan, 2009; Lewis, 2006; Mirakhor & Askari, 2017; Safieddine, 2009). Therefore, as Islamic institutions, *zakat* institutions should comply with ethical and moral standards and values specified by the *Sharia*. In reality, these values of good ethics and moral standards practiced by *zakat* institutions are quite similar to those practiced by other conventional financial institutions.

Compliance to these *Sharia* principles of good ethics and moral standards is especially important for *zakat* institutions as they are an essential mechanism for the redistribution of wealth from the able and haves to the less abled and have nots. In order for *zakat* institutions to perform this role, it is essential that they comply with *Sharia* principles and practice good governance in order to gain public trust. This research is motivated by the findings of a study conducted by the National Board of *Zakat* (BAZNAS) which found that the estimated potential *zakat* collection in Indonesia in 2011 was approximately IDR 217 trillion. The study also found that this economic potential was not realized and that the *zakat* collected at the national level in 2015-2016 was only estimated at IDR3 to 5 trillion per year (National Board of *Zakat* [BAZNAS], 2017). In an earlier study (Beik, 2009), the researcher stated that a number of government policies were not effective in realizing the full potentials of *zakat* management and collection in Indonesia.

In the context of *zakat* management in Indonesia, Islamic values have been incorporated by a specific regulation i.e. Law No. 23, Year 2011 on *Zakat* Management. This law stipulates two models of *zakat* management in Indonesia. They are (1) *zakat* managed by the State through specific government bodies and (2) *zakat* managed by Non-Governmental Organizations (Alfitri, 2005; Jahar, 2008). This law stipulates that *zakat* collection in Indonesia must only be managed professionally by accommodating principles of good governance. It can be concluded that the enforcement of good governance principles in an integrated manner is absolutely essential for *zakat* institutions to compete globally and to meet the demands of stakeholders and to serve these stakeholders more efficiently.

Research on good governance in Islamic institutions focusing on *zakat* institutions has been conducted before by various scholars. Studies on Corporate Governance in Islamic institutions including by Chapra and Ahmed (2002), Irma and Hamdani (2017), Mansoor and Bhatti (2008), Lewis (2006), Samra (2016), and Wafiq and Pellegrini (2006) show that corporate governance has become a major issue with financial institutions due to their failure to implement good corporate governance. Some other studies on Islamic governance in social organizations (Issyam et al., 2016; Kaslam 2011; Ramli & Muhamed, 2013; Wahab & Rahman, 2011) have discussed and emphasized the importance of *Sharia* governance in enhancing the performance and management of Islamic

social institutions. With these findings presented by previous works, this study aimed to explore the phenomenon of good governance further by investigating the implementation of good governance for *zakat* management in Indonesia via a Confirmatory Factor Analysis (CFA). The investigation examined specific indicators of each of the dimensions of good governance and how they contribute to good governance. The indicators examined are found within the principles of transparency, accountability, responsibility, independence and fairness.

METHOD

This study utilized both qualitative and quantitative methods of data collection and analysis. The statistical analysis applied in the study used the Second Order Confirmatory Factor Analysis (CFA) model, which was in fact a measurement model consisting of two levels (Brown & Moore, 2012). At the first level, CFA demonstrates connections between variables as indicators to related latent variables. At the second level, CFA demonstrates connections between latent variables at the first level as indicators to latent variables at the second level. By using CFA modeling in this study, the researcher examined each indicator's contribution to the dimensions of good governance. The software used in the analysis was Partial Least Square (PLS) version 3.

This research also acquired data for analysis via a structured questionnaire which required respondents to answer

questions related to 27 indicators (refer to Appendix A) classified in accordance with the five principles of good governance (transparency, accountability, responsibility, independence, and fairness).The sampling procedure employed was non–probabilistic purposive sampling. The *zakat* institutions which consented to be part of the study were all legally recognized and had been in operation for more than five years.

Ten *zakat* institutions were approached, but only four were willing to share their data and information and consented to be part of the study. These were BAZIS Jakarta Capital Region, BAZNAS Municipality of Bogor, BAZNAS District of Karawang, and BAMUIS BNI. The questionnaire was distributed to all the staff of the *zakat* institutions all the way from directorate to the lower level personnel. A total of 55 questionnaires were distributed and 42 were answered. Out of the 42 questionnaires returned to the researcher, 2 were found to be not suitable for data processing and analysis as they were incomplete. 40 questionnaires were therefore processed and analyzed. Data collection took place over a three-week period.

RESULTS AND DISCUSSION

Confirmatory Factor Analysis (CFA) is a kind of structural equation modeling that deals specifically with measurement models and investigates the relationships between observed measures or indicators (Brown & Moore, 2012; Harrington, 2009). By using the Confirmatory Factor Analysis (CFA) method in this study, the research was able

to investigate the relationship between exogenous and endogenous latent variables. The five principles of good governance are identified as endogenous latent variables and these are the first stage factors. These five principles are further divided into 27 exogenous indicators, which make up the second stage factors (Appendix A).

Estimation Parameters and Path Diagrams

Below is a path diagram of a CFA at two levels along with the parameter of result estimation, which describes connections between indicators and the dimensions of transparency, accountability, responsibility, independence, and fairness. The diagram

aims to show the connections between the 27 indicators and the five dimensions of good governance. An indicator is said to be valid at the first order CFA and the second order CFA if its loading score exceeds 0.5. If the loading score is less than 0.5, this means that the indicator will be omitted as it cannot be loaded onto the construct representing it (Abdillah & Hartono, 2015). The path diagram (Figure 1) shows that at first order CFA, there are 10 indicators with a loading score of less than 0.5; namely, (i1x,i3x1, i8x,i9x1,i3x2, i7x2, i8x2, i9x2, i10x2, i3x3 – explained in Appendix A). This means that there are 10 indicators that are not valid for the first order CFA, and they must be erased and taken out of the analysis.
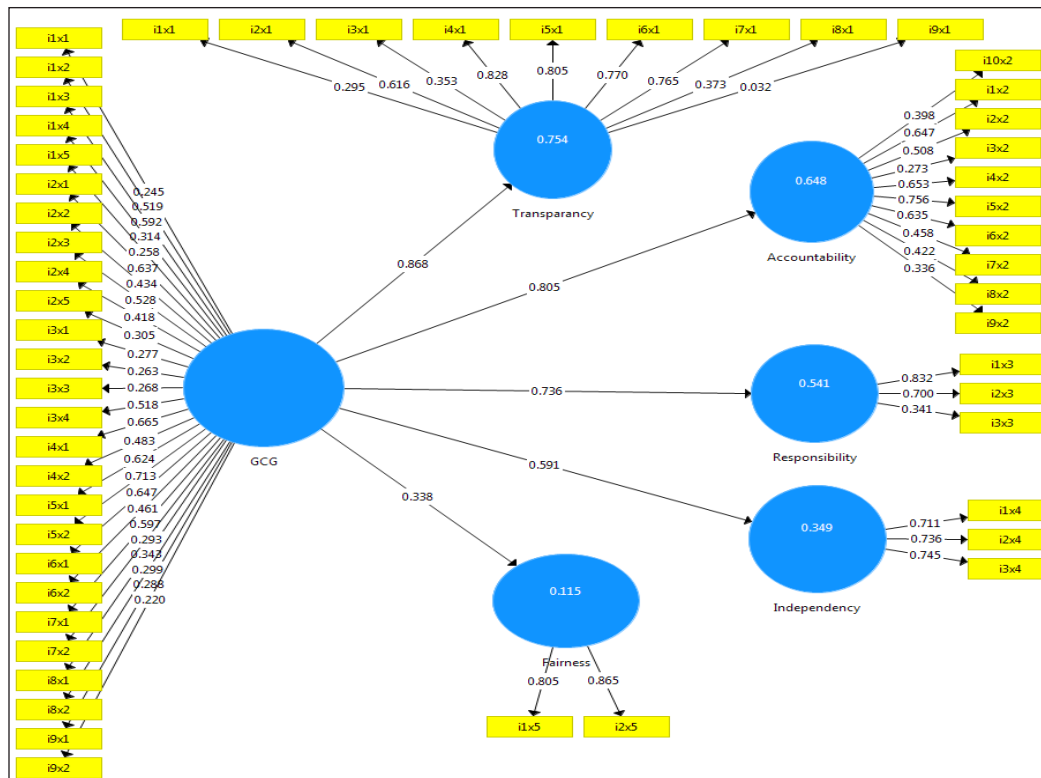
Figure 1. Path diagram results of estimation parameter

At the second order CFA, there was one construct in the dimension of fairness with a loading score less than 0.5 and had to be omitted because of its weakness in explaining the construct. Hence, re-running of the data had to be done. The result of running the path diagram shows that all indicators related to the dimensions of transparency, accountability, responsibility, and independence have a loading score above 0.5. This means that these four dimensions are valid. It seems and can be reasonably concluded that the observation variables are able to measure the constructs well.

Estimation of the Outer Model

The Outer Model was used to confirm the reliability and validity of the measurement model. In this model, latent variables and the indicators are measured for reliability and validity. It can be concluded that the latent variables have good reliability as a measuring instrument and their average variance extracted (AVE) scores are above the benchmark of 0.5. Thus, it can be said that indicators of each construct are consistent in measuring the construct.

Estimation of the Inner Model

After obtaining results from the outer model, the next step was to use the inner model where the four dimensions (transparency, accountability, responsibility, independence) and the relationship between these dimensions are evaluated. Evaluations of the compatibility of the inner model or the entire model can be measured using the Q-Square predictive relevance. The higher the R^2 score, the better the predictive model proposed. An R^2 score of 0.67 is categorized as substantial, an R^2 score of 0.33 is moderate while an R^2 score of 0.19 is weak (Sarwono & Narimawati, 2015). However, R^2 is not an absolute parameter in measuring the precision of the prediction model because the basis of the theoretical relation is the primary parameter explaining this cause and effect relation (Abdillah &Hartono, 2015). The following is the inner model test (R^2 score) of each dimension: transparency (0.711), accountability (0.616), responsibility (0.489), and independence (0.350). Following the inner and outer model evaluation, the next step is to conduct an overall evaluation. The results show that the *R square* score of the four principles of good governance produced a Q^2 square that is close to 1. It can be concluded that the inner model compatibility is good.

The Outer Model Analysis on the Transparency Dimension

The results of the estimation of the standardized loading factor parameter for transparency outer model from the five indicators are shown in Table 1.

Table 1 shows the loading scores of the five indicators on the dimension of transparency. It can be seen that all five provide valid and good contributions in measuring the dimension of transparency. Also, it can be seen that the indicator which contributes most to the dimension of transparency is i4x1 (availability on amount of funds collected) with a score of 0.848.

Table 1
Standardized loading factor score on transparency dimension

Dimension	Item	Indicators	Score
Transparency	i2x1	Website is available to implement the principle of transparency	0.623
	i4x1	Availability of information on the amount of funds collected	0.848
	i5x1	Availability of information on the growth of the number of *muzakki* (people obliged to give *zakat*)	0.835
	i6x1	Availability of information on the growth of the number of *mustahik* (people entitled to receive *zakat*)	0.783
	i7x1	Availability of financial reports (collection, distribution, utilization)	0.778

Source: Output Smart PLS (version 3)

The lowest contribution is i7x1 (availability of financial reports: collection, distribution, utilization) with 0.778. Taken together, the total contribution of the five indicators in the outer model of transparency matches the AVE score. The calculation of the AVE score for the dimension of transparency is 0.604. This means that all five indicators applied explained the dimension of transparency as 60.4%.

The Outer Model Analysis on the Accountability Dimension

The results of estimating the standardized loading factor parameter for accountability in the outer model from the five indicators are as shown in Table 2.

Table 2 shows the loading scores of the five indicators on the dimension of accountability. It can be seen that all five indicators have a significant loading score (above 0.5). This means that they provide valid and good contributions in measuring the dimension of accountability. The indicator which contributes most to accountability is i5x2 (able to be responsible for every authority given to every division) with a score of 0.8. The lowest contribution is i2x2 (availability of Supervisory Board specifically assigned to ensure that the *zakat* institutions comply fully with the *Sharia* regulations) with a score of 0.64. Taken together, the total contribution of the five indicators in the outer model of

Table 2
Standardized loading factor score on accountability dimension

Dimension	Item	Indicators	Score
Accountability	i1x2	Clarity in the function and structure of *zakat* institutions.	0.713
	i2x2	Availability of a Supervisory Board specifically appointed to ensure that the *zakat* institutions comply with *Sharia* and regulations.	0.640
	i4x2	Comply with standard of ethics and values applied.	0.655
	i5x2	Able to be responsible for every authority given to every division.	0.800
	i6x2	Audit conducted by external auditor.	0.652

Source: Output Smart PLS (Version 3)

accountability matches the AVE score. Previous calculations show that the AVE score for the dimension of accountability is 0.582. This means that all five indicators applied to measure the dimension of accountability explain 58.2% of variance.

Outer Model Analysis on the Responsibility Dimension

The results of estimating the standardized loading factor parameter for accountability in the outer model from the two indicators are as shown in Table 3.

Table 3 shows the loading scores of the two indicators with respect to the dimension of responsibility. It can be seen that the indicators have a significant loading score (above 0.5). The indicator which contributes most to responsibility is i1x3 (availability of data and information on compliance with laws and regulations (minimum violation of service code of ethics) with a score of 0.811. The lowest contribution is i2x3

(implementation of regular internal and external audits (financial, managerial, and *Sharia*) with a score of 0.790. Taken together, the total contribution of the two indicators in the outer model of responsibility is as much as the AVE scores. The previous calculation shows that the AVE score for the dimension of responsibility is 0.641. This means that the two indicators applied to measure the dimension of transparency can explain the dimension by as much as 64.1%.

The Outer Model Analysis on the Independency Dimension

The results of estimating the standardized loading factor parameter for accountability in the outer model from the three indicators are as shown in Table 4.

Table 4 shows the loading score of the three indicators on the dimension of independence. It can be seen that the indicators have a significant loading score (above 0.5). This means that they provide

Table 3

Standardized loading factor on responsibility dimension

Dimension	Item	Indicators	Score
Responsibility	i1x3	Availability of data and information on compliance with law and regulation (minimum violation of service code of ethics).	0.811
	i2x3	Implementation of regular internal and external audit (financial, managerial and *Sharia*).	0.79

Source: Output Smart PLS Smart Version 3

Table 4

Standardized loading factor on independence dimension

Dimension	Item	Indicator	Score
Independence	i1x4	Professional management of *zakat* institutions	0.704
	i2x4	No pressure from unauthorized parties based on existing regulation.	0.743
	i3x4	Objective decision making and free from pressure or intimidation from any party.	0.744

Source: Output Smart PLS Version 3

valid and good contributions in measuring the dimension of independence. Regarding the dimension of independence, it can be seen that the indicator which contributes most to it is i3x4 (professional management of *zakat* institutions) with a score of 0.743. The lowest contribution is i1x4 (no pressure from unauthorized parties based on existing regulation) with 0.704. Taken together, the total contributions of the three indicators in the outer model of responsibility are as much as the AVE scores. The previous calculation shows that the AVE score for the dimension of independence is 0.533. This means that the indicators applied to measure the dimension of independence can explain the dimension by 53.3%.

Based on the data processing conducted using the Smart PLS v*ersion 3* software, it can be concluded that the factors establishing good governance in *zakat* institutions along with their indicators and contributions are able to develop good governance as described in Table 5.

The highest contribution in transparency is i4x1 (availability of information on the amount of funds collected) which contributes 0.848, while the lowest contribution is i7x1 (availability of financial reports) with 0.778. The highest principle in accountability is i5x2 (able to be responsible for every authority given to every division) with 0.8, while the lowest contribution is i2x2 (availability of Supervisory Board specifically assigned to ensure that the *zakat* institutions comply with *Sharia* and other regulations from the government) with 0.64. The highest contribution in responsibility is i1x3 (availability of data and information on compliance with *Sharia* laws and other government regulations) with a score of 0.811 and the lowest contribution being i2x3 (implementation of regular internal and external audits (financial, managerial, and *Sharia*) with a score of 0.79. The highest contribution in independence is i3x4 (objective decision making and free from pressure or intimidation from any

Table 5
Factors for establishment of good governance in zakat institutions and the contributions

Construct	Contribution of Highest Indicators	Contribution of Lowest Indicators
Transparency	i4x1 (Availability of information on amount of fund collected) contributes 0.848 to the dimension of transparency.	i7x1 (Availability of financial report) contributes in 0.778 to the dimension of transparency.
Accountability	i5x2 (Able to be responsible for every authority given to every division) contributes 0.800.	i2x2 (Availability of Supervisory Board specifically assigned to ensure that the *zakat* institutions comply with *Sharia* and regulations) contributes as much as 0.640.
Responsibility	i1x3 (Availability of data and information on compliance with *Sharia* and regulation contributes much as 0.811 in measuring responsibility.	i2x3 (Implementation of regular internal and external audit (financial, managerial, and *Sharia*) contributes 0.790 in measuring responsibility.
Independence	i3x4 (Objective decision making and free from pressure or intimidation from any party) contributes 0.744.	i1x4 (Professional management of *zakat* institutions) contributes 0.704.

party) with a score of 0.744 while the lowest contribution is i1x4 (professional management of *zakat* institutions) with a score of 0.704.

CONCLUSION

A Confirmatory Factor Analysis (CFA) was conducted to evaluate how indicators within the dimensions of the five principles of Good Governance contribute to good governance model in the *Zakat* institutions. The results indicate that the principle of transparency contributes at the level of 60.4, accountability at the level of 4.82, responsibility at the level of 6.41, and independence at the level of 53.3. Findings demonstrated that four out of the five dimensions are able to measure GCG in *zakat* institutions and are able to evaluate the lowest and highest contributions from each indicator.

The highest contribution in transparency is i4x1 (availability of information on amount of funds collected) with 0.848, while the lowest contribution is i7x1 (availability of financial report) with 0.778. The highest contribution in accountability is i5x2 (able to be responsible for every authority given to every division) with 0.8, while the lowest contribution is i2x2 (availability of Supervisory Board specifically assigned to ensure that the *zakat* institutions comply with *Sharia* and regulations) with 0.64. The highest contribution in responsibility is i1x3 (availability of data and information on compliance with regulation) with 0.811 and the lowest contribution being i2x3

(implementations of regular internal and external audit (financial, managerial, and *Sharia* compliant) with 0.79. The highest contribution in independence is i3x4 (objective decision making and free from pressure or intimidation from any party) with 0.744, while the lowest contribution is i1x4 (professional management of *zakat* institutions) with 0.704.

Finally, good governance in *zakat* institutions has been well implemented in some aspects but not comprehensively. This research can be utilized to provide guidelines on *zakat* management and act as a guiding reference for formulating policies related to the standardization of good governance in *zakat* institutions.

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APPENDIX A

Research Instrument

Variable	Dimension	Indicator	Item Code	Item Number
Good Corporate Governance	Transparency	Mechanism of openness and standardization of all processes.	i1x1	1-9
		Website is available as part of implementation of principle of transparency.	i2x1	
		Mechanism facilitating public questions and grievances	i3x1	
		Availability of information on the amount of funds collected.	i4x1	
		Availability of information on growth of the number of muzakki (people obliged to give *zakat*)	i5x1	
		Availability of information on growth of the number of mustahik (people entitled to receive *zakat*)	i6x1	
		Availability of financial reports (collection, distribution, utilization).	i7x1	
		Availability of sufficient knowledge to improve efficiency, effectiveness, and innovation in institutions.	i8x1	
		In implementing the principle of transparency, the *zakat* institutions publish their financial reports on their website	i9x1	
	Accountability	Clarity in the function and structure of *zakat* institutions.	i1x2	1-10
		Availability of a Supervisory Board specifically appointed to ensure that *zakat* institutions comply with *Sharia*, law and other regulations.	i2x2	
		Zakat institutions develop professional standardization for Human Resources (amyl).	i3x2	
		Compliance with applicable standard of ethics and values .	i4x2	
		Able to be responsible for every authority given to every division.	i5x2	
		Audit conducted by an external auditor.	i6x2	
		Availability of policy on procedures and documents enabling financial accountability	i7x2	
		Audit/evaluation on managerial performance (internal/external)	i8x2	
		Availability of data and information on the size and primary indicators of accountability of the institution and trust from related stakeholders.	i9x2	
		Availability of policy supporting development of *zakat*.	i10x2	

Research Instrument (continue)

Variable	Dimension	Indicator	Item Code	Item Number
	Responsibility	Availability of data and information on compliance with laws and regulations (minimum violation of service code of ethics).	i1x3	1-3
		Implementation of regular internal and external audits (financial, managerial, and *Sharia*).	i2x3	
		Availability of analysis and research for evaluating the performance of their institution for the purpose of improving it.	i3x3	
	Independence	Professional management of *zakat* institutions	i1x4	1-3
		No pressure from unauthorized parties based on existing regulations.	i2x4	
		Objective and independent decision-making, freedom from pressure or intimidation from any party.	i3x4	
	Fairness	Fairness for all stakeholders (Human Resources, Muzakki, Mustahik).	i1x5	1-2
		Zakat institution provides opportunities to all stakeholders to give input and suggestions for the betterment of the institution.	i1x5	

Source: Various Literatures

Energy Efficiency Incentives in Retrofit Financing in Indonesia

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ABSTRACT

The new financial model that provides monetary investment on savings arrangement financing is beginning to grow in Indonesia, especially in incentivizing energy efficiency. The split incentive problem identified in Indonesia shows that the currently designed program of incentives is still problematic for both providers and customers. This suggests that there are multiple alternatives to the incentives that are more suitable to assist in energy-efficiency implementation. Using case studies on retrofit financing for LED lamps in Indonesia, this study aimed to test the validity of those issues, which involved the process of energy decision-making within an organization. Triangulating the findings from case studies and questionnaire surveys, recommendations for future researchers, practitioners, and the government were made. The results indicated that retrofit financing in Indonesia is feasible. Financial metrics such as the analysis of discounted payback period, IRR, and NPV were used to further validate the result. The study also identified that the provider can use Game Theory as a tool to analyze the costs and benefits of retrofit business decisions to tackle the split incentive problems. These findings could lead to improvement in strategies in considering the effectiveness of a firm's policy measures for delivering energy efficiency in the future.

Keywords: ESA & ESPC, game theory, LCC, retrofit, split incentive problem

INTRODUCTION

In Indonesia, potential in the energy-

efficiency sector is becoming increasingly important, where the increase in energy price continued to occur and became one of the most significant constraints in Indonesia's economic developments (Nafisah & Dwiningrum, 2016). The limited ability of Indonesia's state-owned electricity company to meet electricity needs is also another ongoing problem. One potential source of energy cost savings is the replacement of outdated equipment (conventional lamps using old technology required significantly larger amounts of energy to run) with new energy-efficient lighting equipment (LED lamps) (Husin et al., 2017). The act of replacing outdated equipment with new equipment with new technologies is often referred to as "retrofitting", which can potentially provide economic benefits; not only that, retrofitting is also an effort to improve Indonesia's energy usage efficiency.

The Indonesian government has not yet explored the potential energy savings cost. In contrast, the same potential energy savings cost has been explored and identified by most developed countries and becomes one of the strategies employed to address the challenges of energy security, climate change to mitigate carbon dioxide (CO_2) emissions, and economic development (Organisation For Economic Co-operation And Development/International Energy Agency [OECD/IEA], 2007). Unfortunately, in Indonesia, most of those opportunities are still yet unrecognized, resulting in the energy-efficiency gap (O'Malley et al., 2003; Sathaye & Murtishaw, 2008) and hindering developments within the

energy-efficiency sector (Organisation For Economic Co-operation And Development/International Energy Agency [OECD/IEA], 2007). Many factors are keeping the savings potential unrecognized; one of them is the split incentives problems between providers and customers (O'Malley et al., 2003).

The split incentives problem is seen as a principal–agent (PA) problem, which refers to the problems that may arise when two parties are binding in a contract (Wright et al., 2001). PA problems in a retrofit were pervasive, disbursed, and complex; with only few empirical evidences presented in the literature, it can be categorized as the tip of the iceberg (International Energy Agency, 2007). PA problems are considered market barriers (International Energy Agency, 2007; Sæle et al., 2014). O'Malley et al. (2003) revealed that solutions to the PA problem could use to focus on the relationship between the customer as a principal and provider as an agent and to understand how that relationship influenced energy efficiency.

This study attempted to validate one of those barriers: a split incentive in PA problems by using case studies in retrofit financing for LED (light-emitting diodes) lamps in Indonesia, as the retrofitting was technically feasible and economically viable (ASEA Brown Boveri, 2013). Hence, the retrofit project was cost-effective. The retrofit's provider tried to offer the services that met customer needs. The providers made rational decisions on their service features, but sometime customers acted irrationally.

Due to lack of awareness, project acceptance rates among building owners vary across industrial and commercial sectors (Hoicka et al., 2014) and were generally very low, thus, the decision makers remained hesitant in investing their resources. This causes the acceptance of retrofitting projects in Indonesia to be fairly low, much lower than it should be considering the obvious economic advantages and technical feasibility. These are similar to those of other countries, where retrofitting projects remain an anomaly (Frankel et al., 2013; Fulton & Baker, 2012).

This study attempted to establish a framework for a critical comparative study; comparing and assessing the possibility of retrofit financial practices that involved decision-making within the organization.

LITERATURE REVIEW

Several engineering-economic models have shown that investment in energy saving projects could provide a good financial return (Allcott & Greenstone, 2012). The LCC (life-cycle cost) model can be used as an economic method to evaluate investment costs that are taken into consideration for all costs arising from owning, operating, maintaining, and disposing of the assets (Mearig et al., 1999; Norris, 2001; Ruparathna et al., 2017). Realistic assumptions can be obtained from evaluating the performance over time of similar assets, conducted literature reviews, obtained information from manufacturers, vendors, contractors, and used average support and maintenance costs (Jafari & Valentin, 2017; Robinson, 1996).

Split Incentive Problem as a Principal-Agent Problem

A split-incentive problem is defined as a circumstance in which the flow of investments and benefits is not properly rationed among the parties, thus impairing investment decisions (Navigant Consulting Inc, 2017). While the PA problem on retrofit financing in this study is used within the context of agency theory as a market barrier (O'Malley et al., 2003; Sathaye & Murtishaw, 2004). The theory demonstrates that principals often have different goals and information compared with an agent who supplies them with goods or services (Bird & Hernández, 2012).

There are two types of split incentive problems: ESA scheme incentives and ESPC scheme incentives. Under the ESA scheme, a retrofit provider (agent) buys and supplies all the components for energy-efficiency lamps. The percentage incentives are divided according to the lamp's life-cycle (five years). The high capital investment is quite risky, as a customer can default paying a portion of the energy incentives that belong to the provider. The second type of split incentive problem is an ESPC scheme in the temporal split incentive. In this situation, the provider has no idea how long it would receive the incentives because the incentives need to be done under the negotiations basis. The incentives must fulfill all the total investment cost related to energy-efficiency equipment.

A few published mathematical models were developed to describe the investment problem (Landeo & Spier, 2012; Milgrom

& Roberts, 1982; Prendergast, 1999). Prendergast (1999) proposed a simple linear model to describe the risen problem.

Signaling Profit

In the PA model above, the payoff to the customer depends on the action taken by the retrofit provider. The customer is the first mover and chooses an incentive scheme to pay the provider depending on the observed signal. The provider then determines the optimal action to take, given the incentives, and then decides whether to accept the customer's offer, based on the expected payment and the subjective cost of performing the action. Upon commitment, the provider chooses an action that maximizes his/her payoff, and the customer observes the signal correlated to the provider's action; then he or she pays the provider according to the incentive scheme and receives a payoff dependent upon the signal (Gneezy et al., 2012; Riener & Traxler, 2011).

MATERIALS AND METHODS

This study conducted the semi-structured questionnaire, interviews, and document analysis, adhering to the principles of grounded theory methodology (Corbin & Strauss, 1990; Glaser, 1999, 2016). The data for the game analysis were primarily obtained from the questionnaires and interviews. The probable decisions of the retrofit provider and customer under the two retrofit financing options were discussed. Below is the proposition as a part of our conceptual framework, which becomes a key task in designing our study.

Proposition 1: Retrofit financing in Indonesia was feasible to be implemented by provider XYZ. The sensitivity analysis and the scenario analysis using the LCC calculation were used to evaluate the energy saving based on the Indonesian current electricity rate.

Proposition 2: The strategy under Game Theory was suitable to use as a tool to analyze the costs and benefits of retrofit business decisions with a "mix strategy equilibria and reaction function" to tackle the split incentive problems.

A series of semi-structured questionnaires and interviews was conducted with the top-level people, such as the owners and general managers who were responsible for managing the retrofit project. The interview process helped the information obtained directly from the company's owner, corporate executives, and general managers in the projects involved. Secondary data (were obtained from industry data) and project documents (documents that were used to better understand the lighting industry and energy saving technology) determined the key points that should be addressed during the interviews and observations. This questionnaire allowed the authors to identify the key dimensions given, covered all aspects of the industry, the technical aspects, and managerial aspects.

For this study, the authors used a pseudo name that had been used to protect secrecy and only for the research's descriptive. The provider, XYZ, was one of the biggest suppliers of LED lamps in Jakarta. The second respondent was a manager of one

of the potential customers who directly engaged in the activities of the retrofit project. Energy-efficiency equipment and power saver utility costs (energy costs) were the main factors for which to measure the performance of an energy-efficiency retrofit. The provider, XYZ, computed the feasibility through the LCC analysis for both ESPC and ESA contracts. The current investment value (NPV), the rate of return (payback period), and the rate of profit required (hurdle rate) used analytical tools. The authors conducted semi-structured interviews with the respondents during the months of November 2016 to May 2017, via email and telephone.

RESULTS AND DISCUSSIONS

First Phase – Validate the Claims on the Energy Cost-Effective

Menicou et al. (2015) used the economic model to evaluate the financial impact over the investment horizon on Cyprus' residential buildings' energy retrofit potential. Mundaca and Neij (2009) investigated the numerous energy-economy models on energy efficiency policies to induce technological change. Their investigation focused on the residential sector within European countries; from the investigation, they revealed that the capital and operating costs were one of the factors required to achieve efficient technology and one of the most important factors that determined the consumer's decision in investing in retrofit projects. Following another investigation was conducted by Ruparathna et al. (2017) and Rysanek

and Choudhary (2013). They proposed a novel LCCA and economic benefit model approach for building energy retrofits. This study investigated the provider XYZ, a provider that utilized the energy economic model to analyze total cost, value, risk, and liquidity impact on investment opportunities with its resources. To successfully compete with other investment opportunities, energy-efficiency projects needed to be evaluated on the same basis with the others, and financial analysis was used to identify whether an investment reaches the required level of profitability.

The discounted interest rate was used as one of the main metrics of LCC analysis, which would depended on the inflation rate and risk-adjusted premium. The discounted interest rate with the specific amount of interest (%) above inflation was considered an appropriate value. The expected lifetime of LED lamp was a maximum of five years (or 15,000 hours). The following cost elements were selected for the LCC equation formulation: initial investment cost (IC); energy consumption cost (EC); and maintenance and replacement cost (MR). Based on Kumbaroglu and Madlener (2012 and Ruparathna et al. (2017), the change in LCC of a building due to energy retrofits can be calculated as $LCC = IC + PV_{MR} - \Delta PV_{EC}$

To assess the feasibility of the project, this study used the same approaches and guidelines recommended by the EPA–Energy Star (United States Environmental Protection Agency, 1998): cash flow and customer's financial liquidity is evaluated first; then the rate of return (payback). The

hurdle rate was the accepted/rejected criteria to determine whether an investment passes the profitability test. If the IRR was higher than the required rate of return, the project was otherwise profitable investments. Required interest rate was the marginal cost of capital, adjusted for the risk of the project. The higher the cost of capital and risk, the higher the level of profit required. The EPA–Energy Star recommends using the required rate of return, which is 20% for the energy efficiency investments (United States Environmental Protection Agency, 1998).

LCC analysis for cash flow, NPV, payback period, and IRR, as stated in Table 1 and Table 2, was based on the sensitivity analysis for all variables used in this study. Contrary to Ruparathna et al. (2017), they used a fuzzy set theory-based approach for LCC analysis as the sole decision variable, which was used in multicriteria decision-making for the uncertainty factor consideration. Those uncertainty factors are included in energy, economy, environment, and nonmonetary units, which have been addressed through a Monte Carlo simulation, as most of NPV assessment is based on the static decision-making (Kumbaroglu & Madlener, 2012).

Two steps had been taken in this study; the first step was to assess the feasibility of the project by using the sensitivity analysis. It allowed the project to put into consideration how uncertainty in the output of an energy-efficiency savings model could apportion to different sources of the operation hours and electricity tariff into various levels (Ameli & Kammen, 2014). Importance

measures of each uncertain input variable on operation hours and electricity tariff variability provided a deeper understanding into the most effective way. The sensitivity analysis was investigated based on the key assumption, especially on electricity tariffs (IDR 1,467/kilowatt) and the possibility of electricity consumption (eight hours/day).

The second steps taken in this study involved the scenario analysis of retrofit's key assumptions, following the first step of sensitivity analysis. The findings of the scenario analysis in this case study provided new insights into the factors that influenced the decision of a provider to proceed with the retrofit project for energy-efficient lamps under an ESA or ESPC scheme.

The most useful information from the analysis was the range of values of discounted payback period (years), IRR, and NPV, which provided a snapshot of the investment riskiness. Under this analysis, the information can be useful in determining the inputs into an analysis that has the most effect on value.

As shown in the Table 1, under the scenario of ESA split incentives with discounted rates from 8% to 20%, the higher dominant incentive choice for the provider resides at the 50% to 70% split scheme area. On the contrary, the higher dominant incentives for customers resides at the 20% to 50% split scheme area. The overlapping and possibility to have tough negotiation and having a Nash equilibrium for both of provider and customer are in the 50% split area. The negotiations for both parties will not only be on splitting saving incentives

Table 1

ESA split incentives

Split Incentives	Discounted Rate %	8.0%	10.0%	12.0%	14.0%	16.0%	18.0%	20.0%	
70% (5Yrs)	Net present value (IDR)	182,291	167,910	154,906	143,124	132,430	122,707	113,851	INCENTIVES HIGH IS DOMINANTS PROVIDER CHOICES
	Internal rate of return (%)	138.5%	134.2%	130.0%	125.9%	122.0%	118.3%	114.6%	
	Discounted payback period - Year(s)	0.5184	0.4824	0.5229	0.5659	0.6116	0.6601	0.7115	
60% (5yrs)	Net present value (IDR)	130,208	143,923	132,776	122,677	113,511	105,177	97,587	
	Internal rate of return (%)	95.2%	113.0%	109.2%	105.6%	102.0%	98.6%	95.3%	
	Discounted payback period - Year(s)	0.6221	0.5628	0.6100	0.6603	0.7136	0.7701	0.8300	
50% (5Yrs)	Net present value (IDR)	130,208	119,936	110,647	102,231	94,593	87,648	81,322	INCENTIVES HIGH FOR BOTH PROVIDER & CLIENT (NASH EQUILIBRIUM)
	Internal rate of return (%)	95.2%	91.7%	88.2%	84.9%	81.7%	78.7%	75.7%	
	Discounted payback period - Year(s)	0.6221	0.6754	0.7321	0.7923	0.8563	0.9242	0.9960	
40% (5Yrs)	Net present value (IDR)	104,166	95,949	88,518	81,785	75,674	70,118	65,058	
	Internal rate of return (%)	73.0%	69.9%	66.8%	63.9%	61.1%	58.4%	55.7%	INCENTIVES HIGH IS DOMINANTS CLIENT CHOICES
	Discounted payback period - Year(s)	0.7776	0.8442	0.9151	0.9904	1.0704	1.1552	1.2450	
30% (5Yrs)	Net present value (IDR)	78,125	71,962	66,388	61,339	56,756	52,589	48,793	
	Internal rate of return (%)	50.0%	47.3%	44.7%	42.1%	39.7%	37.3%	35.0%	
	Discounted payback period - Year(s)	1.0368	1.1256	1.2201	1.3205	1.4272	1.5403	1.6601	
0% (5Yrs)	Net present value (IDR)	52,083	47,974	44,259	40,892	37,837	35,059	32,529	
	Internal rate of return (%)	25.4%	23.2%	21.0%	18.8%	16.8%	14.8%	12.9%	
	Discounted payback period - Year(s)	1.5552	1.6884	1.8301	1.9808	2.1408	2.3104	2.4901	

but also will be focused on the discounted rate implied.

Meanwhile, under the scenario of ESPC split incentives as shown in the Table 2, the higher dominant incentives for a provider resides at 1 year to 1.25 years with full energy savings given to the provider and for the customer at 1.5 years to 2.5 years. The negotiation area and the possibility of having a Nash equilibrium are in the 1.25 years area. The same with ESA; one of the negotiation issues between both parties under ESPC will be focusing on the discounted rate.

Based on the result of the LCC model above, it could conclude that the profitability of this retrofit project passed the level of investment required (hurdle rate). Cash flow and financial liquidity of customers had an internal rate of return (discounted payback), which were satisfactory, at below one year discounted payback period, with the discounted rate ranging from 8% to 20%. The payback period and rate of return on the project showed that the risk was quite low. The NPV showed that total net cash flow generated by the project throughout its five-year life of the ESA project and ESPC project were positive under the higher dominant incentives area. Meanwhile, the IRR exceeded the required interest rate (hurdle rate) of 20%, and it showed that the project was deemed profitable. It was in line with research findings from Gluch and Baumann (2004), Menicou et al. (2015), Nikolaidis et al. (2009), which revealed through NPV analysis that it was a reasonable and effective decision to retrofit existing buildings.

Table 2

ESPC split incentives

Split Incentives	Discounted Rate %	8.0%	10.0%	12.0%	14.0%	16.0%	18.0%	20.0%	
1 Year	Net present value (IDR)	89,333	86,236	83,250	80,368	77,586	74,898	72,300	INCENTIVES HIGH IS DOMINANTS CLIENT CHOICES
	Internal rate of return (%)	110.3%	106.5%	102.8%	99.2%	95.8%	92.5%	89.3%	
	Discounted payback period - Year(s)	0.9067	0.9393	0.9730	1.0079	1.0440	1.0815	1.1203	
1.25 Years	Net present value (IDR)	209,762	205,245	200,913	196,756	192,764	188,928	185,238	INCENTIVES HIGH FOR BOTH PROVIDER & CLIENT (NASH EQUILIBRIUM)
	Internal rate of return (%)	131.3%	127.1%	123.1%	119.2%	115.4%	111.7%	108.2%	
	Discounted payback period - Year(s)	0.3862	0.3947	0.4032	0.4117	0.4202	0.4287	0.4373	
1.5 Years	Net present value (IDR)	249,191	243,253	237,576	232,144	226,942	221,957	217,175	
	Internal rate of return (%)	149.3%	144.8%	140.4%	136.2%	132.1%	128.2%	124.4%	
	Discounted payback period - Year(s)	0.3251	0.3330	0.3409	0.3489	0.3569	0.3649	0.3730	
2 Years	Net present value (IDR)	328,049	319,269	310,902	302,920	295,298	288,016	281,050	INCENTIVES HIGH IS DOMINANTS PROVIDER CHOICES
	Internal rate of return (%)	179.9%	174.8%	169.9%	165.1%	160.6%	156.1%	151.9%	
	Discounted payback period - Year(s)	0.2469	0.2537	0.2605	0.2674	0.2743	0.2812	0.2882	
2.25 Years	Net present value (IDR)	364,558	353,822	343,637	333,962	324,762	316,006	307,665	
	Internal rate of return (%)	184.3%	179.2%	174.2%	169.4%	164.7%	160.2%	155.9%	
	Discounted payback period - Year(s)	0.2222	0.2289	0.2357	0.2425	0.2494	0.2563	0.2633	
2.5 Years	Net present value (IDR)	401,066	388,375	376,371	365,004	354,226	343,997	334,279	
	Internal rate of return (%)	188.6%	183.3%	178.3%	173.4%	168.7%	164.1%	159.7%	
	Discounted payback period - Year(s)	0.2020	0.2086	0.2152	0.2219	0.2287	0.2355	0.2423	

The firm insights about the retrofit program were collected from the questionnaires sent to both parties. Below are the comments from the executives of the retrofit provider. The author asked: "Why does your company really want to enter the retrofit business? What kind of strategies to handle the customer' financial liquidity?" The answers are as follows:

"We do not really want to enter the retrofit business, but from our previous observation, almost all business growths nowadays are supported by installment practices. In the case of the lighting industry, these installment methods are now made possible through the support given by the product itself (LEDs), where previously customers are only given with the sole option of using either fluorescent or HID. The savings given by energy consumption made it possible for us to introduce this retrofit payment option, as customers can gain benefit through their own investment savings".

"We conduct auditing processes by examining their previous financial (bank) statements, with the minimum period of six months to one year."

To validate the basic premise of the analysis, the provider must think of the investment payback period as a specific consideration whether it is better or worse. The author also asked: What are the requirements for the minimum payback year period for retrofit project handled by your company currently? In your view, how important are projects that aim to increase energy efficiency? How much is the fair basis for splitting the incentives saving between you and your customer? Do you have any kind of financial tools as your decision-making tools? The answers are as follows:

"Ideally the shorter the payment term is, the better for us. But in the case of installment, the one-year span is usually the minimum".

"Very important. We need to reduce general heat output to increase overall cost efficiency". "85% - 90%".

"Logically, they are spending less money compared to the electricity bill they have to pay when they still using conventional lighting solution".

"Yes, the financial tools were used, especially in the early assessing the financial liquidity as well as on the negotiation process on split-saving incentives".

The same questions were sent to potential customer as the authors tried to obtain their insights into the retrofit financing program. The original questionnaire for customers was made in Bahasa, Indonesia, but it is translated into English for this study. Below is the illustration. The author further asked: How does your company see the retrofit program? How do you feel about the provider companies offering the current retrofit funding program?

"I think this program is good because it can help the owner of the company receive cost savings, provide better lighting and safety, and it also makes the appearance of more modern lights with investment funding that is not too significant at the beginning".

"Quite a lot of options, each company offers the advantages of each program, it will be good for the customer because it has many options so that it can choose the best".

To tackle the transaction cost, which most probably will arise, the author asked: If you are to take a retrofit financing program, what strategies do you use to resolve issues that may arise between your company and the retrofit financing provider? If you are taking a retrofit financing program, what minimum requirements should the retrofit financing provider provide to you?

"A clear and detailed agreement at the beginning of the cooperation, to minimize constraints in the future".

"Quality products, adequate product warranty, and reasonable price, supported by a bona fide company ensuring continuity of long-term cooperation".

In addition, the author asked: How do you see the sharing of energy cost savings between a retrofit provider with your company? What do you think is a reasonable percentage of the austerity portion that retrofit providers should receive and how long will it last? The retrofit profit is calculated from the electrical savings that occur due to equipment replacement by the retrofit provider. What do you think is the reasonable rate of payback that retrofit providers should receive for their investments? Write your opinion in years or months.

"Win-win solution, fair enough, in accordance with each portion".

"The split incentive given to provider is 20% (percentage of total savings)" and "for 3 years."

"I think a reasonable payback period is about 12 - 18 months".

Having the insights from both players into the retrofit business, the authors are confident and confirmed:

Proposition 1: Retrofit financing in Indonesia is feasible to be implemented by provider XYZ. The financial tools were used by both parties; the result of discounted

payback period, IRR, and NPV analysis show that retrofit financing is not only technically feasible but also economically viable under current energy cost regime, which is currently increasing over time.

Second Phase – Exploring the Principal Agent Problem Using the Game Theory Model

By quantifying the principal–agent problem, as well as understanding and focusing on the principal–agent type (Organisation For Economic Co-operation And Development/ International Energy Agency [OECD/ IEA], 2007), it was possible to isolate the number of energy-efficiency projects from consumer's decisions. As a strategy, Game Theory was used to understand decisions that providers make to affect customer decisions. To analyze this retrofit situation, the authors looked at the problem from the point of view of the provider and attempted to predict their choices using Game Theory to minimize the split incentive problems between the provider and their customer. The classic coordination game of "battle of the sexes" was chosen because both the customers and the providers needed to coordinate to install the energy-efficiency lamp under the retrofit financing but had no knowledge whether under ESA or ESPC.

A scenarios matrix shown in Figure 1 was created to predict a payoff matrix for the provider and customer as well as their available choices. It was the most challenging to set up a payoff matrix because the authors needed to figure out the payoff with a reasonable level of

accuracy. In this circumstance, the authors were playing the part of "provider"; hence, the authors did market research and made reasonable relative estimates of the payoffs that the provider might enjoy under each scenario. In this study, the authors asked the executives of the provider and the executives of the potential customer to determine their likelihood of choosing ESPC instead of ESA. To do this, the authors created a questionnaire survey that related to each scenario. The authors then determined provider and customer preferences by asking them. The author also asked that, if the provider or customer chose ESPC over ESA, how would they split the payoff amongst themselves. They then rated each scenario on a scale of 0 to 10.

The important insight obtained from the mixed strategy in Game Theory perspective was the provider focuses on the customer's point of view putting its customers first, namely, "allocentrism," which forced executives to look forward and reason backward, as they must put themselves into the customer's shoes. To increase the value added to their retrofit project, they needed to add other benefits to their customer. Executives could make a profit by designing the game that was appropriate to the company as well as changing the game. Therefore, the authors concluded and confirmed:

Proposition 2: Executives could use Game Theory as a tool to analyze the costs and benefits of retrofit business decisions to tackle the split incentive problem. To understand this problem,
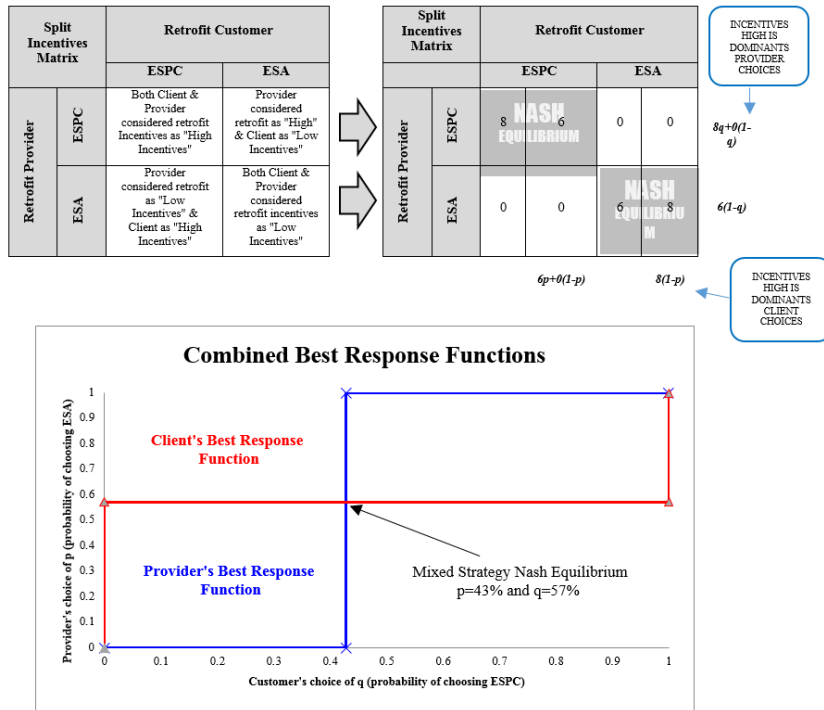
Figure 1. Best response strategy

executives needed to see the ramification of their retrofit programs by adopting allocentric perspectives. The important thing for executives to remember was to anticipate the customer's moves in response to the initiatives implemented.

CONCLUSIONS

This study helped to understand how both participants in this retrofit projects understood their value of the investment, agreed on a funding model, and analyzed project performance. In line with the result, both participants would focus on the processes to achieve the goals and objectives generated. Both participants

utilized a financial model approach in measuring the performance of the project to ensure the project meets its goals – whether financial or nonfinancial.

The LCC financial model was approached by measuring the performance of the project to ensure that it met its financial goals, as well as nonfinancial goals, such as resolving PA problems. Agreeing with the previous empirical literature, the energy retrofitting projects would benefit not only by reducing companies' energy costs, but also by addressing energy-related issues, for instance energy security, climate change, and economic development.

The LCC model did not account for environmental benefits and social

impacts. The result focused on an economic perspective only. Thus, the findings could be useful as a practical LCC tool for the firm. In order to create a more comprehensive decision support tool for retrofitting projects, both environmental and social impact consideration had included within the traditional LCC model analysis approach. Combining engineering-economic models and incorporating socioeconomic considerations into the model would filled the gap in understanding economic barriers and noneconomic barriers to retrofit projects. Once this new approach is developed, the findings from an LCC model approach will not be the main factor for decision-making. This way, retrofit financing will consider the split incentive problem when participants are entering into contracts.

Game Theory helps one to understand the core idea behind the principal–agent problem, and it gives concrete reasons on why people make certain decisions. In this study, Game Theory was used to understand how provider's decisions would affect the customer's decision. The simple premise behind Game Theory in this study is that provider can calculate on the right decision to make before needing to make it. A provider's strategy in this study was categorized to be mixed because it applied some randomization to at least one of the moves, i.e., ESA or ESPC.

The Game Theory model is for simulating management situations and for providing a precise retrofit situation for provider action as in a management science. Critiques might arise from the direct application of a game-theory model. In fact, the authors believed that, by having a good understanding of how its management worked, the providers would understand the repercussions of their action and how they should behave. Of course, customers had made rational decision-making on the retrofit based on the best course of action by examining all options (Nasip & Sudarmaji, 2018; Sudarmaji, 2017).

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Farmers' Organizations Model of Independent Smallholders in Sustainable Palm Oil Certification

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ABSTRACT

Independent smallholders represent more than 3.1 million hectares of all palm oil plantations in Indonesia. However, they receive inadequate attention from sustainability initiatives, deforestation and palm oil production discussions. Meanwhile, evidences show that by collaborating voluntarily in organizations and building linkages with public and private stakeholders among institutional arrangements, farmers have opportunities to access productive assets for expanding their capacities, to seize economic changes, and policy making. Thus, the research answers the key point relationships of the organization of smallholders to meet sustainable certification system. The analysis was conducted in three districts by using structural equation models. The study indicates that there was, directly and indirectly, an effect of the farmers' organization for achieving sustainability. However, none of independent smallholders in the analysis site participated in the farmers' organization. The farmers' organization is also proven to have a positive effect on the legality and a positive indirect effect on the sustainability through the legality. In the farmers' organization, providing information to relevant stakeholders is in line with the applicable provisions, except on the confidential subject which is important for sustainability. The most important aspect with regard to the legality is

the stakeholders' agreement on management and monitoring of the environment.

INTRODUCTION

Smallholders represent an enormous share of the world's palm oil production and important players in the Indonesian palm oil sector. In Indonesia, smallholders have already managed more than 40 percent (4.2 million hectares) of plantations and more than 3.1 million hectares are owned by independent smallholder farmers. Yet, independent smallholder farmers have received inadequate attention by sustainability initiatives or environmental impacts in palm oil production discussions. Thus, they are unable to take full advantage of market opportunities, particularly international market that requires standardization and certification by palm oil plantation. This is also exacerbated by internal factors of independent smallholder farmers due to scattered locations, no grouped nor organizations, which become a daunting challenge resulting in lower productivity.

Nowadays, the existence of certification as a standard is a mandatory requirement in several importing countries which is expected to provide benefits, i.e. the track of sustainability (Mol & Oosterveer, 2015); providing a verifiable method to assess the level of sustainability performance (Sit, 2017); a measure of progress against the sustainability development (D'Hollander, 2016; Langley & Tsoukas, 2017; MacCarthy, 2017; Poveda & Young, 2015); increasing supply chain transparency and improving relationships with suppliers (Aaronson & Wham, 2016; Ernst & Young Global Limited [EYGM], 2016).

Nevertheless, the indirect positive impacts of certifications could also be far bigger than the direct impacts, although access to markets and vulnerability are not improved through certification (Barry et al., 2012; Kronenberg, 2014; Hidayat et al., 2015; Oya et al., 2017). Yet, if the certification schemes are institutionalized, farmers can simply shift to a more profitable approach of production, although not sustainable production (Hidayat et al., 2015).

Therefore, Indonesia as one of palm oil exporting countries launched Indonesian Sustainable Palm Oil (ISPO) standard with the Ministry of Agriculture's decree No.19/Permentan/OT.140/3/2011 to form the norm of sustainable production and to deal with industry sustainability. ISPO standard is covering licensing and plantation management, cultivation and process, environmental monitoring and management, labor, social, economic management, and sustainable business improvement. The Indonesian Government conjointly issued law No. 19/2013 for enhancing small farmers' living within the future, conjointly supported by the recently issued law No. 11/Permentan/OT.140/3/2015 for Indonesian Sustainable Palm Oil (ISPO) certification system.

However, it is not easy to implement ISPO, even though there is evidence showing that by collaborating voluntarily in organizations and building linkages with public and private stakeholders among institutional arrangements, farmers have opportunities to access productive assets for expanding their capacities, to seize economic changes, and to take part in policy making (Abaru et al., 2007; Barham & Chitemi, 2009; Bijman et al., 2012; Bijman & Hu, 2011; Fairfield et al., 2011; Lowitt et al., 2015; Zimba, 2013).

Hence, since the term sustainability has been emerged and booming, stakeholders are concerned with improving the organization's sustainable behavior for regulatory approaches in effective ways accordingly (de Lange et al., 2012; Vaio & Varriale, 2018). For these reasons, it is imperative that we focus on farmers' organizations as a result of the role of farmers' associations, which facilitate dialogues involving all people who exercise its functions for farmers. Farmer organizations conjointly also play crucial roles in rural communities, supporting democratic decision-making processes, leadership development and education. This concern relates to how sustainability is sustained in organizations through the lens of strategy and organization theory for developing the internal knowledge-based (Leon, 2013).

This finding is also based on the concept of dynamic capabilities (Teece et al., 1997) for deploying capabilities in their own organizations (Breznik & Lahovnik, 2016) and interorganizational alliances of activities on sustainable farmers' organization behavior (Post, 2015), which prove the organization innovativeness for facilitating sustainability (Luqmani et al., 2017). While, the legal aspect of sustainable development is important matter in international law due to the emerging principle of international environmental law, or as a customary norm that will eventually be accepted as binding on all states (Segger & Khalfan, 2004). Thus, the research addresses the questions of what and why are the key point relationships (direct and indirect) of smallholders' organizations to meet sustainable certification system as the important key point targets for government support policy in fostering the role of farmer organizations to meet sustainability of palm oil industry.

MATERIAL AND METHODS

The research was conducted in West Kalimantan districts, i.e. Landak, Kubu Raya, and Sambas which have the biggest population of independent smallholder farmers; 150 respondents were recruited using purposive sampling (Fraenkel & Wallen, 1993; Sugiyono, 2003). In-depth interviews were used with an unstructured or semi-structured set of questions to obtain best results and sampling; elicit candidates' responses; fewer distractions; faster and cheaper; more productive; deeper insights; versatile, and quicker adaptation (Alshenqeeti, 2014; Turner, 2010).

The findings are structured from the Indonesian Sustainable Palm Oil (ISPO) indicators that are taken into consideration by

the Ministry of Agriculture as a government policy for the resolution of sustainability environmental issues. The sustainability aspects were developed to support the legality and farmers' organizations, also to answer the question of the key relationships (direct and indirect) of the smallholder organization to meet proper certification system and palm oil industry demands for the long-term. A review of existing literature of previous studies contributes to the findings of the analysis so that conclusions can developed through the question analysis, relevant literature, research instruments and also evidence.

The research data were analized using Structural Equation Model (SEM) with Lisrel software. The analysis was conducted in the following steps: (1) model specification that serves to find and connect the indicators of the latent variables and between latent variables; (2) the qualification model in the over-identified category; (3) the value of the parameters estimation with ML (Maximum Likelihood) with criteria which are the offending estimates in acceptable limits; (4) the validity and reliability test of the model using the value of standard loading factor and CR test; (5) the goodness of fit test; (6) the model respecification using the modification of indices information; (7) the goodness of fit test used once more for model respecification; (8) the result interpretation (Riadi, 2013; Wijanto, 2008).

RESULTS AND DISCUSSION

The research questions of what and why are key point relationships (directly and indirectly) of smallholders organizations to meet a sustainable certification system to face major challenges of farmers organization for the long term of palm oil industry are addressed by the results. Thus, initial validity and reliability tests were conducted before answering the research questions. The findings indicate that a number of t-loading factor value was not valid, although all data were reliable, and the validity and reliability test on the data ought to be conducted once more to qualify all the data till they become valid and reliable. Meanwhile, the goodness of fit test indicated that the eight criteria were fulfilled, i.e. SNCP (NCP/n), ECVI, AIC, CAIC, NFI, CFI, IFI and RMR. The results of the estimated coefficient model for sustainable development of independent smallholder farmers in palm oil production are presented in Figure 1.

In Figure 1, there were interrelated dependence relationships or paths of variable latent affecting the sustainability. It confirms that there were direct and indirect effects of farmer organizations on the achievement of sustainability. Farmer organizations also play a crucial role in making the input and output of market mechanism (Barham & Chitemi, 2009; Ouma & Mercer, 2012; Shiferaw & Muricho, 2009; The Sustainable Development Solutions Network [UNSDSN], 2013). Hellin et al. (2007) stated that farmer organizations directly linked to markets could be more economically sustainable as opposed to organizations supported by non-governmental organizations.
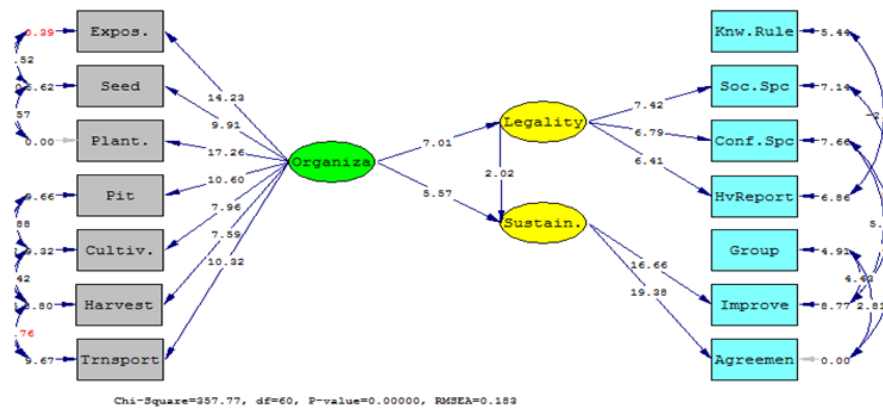
(a) t-value
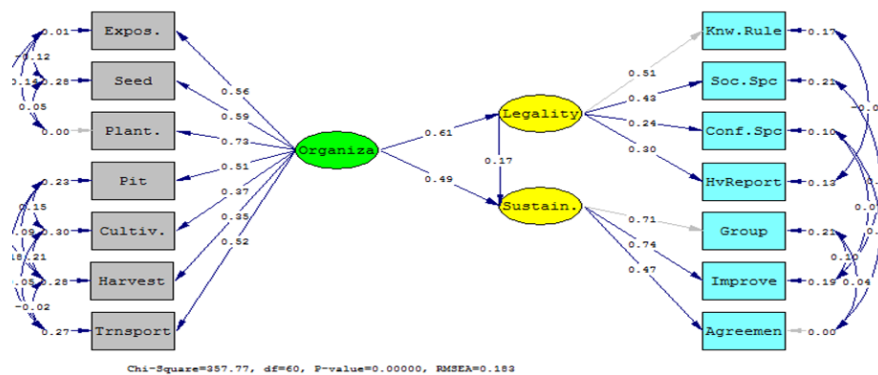
(b) Estimate coefficient

Figure 1. (a) t-value and (b) estimate coefficient for farmer's organization model

Here we see that ISPO certification did not provide a direct impact on sustainability, but farmer organizations are one of ISPO aspect that provide a direct impact on sustainability. This finding indicates that the limited and inconclusive evidence of ISPO certification is beneficial for increasing the production of independent smallholders due to insufficient CPO prices to cover recurrent costs, a lag time in realizing benefits from improved agricultural practices, and limited data (Rietberg & Slingerland, 2016). However, certification of independent smallholders changes market relations, and seems to increase the access to training and technical support as well as access to agricultural inputs and finance (Barry et al., 2012; Hidayat et al., 2015; Molenaar et al., 2013), even though the effects of these changes have not yet been examined.

Thus, there was a question about extension services provided by farmers' organizations which requires deep thinking to solve, particularly issues in market relations, access to training and technical support and access to agricultural inputs

and finance. Literatures proposed some extention services for solving these issues, i.e. exploring market system connections to identify interconnections and opportunities (United States Agency for International Development [USAID], 2017); integrating service provision with public-private sector partnerships (Hussain & Perera, 2004); getting the private sector involved in smallholder input credit and non-credit mechanisms that make inputs more affordable; policies to promote smallholder access to purchased inputs (Gordon, 2000); innovative media platforms and technology (Barton et al., 2016).

Besides, there were the direct effect and indirect effect of farmer organizations to meet sustainability. The functions of farmer organizations is also distinctive and proven historically, i.e. the access to credit, seed, fertilizer and market (Food and Agriculture Organization [FAO], 2011; Gyau et al., 2014; Hellin et al., 2007; Jack, 2013) because they are typically hybrid governance structures combining elements of markets and hierarchy (Ménard, 2007); they are positively associated with higher quality standards because the outcomes are more efficient (economies of scale) and better performance in price and quality (Bijman et al., 2012; Bijman & Hu, 2011; Poole & Frece, 2010; Rwelamira, 2015; Stanciu, 2013); offering higher producer prices as long as they handle considerable quantities in food chains with asymmetric market power (Bijman et al., 2012).

These functions are particularly important in remote areas where farmers

are faced with the markets, that are typically characterised by asymmetric information and where farmers rely upon a number of (large) traders or processing firms (Shiferaw & Muricho, 2009; Magesa et al., 2014). Thus, activities in the organization go hand in hand with pursuing public goals such as the development of human capital, improving competitiveness and environmental protection and even building their strategy even on regional characteristics and social processes which will then result in sustained (OECD et al., 2014; World Economic Forum [WEC], 2013) which could be a load of structural and technological innovations that yield each line of returns (Bansal & Hoffman, 2012; Hopwood & Unerman, 2010).

The farmer organization has proven to have a positive effect on the legality and sustainability. Thus, if the farmers' organization increased 1%, it would increase the legal aspect of 0.61% and if the legality increased by 1%, it would also increase the sustainability value to 0.17%. Meanwhile, if a farmer organization increased by 1%, it would also increase the sustainability value to 0.49%.

The farmer organization also had an indirect effect on sustainability as 0.10% through legal. This is of course understandable because one of important parts of the institutional environment, in addition to the social and cultural characteristics, is formed by the legal and policy aspects (NABARD, 2015). It is also triggered by the significant progress toward a sustainable society (Dernbach

& Mintz, 2011; GlobeScan, 2017; United Nations [UN], 2016), much less achieve sustainability by developing and implementing laws and legal institutions. Since government, business, and non-governmental organizations increasingly require legal works that address sustainable development issues (Dernbach & Mintz, 2011). Hence, the farmers' organization has to create the mechanisms for standards, as well as to adapt and respond to unanticipated outcomes, particularly when there is a commensurate focus on capacity building and other strategies to support improved performance (Barry et al., 2012).

This finding is supported by Lyson and Welsh (2005) that more restrictive laws provided better socioeconomic conditions. Eventhough it cannot put structural change, they control the organizational form of farming based on ownership arrangements (Hogeland, 2015); serving as a business climate signal markets demand (Speier & Krueger 2006); effectively organized with the strategy (Bijman et al., 2012).

However, the sustainability is not just about the connection of legal aspect and sustainability (Affolder, 2012; Dernbach & Mintz, 2011), but also the phrase of law for sustainability (Avilés, 2014; Barral, 2012; Rijswick, 2012) and sustainability governance (Clarck, 2012; OECD, 2010). Thus, these following factors were engaged to meet the challenges and defience of sustainability, i.e. providing information, tools, and ideas of key contributions in achieving and foster sustainability for policy makers, practicing lawyers, etc

(Dernbach & Mintz, 2011; Willetts et al., 2010); integrated decision-making (Cheever & Dernbach, 2015; Cole, 2014); pre-existing laws (Dernbach & Mintz, 2011); the centrality of governments (Bakshi, 2012; Mudacumura et al., 2006); the climate change concern (EYGM, 2011; OECD, 2016; UN, 2008); the ecological integrity (Aleksandr et al., 2016; Keenleyside et al., 2012); the specific legal principles (Avilés, 2014); creating an appropriate legal structure (Dernbach & Mintz, 2011; Srinivas, 2015; the hard law norms in the sustainability assessment tools and institutions (Barry et al., 2012; Charlemagne et al., 2015; Waas et al., 2014). However, this finding is contrary to the finding of Meng-Shan and Chi-Cheng (2013) that the organization cannot help to require sustainability directly, but external factors can do so.

Thus, none of independent smallholders in the research site participated in the farmer organization due to non-establishment of the farmer organization and lack of understanding about the role of its existence which is in line with the aspect of farmer groups' heterogeneity (Woolverton & Neven, 2014), i.e lack capital to grow in scale and complexity, lack of coordinated decision-making not well-linked; lack of trust in markets from the supply side; lack of planning; storage practices are not in line with a commercial approach; insufficient quality management; lower commercial practices and attitudes. Furthermore, collective decision making is sometimes cumbersome (Poole & Frece, 2010), including undesirable top-down

decision making (Isubikalu, 2007), and a few incentives to get access in output markets (d'Hôtel et al., 2011; Ferris et al., 2014; Hellin et al., 2007).

Although none of the independent smallholders in the research sites participated in the farmer organization, in principle and based on the criteria of Indonesian Sustainable Palm Oil (ISPO) through No.11/Permentan/OT.140/3/2015, independent smallholder farmers are also required to undertake farm management provisions with or without famer organization. Moreover, the principles and criteria of the farmer organization in the ISPO are the institutional of farmers that is formed to assist in the implementation of the farm management including the needs of production facilities, production estimates, crop maintenance activities, pest control, harvesting, transportation, terracing maintenance, drainage, road production, plans rejuvenation, and so forth. Therefore, organizations could use their capabilities in creating and maintaining competitive advantages to meet sustainability (Srivastava et al., 2013) and those aspects help to realize optimal farm management aspects.

Thus, the development of sustainability will be significant if an organization could repeatedly reexamine its sense of purpose and make sure that the organization has a consistent sense of focus, strong engagement both within the organization and with its stakeholders (suppliers, developers of environmentally safer materials and processes, and firms), continuous and pragmatic innovation (Ikeda, 2012;

Matsumoto et al., 2017; Weidinger & Fischler, 2014).

Hence, the government may support it through policy making that is adopted in that area and how the line is drawn between public sector support and private sector, and uses events to have impacts, financial, cultural or social terms (Henderson, 2011). Next, the results of the indicator that has a significant effect on the farmers' organization for sustainability is presented in Table 1.

In Table 1, all the indicators of the farmer organization had a contribution of 77.87% to the sustainability. The highest one was providing information to relevant stakeholders in accordance with the applicable provisions, except on confidential subjects. This will allow reporting organizations and report users to focus on the economic, environmental, and social impacts that actually matter, leading to reports that are more strategic, more centered and credible, also easier for stakeholders to navigate (Global Reporting Initiative [GRI], 2015).

The second contribution to the farmer organization is the certified seeds. The question regarding seed circulation might be a complicated one as the farmer seed systems are embedded in social, economic, political and institutional relations of rural life (Coomes et al., 2015; Wencélius et al., 2016), i.e. seeds are effectively kept in farmer networks that become a crucial alternative for providing seeds in times of shortage; seeds bear social prices and transfers by social relations around identity,

Table 1

Indicator of latent variable effect for the sustainability

Indicators of Latent Variables	Estimate Coeff./ Total Effect	Indirect Effect (through legality)	Total effect to farmers organization	Determinant Coefficient
Farmer's organization:				
Expos.	0.56			14.23
Seed	0.59			9.91
Plant	0.72			17.26
Pit.	0.51			10.60
Cultiv.	0.27			7.96
Harvest	0.35			7.59
Transport	0.52			10.32
Legality:				
Knw.Rule	0.51		0.31	
Soc.Spc	0.43		0.26	7.42
Conf.Spc	0.24		0.14	6.79
Hv Report	0.30		0.18	6.41
Group	0.71	0.12	0.42	15.03
Improve	0.74	0.13	0.44	16.66
Agreement	0.47	0.08	0.28	19.38

status and wealth, as well as access (Coomes et al., 2015). Thus, choice of seeds is very influential, besides labor, urea fertilizer, and herbicides, which do not directly have an effect on fruit production (Salmiyati et al., 2014).

Planting on peatlands becomes the third vital factor in the farmers' organization. This can be a challenge for the palm oil plantation that is expounded to the dilemmas and complexities of peatlands with potential impacts ensuing from flooding, water inadequacy and pollution, forest fires and air pollution, habitat loss and biodiversity alteration, social economic shift and global climate change (FAO, 2017; Matthias & Annette, 2016; Roundtable on Sustainable Palm Oil [RSPO], 2015;). If not properly managed, oil palm development on peatlands may conjointly impact the financial aspects of the production (Goldstein, 2016; Veloo et al., 2015). Thus, oil palm cultivation on peatlands needs such a lot of efforts and costs compared to cultivate on the mineral ground (Morel et al., 2016; RSPO, 2015) and particular approach for coordination and collaboration between stakeholders (The Singapore Institute of International Affairs [SIIA], 2017).

Next, cultivation provides the required soil conditions to boost the successful establishment of young offshoots or the tissue of culture plants since it is received from the nursery by considering the character of the date palm and hope for long-term sustainability of the plantation (Ali, 2011; Shah, 2014).

Harvesting is the fifth important indicator in the farmers' organization. Good harvesting practices are needed to produce large quantities of fresh fruit bunches, high oil extraction rates, and good quality oil which is needed for maximum yield (Kumaradevan et al., 2014; Woittiez et al., 2017) with some methods, i.e. Photogrammetric methods (Jaffar et al., 2010; Roseleena et al., 2011), digital camera (Razali et al., 2011), staining methods and laboratory testing, and video image processing (May & Amran, 2011). Good harvesting practices include, i.e. correct procedures; only ripe bunches; good and fast transport of the bunches to the mill; limited loss of loose fruits in the field or during transport (Mat Sharif et al., 2017).

The last indicator in the farmer organization is FFB transported that is one of field issues that affects the composition and final quality of palm oil. The free fatty acid content will be less than 5% if harvesting standards are followed; especially, it is important to confirm fast transportation to the mill and harvesting fruit at the proper ripeness (Morcillo et al., 2013) or the quality of bunches arriving at the mill inside 48 hours (Institut Penelitian Inovasi Bumi [INOBU], 2014; Shamsudin et al., 2012). The mill cannot improve upon this quality.

However, it can prevent or minimize further deterioration (Poku, 2002).

Meanwhile, the legality aspect had contributed 71.69% to the sustainability and the most contributing factor was the stakeholders' agreement on the management and monitoring of the environment. It is very clear that no individual, institution, government or company can offer the solution. Collaboration is one of the keys for unlocking sustainability because no single organization or sector has the knowledge or resources to run individually (Cramer-Montes, 2017; Gray & Stites, 2012; Interfaith Center on Corporate Responsibility [ICCR], 2011). Selecting the right partner and partnership design does not, however, guarantee a successful outcome of partnering. Therefore, achieving successful partnerships requires that partners learn to capitalize on the creative tensions inherent in the partnership, i.e. shared vision; collective norms; trust; handling conflict; sharing power and certain voice; and effective leadership (Gray & Stites, 2012; McCormack et al., 2013; Naimoli et al., 2015).

Then, the next contribution on legality aspect to the sustainability is followed by the improvement of the management and monitoring of the environment; management and monitoring of the environment in the group; socialization of wildlife reserved; the kind of wildlife reserved; and reported in the management and monitoring of the environment. This finding is in line with indirect effects of environmental indicators on the sustainability.

To meet sustainability, environmental law becomes crucial for achieving sustainability that is part of the mandatory legal framework (Dernbach & Mintz, 2011; Avilés, 2014). Besides, the importance of environmental sustainability is being recognized by mainstream business practices through building institutional trust for environmental sustainability services in many sectors (Spence et al., 2012). Moreover, there is different emphasis between 'developed' countries, where environmental protection is commonly the primary concern, and 'developing' countries where economic growth and social stability are at the forefront of the sustainability discourse. Moreover, development endeavors of the past have not considered environmental issues and merely focused on short-term technical feasibility and economic benefits in the evaluation of development projects (Mekuriaw & Teffera, 2013).

CONCLUSIONS

There were direct and indirect effects of farmer organization to meet sustainability. However, none of independent smallholders in the research site participated in the farmers' organization. This is due to the non-establishment of the farmers' organization and lack of understanding about the role and benefits of its existence. Meanwhile, farmer organizations have been proven to positively affect the legality and had a positive indirect effect on sustainability through the legal. This is of course understandable because it is one of important parts of the institutional environment, in addition to the social and cultural characteristics, which is formed by the legal and policy aspects. It is also triggered by the progress toward a sustainable society since government, business, and non-governmental organizations demand more legal works. Morever, there is an engagement needed to deal with the challenges and opportunities of sustainability, i.e. providing information, tools, and ideas that policy makers, practicing lawyers, etc. Further, the necessity to translate sustainability into specific legal principles and sustainability assessment tools and institutions that contain hard law norms is embodied into certification systems.

Meanwhile, the most important indicator in farmer organization to meet the sustainability is providing information to relevant stakeholders in accordance with the applied provisions, except for the confidential subject, then followed by certified seeds; planting; planting on peatlands; cultivation; harvesting; and fresh fruit bunch transportation. Moreover, the most important indicator in the legality is the stakeholders' agreement on the management and monitoring of the environment, then followed by the improvement in the management and monitoring of the environment; management and monitoring of the environment in the group; socialization of wildlife reserved; kind of wildlife reserved; and report in management and monitoring of the environmental that was in line with indirect effect of environmental indicators on sustainability.

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SOCIAL SCIENCES & HUMANITIES

Does the Trademark Protection Regulation Protect Consumers against Counterfeit Products? Analyzing the Theories of Trademark and Indonesian Trademark Law

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ABSTRACT

Consumer protection against resellers infringing intellectual property (IP) is not guaranteed based on *Consumer Protection Act No. 8 of 1999* because it is argued that it is already regulated under IP laws, such as patent, trademark, and copyright laws, prohibiting the production or sale of products infringing IP law. However, because the nature of IP is to protect private rights, how can trademarks protect consumers? This paper analyzes trademark theories and the *Trademarks Act No. 20 of 2016* to establish whether trademarks protect consumers. This research concludes that most scholars use utilitarian and economic theories, supporting that trademarks protect consumers by balancing the trademark holder's economic right with the interests of the public as consumers. However, *Trademarks Act No. 20* provides very limited protection with only legal, philosophical arguments. Further protection is limited to simply safeguarding consumers from being misled or deceived by stipulation that a potential trademark is distinctive and not registered in bad faith. It neither provides any legal instrument for consumers injured or having suffered any loss nor allows consumers to report counterfeit goods or be reimbursed for loss or injury from buying those goods. Therefore, protecting customers is not the Indonesian trademark law's primary objective.

Keywords: Counterfeit products, Indonesian trademark law, Intellectual property law

INTRODUCTION

Counterfeit products might infringe consumers' fundamental rights such as the right to health and safety because they might harm consumers or cause losses. By purchasing a counterfeit product, consumers might endanger themselves. Almost all

products can be counterfeited and most of them pose a great risk to consumers' health and safety. Even though numerous counterfeit products are bought with full awareness, intention, and knowledge, (for example, Veblen goods such as bags, wallets, and sunglasses) they might endanger consumers by causing, for example, a severe allergic reaction. This misconduct is often referred to as a "victimless crime" because in this case, a consumer knowingly buying a counterfeit product would never have bought the original one (Reichelt, 2010).

As the problem of counterfeit products is most likely seen and discussed as an infringement of the trademark owner's right, the infringement of consumers' rights in this context seems to be ignored. It is argued that consumer protection against counterfeit products is provided through the trademark protection system. Prominent scholars understand that one of the functions of trademarks is to protect consumers. Trademark protection enables consumers to distinguish identical goods and avoid confusion (Economides, 1988). Trademarks also reduce consumer search cost as they convey the reputation of the product (Landes & Posner, 1987).

In Indonesia, the Bill on the Consumer Protection Act, discussed in the Parliament in 1999, proposed that it is a consumer's right to obtain products that do not infringe the regulations on intellectual property (IP) rights and that resellers should be obliged to produce and trade in products that do not infringe regulations on IP rights (Secretariat General of the Parliament, 2001). However,

this proposal was finally rejected during the discussion because it was argued that these points are regulated under IP law, such as patent law, trademark law, and copyright law.

Therefore, it is interesting to investigate whether IP law, especially trademark law, protects consumers against counterfeit products in the absence of such protection under the consumer protection law. As the nature of IP rights, including trademarks, is to protect the private right or interest of the trademark owner, it is also interesting to know whether trademark law also provides certain provisions to protect consumers from counterfeit products. Furthermore, the issue of whether trademarks actually protect consumers is more interesting because there is conflicting opinion among legal scholars regarding this issue.

Literature Review

The Trademark Protection System Protects Trademark Owners as well as Consumers. Considering trademark as a property seems to hinder its function to protect consumers. Basically trademark has two main functions as the basis for its legal protection. The first it is to individualize a product therefore the trademark must indicate the origin or source of the product. The second function is to distinguish between goods or services. The origin function is considered to protect the business interest to individualize his product. The distinguish function on the other hands protects consumers' interest so they would not be confused since they can distinguish

between products sold in the market. However, in practice the two functions are inseparable. Consumer can distinguish a product only if the trademark informs the consumer the producer or seller of the product (World Intellectual Property Organization [WIPO], 2004). The two functions can be seen in the definition of a trademark provided by WIPO where a trademark is any sign that individualizes the goods of a given enterprise and distinguishes them from the goods of its competitors (WIPO, 1993).

In Indonesia, Article 1 of the 2016 Trademark Law defines a "trademark" as any sign that is capable of being graphically represented (1) in the form of a picture, logo, name, word, letter, numeral, or composition of colors; (2) in the form of 2- and/or 3-dimensional, sound, hologram; or (3) a combination of two or more said elements to distinguish the goods or services produced by one person or legal entity in the activities of trade in goods or services. Based on this definition, the key element of a trademark is a distinctive sign. The sign in a trademark provides information that is beneficial to both producers and consumers, protecting the private interest of the owner as well as the public interest of consumers.

Ono (1999) defined trademark right as "an inherent private right to claim exclusive possession of a trademark as between individuals" (pp. 1-2). As a distinctive sign, a trademark provides information that benefits producers, enabling them to identify their products and services. Trademarks protect the interest of the trademark owner,

rewarding their investment and goodwill in the product (Singh et al., 2015). Trademarks also provide the owner with an incentive to produce high quality products (Naser, 2007).

On the other hand, the sign in a trademark also provides information for consumers, enabling them to differentiate one product or producer from another. To fulfill this objective, therefore, the sign of a trademark should be distinctive. As a distinctive sign, a trademark's main function is to identify the source and origin of a product (Naser, 2007). Trademarks enable consumers to locate and identify a product with little research (Singh et al., 2015).

Hence, trademarks help consumers from being deceived by counterfeit, low quality products. The trademark protection system prohibits the registration of any trademark that is similar to a registered trademark for the same kind of goods or services. The similarity in trademarks might deceive consumers, causing them to unintentionally purchase certain products.

A trademark does not necessarily provide information on the composition or characteristic of a product. However, consumers can acquire information on the quality of a product based on their own experience or that of others (Economides, 1998). A trademark may represent the quality of a product as the "quality experienced" by the consumer, guiding him to purchase a product of a particular trademark, expecting to experience the same "quality expectation" (Singh et al., 2015). This information, together with the advertisement provided by the company, will provide the consumer

information on the nature, origin, and quality of the product. With this lasting impression regarding information, the consumer will be guided to choose the product he needs (Singh et al., 2015).

Nevertheless, trademarks protect the public interest because IP delivers safe products to our homes by allowing consumers to identify respected and safe brands (Hirschmann, 2012,). Consumers will thus be able to recognize the product they desire without being obliged to differentiate between products or trying to stipulate which product identifies and fulfills their needs and preferences (Naser, 2007). Consumer protection on the ground of trademark law it to protect consumer against disinformation by minimizing the risk of being misled (Gruca, 2018).

Counterfeiting is Part of Trademark Infringement. All counterfeiting can be considered as trademark infringement. A trademark infringement is the unauthorized use of a trademark in connection with goods and/or services in a manner that is likely to cause consumer confusion, deception, or mistake about the source of the goods and/or services. Counterfeiting is defined in the Agreement on Trade-related Aspects of IP Rights (Agreement on Trade-Related Aspects of Intellectual Property Rights, 1994) in Article 51 "*counterfeit trademark* goods" + footnote 14 as follows:

> Counterfeit trademark goods shall mean any goods, including packaging, bearing without authorization of trademark which

is identical to the trademark validity registered in respect of such goods, or which cannot be distinguished in its essential aspects from such a trademark, and which thereby infringes the rights of the owner of the trademark in question under the law of the country of importation. (p. 342).

Counterfeiting is part of the illicit activities related to IP infringement, meaning an infringement of the legal rights of an IP owner. Counterfeiting usually refers to trademark infringement cases. Counterfeiting is "any manufacturing of a product which is so closely imitates the appearance of the product of another to mislead a consumer that is the product of another." It includes products that infringe trademarks and copying of packaging, labeling, and other significant features of the product (Organization for Economic Co-operation and Development [OECD], 1998).

Within the context of this research paper, counterfeit goods shall refer to goods that illegally imitate, copy, or duplicate another good, or use a registered trademark without authorization, and thus infringe the legal rights of the trademark owner. This means that the goods in question are made by producers other than the true and lawful trademark holder.

Counterfeiting Harms Consumers. The ultimate victims for counterfeiting are consumers. Some counterfeit products might pose a threat to consumers. Counterfeit medicines present an increasing threat

to public health, in both developed and developing countries. Counterfeit medicines can result in the failure of medical treatment and are harmful to the safety of consumers. In Nigeria in 1990, 109 children died after consuming counterfeit paracetamol (World Health Organization [WHO], 2003). In Haiti in 1995 and in India in 1998, counterfeit paracetamol cough syrup caused 129 deaths, 30 of which were infants (Newton et al., 2001).

A low quality of counterfeit medicines results in low efficacy, adverse clinical results, failure of treatment, and death of individual consumers. Counterfeit medicines containing reduced active constituents contribute to global microbial resistance and more instances of fatal disease (Lybecker, 2007) and drug resistance (WHO, 2003).

Furthermore, counterfeit medicines take advantage of consumers' limited health budgets, making them pay for medicines that have little or no medicinal value, causing unresolved health problems and perhaps even death. On February 14, 2012, the Food and Drug Administration (FDA) issued letters to 19 medical practices in the United States, warning about a counterfeit version of Avastin 400mg/16mL that did not contain the medicine's active ingredient, bevacizumab, which might have resulted in patients not receiving the required therapy (FDA, 2012).

MATERIALS AND METHODS

This research is a normative legal research, a research methodology used to find a legal rules, principles, or doctrines (Marzuki, 2005). This research examines written legal norms or laws that are theories of trademark and Indonesian trademark law, focusing on whether trademark law protects consumers. The data gathered as primary legal resources are *Trademarks Act No. 20 of 2016* and *Consumer Protection Act No. 8 of 1999*. Furthermore, the secondary legal resources are books or articles written by scholars on IP, trademarks, consumer protection, and counterfeiting. The data gathered were then analyzed using the qualitative data analysis method.

RESULTS

Theories of Trademarks Protecting Consumers

Utilitarian and Economic Analysis Theories: Preventing Consumers from being Misled and Reducing Consumer Search Costs. The largest theoretical framework to justify the protection of property rights is John Locke's labor theory and other theories under the title "Natural Rights" (Naser, 2007). In the 19th century, courts applied the natural rights theory as the basis to protect IP right, arguing that property rights were intended to preserve for individuals a zone of free action and the ability to reap the benefits of their own labor or industry (McKenna, 2007). In the context of trademarks, the natural right theory called on courts to protect the fruits of a producer's honest labor by preventing competitors from stealing its trade, but also to avoid interfering with the rights of others to develop their own trade. However, according to Naser (2007), Locke's theory

of property is inapplicable to trademarks because a trademark is not an object per se but a right or entitlement of rights to use the mark and prevent others from using it.

Furthermore, Naser argued that utilitarian and economic arguments justified the current trademark protection system. Trademarks are essential to provide maximum protection to trademark owners by providing an incentive to produce high quality products. This has led to the introduction of the concept of dilution that gives the trademark owner the right to monopolize the trademark and to prevent any public access to the trademark (Naser, 2007).

Some scholars justify that trademarks also protect consumers under the theories of Utilitarian and Economic Analysis theories. The utilitarian rationale argues that trademark protection will result in the maximization of wealth. Trademark monopolies, together with protection and enforcement, will lead to the reduction of wealth to its optimal levels (Kinsella, 2001).

From the perspective of economic analysis, the sign of a trademark can resolve the problem of information irregularity (Riley, 1990). Trademarks enable consumers to identify a product by the mark it bears and to distinguish it from other products or the same kind of goods or services (Carter, 1990). The benefits of trademarks in lowering consumer search costs presuppose the legal protection of trademarks (Landes & Posner, 1987). The most considered benefit of trademarks for consumers is that a trademark reduces consumers' search costs

(Landes & Posner, 1988). The rationale of a trademark is to facilitate and enhance consumer decisions (Economides, 1988) in choosing the product they want to purchase (Naser, 2007). The trademark is protected under trademark law because of its function to convey information and help consumers in their purchasing decisions. Trademark law is principally concerned with ensuring that consumers are not misled in the marketplace and is therefore particularly amenable to economic analysis (Menell, 2000).

The Critiques. Mark P. McKenna criticized the established theory that trademarks protected consumers, by stating that trademark law was not traditionally intended to protect consumer. Instead, trademark law, like all unfair competition law, sought to protect producers from illegitimate diversions of their trade by competitors (McKenna, 2007). Furthermore, he argued that American courts protected producers from illegitimately diverted trade by recognizing property rights. This property-based system of trademark protection was largely derived from the natural rights theory of property that predominantly influenced courts during the time American trademark law developed in the nineteenth century (McKenna, 2007).

From the historical and philosophical context of the traditional trademark decision, he concluded that trademark law has never focused primarily on consumer interest. However, he still agreed that courts did acknowledge the benefit of trademark protection for consumers. Some courts in

the US stated that one of the reasons for protecting trademarks was to prevent fraud taking place for the public, but this was a secondary goal. Courts emphasized that trademark protection was primarily intended not for consumers' benefit but for producers' interests (McKenna, 2007).

McKenna also criticized modern trademark scholars who argued that trademark law had recently lost its consumer focus in that there had been a shift in modern trademark law, from a consumer focus to a producer focus. He argued that the ultimate object of protection in both traditional and modern trademark law was the producer's business. Traditional trademark law merely saw trademarks as a vehicle for consumers to match products with their producers, whereas modern trademark law intended to increase brand value (McKenna, 2007).

The Proposal of Consumer Rights against Products Infringing IP Rights in the Previous Bill of the Consumer Protection Law

In the previous Bill of the Consumer Protection Law, there were four proposals regarding IP rights:

1. Consumer's right to obtain products that do not infringe IP rights

2. Consumer's obligation to respect regulation on IP rights

3. Reseller's obligation to produce and/or to trade in products that do not infringe IP rights

4. Provision regarding prohibited acts where resellers are prohibited to trade in products that are defective, tainted, or that infringe IP rights.

However, these proposals were then rejected by the government because it was argued that they were already regulated under IP laws. The objection was opposed by a member of parliament, who argued that because IP rights are a relatively new issue in Indonesia, the provisions might strengthen consumer protection law. However, the government again rejected the proposals, arguing that such similar regulations cannot be found in any consumer protection law in other countries. Finally, both the government and the parliament reached an agreement to delete the proposals. In accordance, this issue was accommodated in the General Explanation of the consumer protection law, stating that the resellers infringing IP law shall not be regulated under the consumer protection law. Instead, it has been regulated under the law on copyright, law on patents, and law on trademarks, which prohibit resellers from producing or trading in goods and/or services that infringe the regulations on IP right (Secretariat General of the Parliament, 2001).

Consumer Protection under the Indonesian Trademark Law

Indonesian trademark law, *Trademark and Geographical Indication Act No. 20 of 2016* was enacted on November 25, 2016, replacing the previous *Trademark Act No. 15 of 2001*. There are some major changes in the new trademark law, considering protection of trademark and geographical indication.

Consumer Protection Law recognized that one of the roles of trademarks is to protect consumers, as a philosophical argument. The word "consumer" appears three times in trademark law:

1. In the consideration part of the law point a *Trademark and Geographical Indication Act No. 20 of 2016* as follows: "whereas in the era of global trade, in line with international convention ratified by Indonesia, the role of Trademark and Geographical Indications has gained great significance, particularly in the context of maintaining fair, just business competition, consumer protection, and the protection of Micro, Small, and Medium Business as well as the domestic industry".

2. In the elucidation of Article 21 paragraph 3 of the *Trademark Act No. 20 of 2016* when explaining about "applicant not acting in good faith", as follows: "referred to as "Applicant not acting in good faith" shall be an applicant who, in registering the mark concerned, is reasonably suspected of having the intent to imitate, copy, or follow the mark of another party for the purpose of advancing his/her business interest creating unfair business competitions, deceiving or misleading consumers".

3. In the elucidation of Article 76 paragraph 1 *Trademark Act No. 20 of 2016*, when explaining about an

"interested party" who can file a trademark cancellation lawsuit, as follows: "referred to as "interested party" shall be those other than the owner of registered mark, prosecutor, foundation/institution in the field of consumers, and religious council/institution".

The term "consumer protection" appears only once in the consideration part of the law point a. The consideration part point a of a law contains the philosophical arguments justifying the proposed law, describing that the law should be promulgated considering the philosophy of life, understanding, and legal ideals that include the atmosphere of inner and philosophy of the nation that originated from Pancasila and the Preamble of the 1945 Constitution of the State of the Republic of Indonesia (Soeprapto, 2007). Finding the word "consumer" in explaining "interested party" is meaningless in the context of justifying the idea that trademark law protects consumers.

However, the words "deceiving or misleading the consumer" that are found when explaining the "applicant not acting in good faith" may have a correlation in this context. Although that is not its primary objective, as one of the requirements of registering a trademark is "in good faith" to prevent consumers from being deceived or misled, trademark law certainly intents to protect consumers because there are no further provisions related to consumer protection. As McKenna (2007) pointed out that a trademark was a vehicle for consumers to match products with their producers,

trademark law also required that a trademark be distinctive to enable consumers to differentiate between producers of similar products. Registration will refuse any similarity of a trademark with an already registered trademark (Articles 20 and 21 of the *Trademarks Act No. 20 of 2016*).

Indonesian Trademark Law Does Not Provide Any Legal Instrument for Consumers to Report Counterfeit Products. Although IP rights are private rights and are enforceable by means of civil litigation, the prevalence of counterfeiting (that relates to trademark infringement) and piracy (that concerns copyright infringement) and the economic damage they cause has led to an increased importance of criminal sanctions. The infringement of other IP rights is generally not criminalized (World Intellectual Property Organization [WIPO], 2012). For cases that disturb market order and economic development and can cause huge losses to the State and the people, criminal procedures should be upheld to deter criminals (Jianming, 2004). As has been highlighted by the World Intellectual Property Organization (WIPO), counterfeiting and piracy are often results of criminal activities that impact other public interests such as the prevention of organized crime, public health concerns, and the protection of the public purse (WIPO, 2012).

Nevertheless, under trademark law, the criminal procedure alleging counterfeit or infringement of the criminal provision of trademark law is considered an offense based on a complaint. Article 103 of the *Trademark Act No. 20 of 2016*, states that criminal offenses as detailed in articles 100–102 shall be offenses based on a complaint. Therefore, only the legitimate owner of the infringed trademark can file a report to the police or investigator within the related government agency. In practice, the submitted report should be accompanied by evidence of a trademark certificate. Based on trademark law, therefore, a consumer has no legal capacity and is not considered to have any legal interest to file a complaint of knowing about or suffering because of counterfeit products. Trademark law strictly limits the trademark owner as the one who has the legal capacity to start criminal procedures regarding counterfeiting.

Indonesian Trademark Law Does Not Provide Any Legal Instrument for Consumers to Ask for Compensation for Injury or Loss Resulting from Counterfeit Products. As mentioned above, consumers may suffer injuries and/or loss after purchasing counterfeit products. However, trademark law does not provide any legal instrument for consumers to ask for any compensation. Under Article 83 of the *Trademark Act No. 20 of 2016*,, the owner of a registered trademark and/or licensee of a registered mark can file a claim against another party that uses the mark without permission and has similarities in part or in entirety with the goods and/or services of the same type in the form of the following:

1. Claim for damages; and/or
2. Halting all production related to the use of the mark concerned.

According to Article 83 of the *Trademark Act No. 20 of 2016*, the consumer does not have the legal standing to file a claim for a trademark infringement and to claim for compensation for damages occurred. The standing is limited to the owner of a registered trademark or licensee.

DISCUSSIONS

The Preamble of the Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement states that WTO members recognize that IP rights are private rights (Agreement on Trade-Related Aspects of Intellectual Property Rights, 1994). The Panel of EC-Trademark and Geographical Indications suggested that TRIPS should not only provide positive rights to exploit or use certain subject matter, but rather provide for the grants of negative right to prevent certain acts (Guan, 2014). As a private right, therefore, the holder of the right should be the one who has the right to initiate the monitoring and enforcement of the right through civil or criminal procedures.

Under the theories of Utilitarian and Economic Analysis, some scholars justify consumer protection under the trademark system. The utilitarian rationale argues that trademark protection will result in the maximization of wealth (Naser, 2007). Meanwhile, from the perspective of economic analysis, trademarks protect consumers in terms of resolving problems of information irregularity, identifying, and distinguishing products of the same kind in terms of goods or services, lowering consumer search costs, facilitating and enhancing consumer decisions, conveying information and helping consumers in their purchasing decisions, and ensuring that consumers are not misled in the marketplace (Landes & Posner, 1988).

The findings of the examination of trademark law show that the Indonesian trademark law acknowledges consumer protection as one of the philosophical arguments for trademark protection because it is explicitly written in the consideration part of the law. The Indonesian trademark law accommodates this understanding that a trademark is a private right. It gives the right solely to the trademark owner to initiate monitoring and to enforce their right. It is the decision of the trademark owners whether they want to fight for their right and prevent others from infringing their trademark. Thus, if for some reason trademark owners are unlikely to use their rights, no other party can push them to do so. Furthermore, because it is considered as a right, there is no sanction that can be imposed on the trademark owner for not exercising their rights.

This problem can arise when counterfeited products injure consumers and the trademark owner does not want to exercise his right for some reason. As trademark law does not allow the injured consumer or the government to initiate legal action, the only hope for consumers is that the government may utilize another legal

instrument aside trademark law. Indonesia has some other regulations that can be used to combat counterfeit products and to protect consumers, including the consumer protection law, *Consumer Protection Act No. 8 of 1999* and the health law, *Health Act No. 36 of 2009*.

The Consumer Protection Act No. 8 of 1999 protects end-user consumers in general. There is no specific regulation on protecting consumers against counterfeit medicines. *The Consumer Protection Act No. 8* protects consumers against unstandardized products (Article 8). Under the *Health Act No. 36 of 2009*, the counterfeit medicines are considered as illegal medicines, and there are some criminal provisions under both laws that can be applied to medicine counterfeiters.

The findings of this research support those of McKenna (2007) who stated that both traditional and modern trademark law were not intended to protect the consumer. They were predominantly producer-centered and protected property rights, intending only to prevent competitors from dishonestly diverting customers who otherwise would have gone to the leading user of a mark (McKenna, 2007). Indonesian trademark law was not primarily intended to protect consumers and provided little protection to consumers, similar to the United Arab Emirates. Although trademark laws protect consumers by requiring elements of distinctiveness to prevent misleading consumers, they do not provide deterrent safeguards (Massadeh & Al-Nusair, 2017).

CONCLUSIONS

This research concludes that most scholars use utilitarian and economic theories to justify that trademarks protect consumers by the need to balance the economic right of the trademark holder with the interests of the public as consumers. The utilitarian rationale argues that trademark protection will result in the maximization of wealth. The perspective of economic analysis provides the argument that trademarks protect consumers in terms of resolving problems of information irregularity, identifying and distinguishing products of the same kind in terms of goods or services, lowering consumer search costs, facilitating and enhancing consumer decisions, conveying information and helping consumers in their purchasing decisions, and ensuring that consumers are not misled in the marketplace. However, Law No. 20 of 2016 on trademarks provides very limited protection for consumers. In conclusion, currently, the Indonesian trademark law possesses limited function to protect consumers.

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The Impact of Moratorium Policy on Survey Permits and Retrieval of Valuable Objects from Shipwrecks

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ABSTRACT

Little research has been undertaken that focuses on valuable objects from shipwrecks, especially regarding public policy and potential non-tax state revenue from these artifacts. Due to difficulties of implementation of the valuable object from shipwreck policy, in 2011, the Indonesian government issued a moratorium on survey permits and the retrieval of sunken artifacts. This research used a post-positivist approach to collect data through in-depth interviews and the analysis of documents and literature. It was found that the moratorium, which was intended to provide time for the government to manage the valuable objects from shipwrecks, was unable to meet its purpose. Instead, the moratorium had incurred opportunity costs, including the loss of both material and intangible value. Of those opportunity costs, the most significant loss was potential non-tax state revenue to treasury from auctions of shipwreck treasure. During the moratorium, cases of theft and the unlawful retrieval of sunken artifacts had steadily increased. Further, the state also lost the opportunity to preserve history and create learning materials for future generations.

Keywords: Cultural heritage, opportunity cost, policy impact, shipwrecks

INTRODUCTION

Indonesia's strategic position and its abundant natural resources have attracted merchant ships from Europe, China, and the Middle East. At the same time, many of these have sunk in Indonesian waters. In 2000, the Ministry of Marine Affairs and Fisheries of the Republic of Indonesia conducted a study

on the location of shipwrecks in Indonesian waters and discovered around 463 ships Marine and Fisheries Ministry, Republic of Indonesia (2015). Table 1 presented data from other sources on the number of ship sunk in Indonesian waters.

Table 1
The number of ships sunk in Indonesian waters

No.	Source of data	Amount
1.	Marine Fisheries Research Agency; Indonesian Institute of Sciences; Center of Hydroceanography, Navy Indonesian National Army; Oceanology Research Development	463 ships
2.	Archives of Archaeological Organizations in the Netherlands	245 ships
3.	Tony Wells, Shipwrecks & Sunken Treasure	186 ships

Source: Marine and Fisheries Ministry, Republic of Indonesia (2015)

The Government of Indonesia issued a Presidential Decree creating a national committee for the retrieval and utilization of treasure-laden shipwrecks (*Benda Berharga Asal Muatan Kapal Tenggelam* [BMKT]) in 1989. In 1992, the Government of Indonesia also enacted the Law on Cultural Heritage Objects. In 2010, the Government revoked and replaced it with Law No.11/2010 on Cultural Heritage. Presidential Decree No 19/2007 on the BMKT National Committee was issued in 2007 and was replaced by Presidential Decree No. 12/2009. The retrieval of BMKT could have an economic benefit, and these artefacts could still be prioritized as objects of cultural heritage. However, the implementation of this legislation has proven difficult.

As stated in Law No. 11/2010, which categorizes BMKTs as cultural heritage objects, the utilization of each BMKT requires research by an expert team. The team makes recommendation to the Regional Head of Minister of Education and Culture, depending on the relevant authority, issues a decision with regard to the object. When studies have been conducted and no decision on the status has been made, these objects are categorized as potential cultural heritage objects and treated similarly to verified cultural heritage objects. This process complicates BMKT retrieval and causes investment uncertainty for BMKT investors.

The regulation of the two policies on BMKT makes it difficult to implement them in the field, causing enormous potential for failure because the government policies related to BMKT utilization do not seem to align. Furlong (1995) stated that if a country experiences difficulty in implementing regulations, it should issue a delaying policy, known as a moratorium. Cambridge Dictionary defines a moratorium as the stopping of an activity for an agreed amount of time. In the public sector, a moratorium is related to the postponement, suspension, or temporary suspension of regulations, laws, or agreements during a specified period of time. The Government of Indonesia issued the moratorium on survey permits and the retrieval of BMKTs in 2011. The goal of the moratorium was to give the Government time to manage the utilization of BMKT according to the Law on Cultural Heritage.

The implementation of the BMKT moratorium was extended from November 11, 2011, until December 31, 2016. The

policy did not have the intended result but it was replaced with a policy in which BMKT-retrieving activities are listed on a negative investment list. However, no further arrangements have been made for BMKTs. The moratorium stopped surveys and BMKT retrieval by private parties, which also halted the utilization of BMKT. This has also resulted in a loss of revenue for the government and private parties from BMKT auctions. In addition to economic losses, there are social and cultural losses. BMKTs have unmeasurable value for society and culture. The predicted commercial revenue from BMKT retrieval and its social and cultural value can be seen in Table 2.

The implementation of this moratorium has also led to BMKT theft. In 2014, 11 cases of BMKT looting were recorded in Riau Island waters (see Table 3).

Table 2
Potential government income from the retrieval of BMKT

Location	Type and origin (socio-cultural values)	Taxation value
Buaya Island	Ceramics and other types (Song dynasty, China)	US $489,122
Batu Hitam, Belitung (Tang Cargo)	Ceramics, metal, and other relics (Tang Dynasty, Song Dynasty, Yuan Dynasty, Ming Dynasty, Qing Dynasty/ Vietnam/ Thaiand/ Europe/ Southeast Asia)	US $86,711
Blanakan Waters	Ceramics (Thailand, Vietnam, China)	US $578,999
Karimata Straits	Ceramics and metal (Yuan Dynasty, China)	US $1,145,720
Java Sea (Cirebon)	Ceramics, metal, and jewelry (Five Dynasties of China, The Middle East, Africa, Indonesia	US $9,397,920
Karang Heluputan Waters	Ceramics, anchor, cannon, and metal (Qing and Ming Dynasties, China)	US $552,765
Sumpat Bay	Ceramics and rock (Yuan and Qing Dynasties, China)	US $280,800
Java Sea (Jepara)	Ceramics and coins (Song and Yuan Dynasties, China)	US $217,482
Java Sea (Karawang)	Ceramics (Five Dynasties, China)	US $339,985
East Belitung Waters	Coins, cannon, and ceramics (XVIII century)	US $408,500

Source: Marine and Fisheries Ministry, Republic of Indonesia (2015)

Table 3
Illegal BMKT retrieval in Riau Islands in 2014

Location	Alleged infringement
Riau Straits	Unauthorized removal of BMKT
Mapur Waters	Unauthorized removal of BMKT
Karang Heluputan Waters	Diving and removal of BMKT without permission
Riau Waters	Unauthorized removal of BMKT
Heluputan Straits	Unauthorized removal of BMKT
Uban Cape	Suspected BMKT container from Heluputan waters
Hang Nadim Airport	Ceramics taken from Heluputan waters
Tanjung Sembulang Waters	Diving and removal of BMKT without permission

Source: Marine and Fisheries Ministry, Republic of Indonesia (2015)

There is excellent potential for BMKTs found in Indonesian waters. Some companies continued to apply for permission to retrieve BMKTs during the moratorium. These applications, however, were not approved (see Table 4).

Table 4
Permit applications for the survey and retrieval of BMKT during the moratorium (2012–2014)

No.	Location
1	Kijang Waters
2	Kijang Waters and Lingga Islands
3	Java Sea
4	Rusuk Buaya Waters
5	Tanjung Pinang Waters
6	Indramayu Waters
7	East Bintan Waters
8	Northeast Bintan Waters

Source: Marine and Fisheries Ministry, Republic of Indonesia (2015)

Policy evaluation is necessary. As Vedung (2013) asserted, it was only through policy evaluation that the performance of a policy, efforts made to enact the policy, and the policy's outputs, as well as impact, could be measured. Therefore, this study focuses on the effects of the moratorium on survey permits and BMKT retrieval by exploring its opportunity costs.

METHODS AND MATERIALS

This study used a post-positivist approach. The study did not measure the strength of the relationship between the dimensions of the impact of the BMKT moratorium. Instead, it deepened understanding of aspects of the effects of the moratorium. This study used the policy impact evaluation model created by Hansen (2005). This model addresses Hansen (2005) and Vedung's (2013) cautions that it is better to use several evaluation models.

To describe the impact of the policy, the conditions before and after the moratorium were compared. The use of comparative methods in evaluating the impact of a policy is advocated by Palumbo and Hansen (as cited in Hansen, 2005). The comparison between actual and counterfactual conditions is based on Mankiw (1998) and Yip's (1999) concept of opportunity cost. The measurement of the opportunity costs of not utilizing BMKT as a result of the moratorium was performed based on Vadi's (2009) theory of the usage of underwater cultural heritage.

This research employed qualitative methods, as research data were collected through in-depth interviews and documentary study. The selected informants were investors in BMKT, high-level government officials and bureaucrats, and an archeology expert.

RESULTS AND DISCUSSIONS

Opportunity Costs

The government's decision to implement the BKMT moratorium must have entailed opportunity costs. These opportunity costs include the loss of the opportunity for the government to gain revenue from BMKT auctions and the loss of cultural and historical knowledge from the retrieval of BMKTs. Opportunity costs are the costs of opportunities lost or the costs of losing the best or worthiest alternative (Mankiw,

1998; Polley, 2015; Yip, 1999). Dye (2005) asserted that opportunities to perform other activities missed as a result of a policy represent indirect opportunity costs.

Material Opportunity Cost

As Vadi (2009) stated, the economic utilization of underwater cultural heritage in Indonesia could occur through the management of underwater cultural heritage as tourism objects, such as in museum exhibits, films, and books, as well as objects of marine tourism. The sale of BMKTs has the most significant economic value.

Economic Utilization. The economic utilization of BMKTs in Indonesia still focuses on sales by auction, with a 50:50 profit-sharing system between the government and sales agents. This system is regulated in the Presidential Decree on the BMKT National Committee and the Presidential Decree on Sharing the Results of BKMT Retrieval between Government and Companies. The Ministry of Finance Regulation on Procedures to Determine the Status of the Use and Sales of BMKTs, which regulates BMKT sales as a non BMN, allows BMKTs to function as income-producing government property through non-tax state revenue. Instead of managing the utilization of BMKTs, the moratorium inflicts an opportunity cost in the form of the loss of potential revenue from BMKT auctions. The profits that could have accrued to the government can be estimated by taking the average of 10 transactions including retrieved objects, which amounts

to US \$1,349,800. However, from the data collection, of the 13 retrievals examined, only one contributed to state revenue. This was the retrieval in Black Stone, in the waters of Belitung, amounting to US \$2.5 million.

The utilization of BMKTs is not optimal due to the lack of auctions. According to an informant from the Ministry of Marine Affairs and Fisheries, the number of auctions is low because bidders object to the auction bail, which amounts to 20% of the total transaction. The bidders also doubt that the bail will be returned by the Government of Indonesia. The submission of the 20% auction bail is regulated by Ministry of Finance Regulation No. 40/PMK.07/2006, which guides auction processes. This regulation also governs the time frame for returning the auction bail, which is at most one working day after a request is received from the bidder for the return of the bail. This arrangement is problematic, given this study's finding, noted above, that the reason for the lack of auctions is doubt that the auction bail will be returned.

According to the research findings, some retrievals cannot be utilized in any way because the parties involved face difficulties in the determination of BMKT status by the Ministry of Finance, as regulated in the Minister of Finance Regulation No. 184/2009. This problem occurs because the Ministry of Education and Culture has not made any recommendation on the cultural heritage status of the object due to the legal restrictions of the 2010 Law on Cultural Heritage. This law states that

the determination of the status of cultural heritage must be performed through an extensive study by an expert team, beginning with the start of the search.

The moratorium incurs opportunity costs in the form of the potential loss of PNBP and the government obligation to conduct retrievals and utilize BMKT. The government must provide funding to conduct surveys and extract BMKTs. Since the moratorium policy was enacted in 2011, only one BMKT retrieval activity was planned by the Ministry of Marine Affairs and Fisheries (in 2017), with a budget of Rp 6.3 billion. According to interviews with informants, the Government's plan to retrieve BMKTs in 2017 has been approved by many stakeholders. However, the Government's lack of experience and the costs of retrieval pose an obstacles as the cost of survey and retrieval activities by private companies reached Rp 10-15 billion. This amount is much higher than the available government budget.

Furthermore, the duration of survey and retrieval activities also concerns many parties. BMKT retrieval missions can take two to three years. In development planning, BMKT retrievals are categorized as multi-year expeditions, which complicates the aspect.

The Ministry of Marine Affairs and Fisheries has not been focusing on the marine-service sector. This can be seen in the National Medium-Term Development Plan of 2015–2019 in which the primary target of marine development remains the fisheries sector, as demonstrated in its regulations on topics such as illegal unreported unregulated (IUU) fishing, increasing fishing production, and the development of fishing ports. In the marine sector, the target of marine growth is the completion of the standardization of the names of small islands to complete the marine boundaries and to increase areas of marine conservation. This does not mean that the Government must ignore the utility of the marine sector, such as the management of BMKT. The Government of Indonesia could use investors to utilize this BMKT, of course, as long as their work remains under government control. However, with the moratorium in effect, the Government had to allocate its budget to utilize BMKT. This budget could have been better used to finance other developments.

Like the Ministry of Marine Affairs and Fisheries, the Ministry of Education and Culture does not make BMKT or underwater cultural heritage a priority. After the enactment of Ministry of Education and Culture Regulation No. 11/2015, the management of underwater cultural heritage was no longer under a specific unit. Now, the Sub-directorate of Cultural Heritage Preservation, the Directorate of Cultural Heritage and Museums, and the Directorate General of Culture are in charge of managing cultural heritage, both on land and underwater.

Other Potential Lost Revenue. Revenue from PNBP auctions is not the only potential revenue the government has lost. BMKTs that are the property of the state can be used by museums. Proper museum management

could contribute to government revenue from ticket sales. According to investors who have conducted benchmarking, the average price for ticket entry to BMKT exhibitions overseas is Rp 200,000. The management of museums should be aligned with the development of tourism in the region.

Furthermore, this should also be given to professional parties, such as private companies or collaborations with private companies, so that museum facilities can attract visitors. Such an effort has been initiated by the local government of Riau Island, working together with BMKT-retrieving companies. However, this initiative was halted by the moratorium. Singapore has good examples of BMKT museums. Even though entry to the museums is expensive, they still have many visitors. Management of BMKTs in Singapore is excellent; museum exhibits are equipped with comprehensive historical notes on each item. Collections of maritime objects in the museums comes from retrieval activities in Batu Hitam and consist of ceramics, metals, and other artifacts from China (Tang, Song, Yuan, Ming, and Qing dynasties), Vietnam, Thailand, Europe, and Southeast Asia.

Another potential economic benefit is through movies or books inspired by BMKTs. One sunken vessel that has been avidly sought is the *Flor de la Mar*. Its story is full of historical value, and its cargo has a high economic value. The history of the ship has inspired investors to fund films on the topic. Estimates of the profits from such films reach Rp 100 trillion. Also, stories of BMKT retrievals and research can also be documented in books. The sales price estimate for a book written by a team from the Ministry of Marine Affairs and Fisheries, using the average price of an Indonesian encyclopedia of small islands, would be Rp 80,000.

Meanwhile, BMKT utilization for diving tourism is limited. This is due to marine artifacts generally being located deeper than 10 meters below the surface and the fact that the sea conditions in Indonesia are dynamic and the coast is vulnerable to earthquakes. The position of BMKTs in open water also limits their potential to attract diving tourism.

Intangible Opportunity Costs

Additional opportunity costs are calculated using Vadi's (2009) theory of the utilization of social and cultural underwater heritage. This utilization includes ideological and academic benefits. From an ideological point of view, BMKTs have great historical value, which can promote Indonesia's identity as a maritime nation. From a theoretical point of view, BMKTs are objects of study and research.

Ideological and Academic Aspects. According to Tjandrasasmita (2010), objects of cultural heritage are national cultural treasures, which are essential for understanding and developing the history of science and culture. The historical value of BMKTs can be used to promote Indonesia as a maritime nation. This advantage also supports the realization of Indonesia's

vision as a world maritime axis, as stated in the National Midterm Development Planning document and the President's Instructions. The implementation of the moratorium on BMKTs has caused the loss of the opportunity to use BMKTs to promote Indonesia's national identity as a maritime nation.

Another lost opportunity for social utility is the failure to promote the use of BMKTs by students, researchers, and the public. This opportunity aligns with the argument of Smith and Couper (2003), Vadi (2009), and Cichocki et al. (2015) that cultural heritage objects can be utilized for their educational value in the form of research on historical artifacts that would support the development of knowledge. According to research conducted on BMKTs by Dr. Ali Akbar, an archeologist at Universitas Indonesia, several aspects related to the history of Indonesia could be studied in greater detail. These include the following: (1) Indonesia's longstanding interactions with other countries; (2) Indonesia's significant role in intercontinental trade; and (3) Indonesia's unique attractions that have long attracted foreigners. However, these are difficult to study using the shiploads that have been found because the attractions of Indonesia's BKMTs are items that decay, like rice, spices, and woven fabrics.

To enable the study of BMKTs, the participation of Indonesian experts and scientists in research, observations, and publications related to BMKT must increase. Along these lines, the book *Kapal Karam Abad X di Laut Jawa Utara Cirebon* [The

10th-century Shipwreck in the Cirebon Sea near North Java] should be considered as an example. This publication was founded on research on the observation and analysis of BMKT retrieval from the Cirebon Sea near North Java. Observation and study led to the documentation of the development of national cultures, sailing, ship technologies, and objects onboard ships. This work was conducted by experts from Universitas Indonesia and The Gajah Mada University, as well as other experts and researchers from related institutions, including the Ministry of Marine Affairs and Fisheries and the Ministry of Education and Culture.

Social and Cultural Aspects. The results of findings on BMKTs, of course, will require further research. If a BMKT is seen only as an object, it will not be exciting or worth retrieving. BMKTs will be perceived as more valuable if there is a story or history behind them. Greater attraction will raise their economic value. Objects of cultural heritage will have higher economic benefits for tourism if they are packaged attractively. As noted by Wahyudi (2006), cultural heritage objects are inanimate and cannot speak, so they cannot attract visitors on their own; their value has to be communicated.

The demand for cultural tourism is on the rise due to increasing needs of tourists. Suwatoro said that the attraction of cultural tourism depends not only on the beauty of nature and the uniqueness of cultural heritage but also on good management (Suwena et al., 2010). Also, Wahyudi (2006) found that the development of cultural heritage tourism

was not natural. Supporting elements, like gardens, museums, and other facilities in specific areas are needed to attract tourists. The same argument was conveyed by Vadi (2009), who wrote that excellent underwater cultural heritage management, such as in museums or tourist sites, could sustainably conserve cultural values, attract tourists, and stimulate development through economic activities.

Maintaining the sustainability of BMKT should also be considered an opportunity cost. The preservation of underwater cultural heritage can be conducted ex situ or in situ. In interviews, some informants concluded that, in the current policy climate, BMKT utilization needs to be done ex situ, through retrieval. This view is in light of the following: (1) security factors—because the existence of BMKTs in the water is unknown, the government and public are not prepared to maintain BMKTs on the seabed; (2) vulnerability, as the risk to BMKTs on the seabed is quite high due to the temperature of the water, its high salt content, weather, waves, seabed conditions, and the seabed's vulnerability to earthquakes; and (3) interest in BMKTs as items of cultural heritage that may have historical value and be essential for human life.

This urgency of preserving BMKTs is in line with Lu and Zhao's (2016) theory that policy related to the preservation of underwater cultural heritage is urgently needed because of the massive looting and destruction of underwater cultural heritage sites. Further, Perez-Alvaro (2016) argued that the management of underwater cultural heritage aimed to overcome the damage caused by climate change and rises in sea level and temperature. Also, according to Vadi (2009), the preservation of cultural heritage underwater that has been conducted has helped sustain the utilization of cultural heritage.

The massive looting of BMKTs is caused by the rise in demand for BMKTs on the black market resulting from the moratorium, which entailed the closure of the legal market. This situation is indicated by the increasing frequency of information on BMKT theft via telephone, email, and social media. In interviews, it was alleged that this leads to costs of surveillance, especially considering the vastness of Indonesian waters. However, in reality, BMKT surveillance does not increase costs because this is done together with IUU fishing supervision, which is already a priority of the Ministry of Marine Affairs and Fisheries. Law No. 1/2014 is the legal foundation for the control of BMKT. This surveillance is part of the management of coastal areas and small islands, and the law regulates BMKT retrieval as one type of utilization of coastal regions and small islands, requiring permits of location and licenses for usage. The granting of these licenses is a basis for the argument that surveillance is needed for the utilization of coastal areas and small islands.

Institutional Issues. The moratorium, which was intended to allow the government time to develop the management of BMKT utilization has, in fact, incurred opportunity

costs. On the one hand, from the interviews, it was discovered that the goal of the moratorium policy was not achieved. On the other hand, the government's efforts to utilize BMKTs based on the Presidential Decree on the BMKT National Committee had proven ineffective. Thus, it was the right decision to enact the BMKT moratorium. The difficulties in the implementation of BMKT utilization based on the Presidential Decree on the BMKT National Committee and Law on Cultural Heritage led to the issuance of a BMKT moratorium. However, the time granted was not optimally utilized by the Government. There have been no implementing regulations related to the Law on Cultural Heritage that regulate the utilization of BMKTs.

The longer the moratorium is in effect without BMKT management, the higher the loss to the government and business. Indeed, this contradicts the concept of the moratorium. As argued by Lieberman et al. (2012) and Albert (2005), a moratorium can only apply for a certain period. Related to the policy that is urgently decided by the Government to make BMKT utilization run effectively, there is a need for criteria for underwater cultural heritage. If such criteria are established, the cultural heritage status of any potential BMKT can easily be decided. This will ease further utilization. However, it is not easy to complete, as the Law on Cultural Heritage regulates whether something meets specific criteria, which necessitates a survey or research on the seabed, which requires a significant amount of time and money.

Another problem is that a survey can only be conducted for objects that can be seen on the seabed and not those embedded in the seabed. Another issue that needs to be considered is the clear division of authority between the Ministry of Education and Culture and the Ministry of Marine Affairs and Fisheries in BMKT management. This problem is addressed in the Draft Government Regulation on Location Permits for the Utilization of Coastal Areas and Small Islands, which stipulates that clearance from the Ministry of Education and Culture is needed to obtain a permit to retrieve a BMKT.

BMKT management is intersectoral and requires effective coordination. Control can be performed through policies for each stage of BMKT management, including data collection, retrieval, and utilization. The moratorium should only be a temporary measure, and the three functions should not cease permanently. Currently, with the enactment of Presidential Regulation No. 44/2016, the retrieval and utilization of BMKTs is the responsibility of the Government alone. However, the Government's willingness to conduct BMKT retrieval is still doubted by many parties, due to the need for greater budget preparedness for a multi-year project. Furthermore, the Government is also inexperienced in these matters. Part of the weakness of the moratorium policy is that it has given the Government too little to time evaluate and improve policy effectiveness to fulfill the economic, social, and cultural potential of BMKT management.

CONCLUSIONS

The results of this study show that the moratorium was intended to provide time for the Government to effectively manage BMKTs. On the one hand, the moratorium policy incurred opportunity costs, resulting in the loss of both material and intangible value. Of those opportunity costs, the most significant loss is that of potential state revenue to the treasury through PNBP from BMKT auctions.

Material opportunity costs include the loss of income from PNBP auctions, which would amount to around US $1.3 million for each retrieval, the loss of ticket sales to museums, amounting to Rp 200,000 per visitor, the loss of revenue from book publications, amounting to Rp 80,000 per book, and the loss of potential profits from film productions, amounting to around Rp 100 trillion. Income from diving tourism was not a significant opportunity cost of the moratorium on BMKT utilization in Indonesia. This is because BMKTs are generally located at a depth of more than 10 meters, and Indonesian waters are dynamic and vulnerable to earthquakes. The fact that Indonesian waters are open to the ocean also reduces the country's attractiveness for diving tourism.

Intangible opportunity costs were also incurred, including the loss of the opportunity to harness the historical value of BMKTs to achieve the vision of Indonesia's national identity as the world's maritime axis, to create learning materials from BMKTs, and to sustain BMKT preservation.

Another impact of the BMKT moratorium has been a disruption to legal markets for BMKTs, and the resulting increased looting of BMKTs. This problem should have been addressed through funds set aside for surveillance, but this did not occur.

Suggestions

It seems that the moratorium halted revenue that was previously taken in by other parties. Therefore, before issuing the moratorium, the Government should have conducted a cost-benefit analysis for stakeholders to minimize unintended effects. The moratorium is not a permanent policy. For that reason, the Government must immediately implement regulations for the Law on Cultural Heritage that would socially and economically accommodate the realization of BMKT data collection, retrieval, and utilization.

Maritime archeologists must be involved in survey activities and BMKT retrievals in order to create records from the beginning of the process. This could improve the historical value of BMKTs, which will increase their economic importance and enhance BMKT utilization. Research on models of BMKT utilization is needed, mainly related to cooperation between the Government and the business sector in managing BMKTs so that synergy is fostered. Research on the failure of BMKT auctions in Indonesia is also needed to allow for better BMKT utilization and to aid in augmenting state revenue from BMKTs.

ACKNOWLEDGEMENTS

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Review article

The Confusion about *Maslahah* Implementation in *Ijtihad* Discourse

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ABSTRACT

In the study of *ijtihad*, there is often confusion over the implementation of *maslahah* (human welfare) by Islamic law observers when they face new social problems. It is too easy to set a law based on *maslahah* regardless of what *maslahah* actually is. The present paper reviews the concept of *maslahah* and sheds light on differences and similarities of the way in which it is conceptualised in the related literature. The literature included the *Quran*, *Hadith, usul fiqh, al- Ihkam fi usul al-ahkam* as well as a number of important related sources. Qualitative methods were used to analyse the literature and synthesise the concepts based on the objectives of the present research and the authors' interpretations.

Keywords: Islamic law, *Maslahah*, method of law, purpose of law

INTRODUCTION

Maslahah in simple terms is a decision-making model based on the current context (*maqasid syari'ah*) of the community. To implement *maslahah* as a method of law, it is essenial to distinguish *maslalah* as the purpose of law instead of *maslahah* as the source of law. *Maslahah* or often called *maslahah mursalah* as the source of Islamic law can be made clear when the scholars refer to a number of sources of Islamic law to determine whether they agree or disagree to it. Generally maslahah may originate from two distinct sources (Figure 1).

As the figure shows, the sources could be agreed or disagreed upon. The agreed sources, according to Rahman (1979) are the *Qur'an*, the prophetic tradition (*Hadith*), the consensus (*Ijma'*), and analogy (*qiyas*); commonly regarded as something 'good', given approval consent (*Istihsan),* takes the public interest into account (the public interest - *Maslahah Mursalah),* taking it as
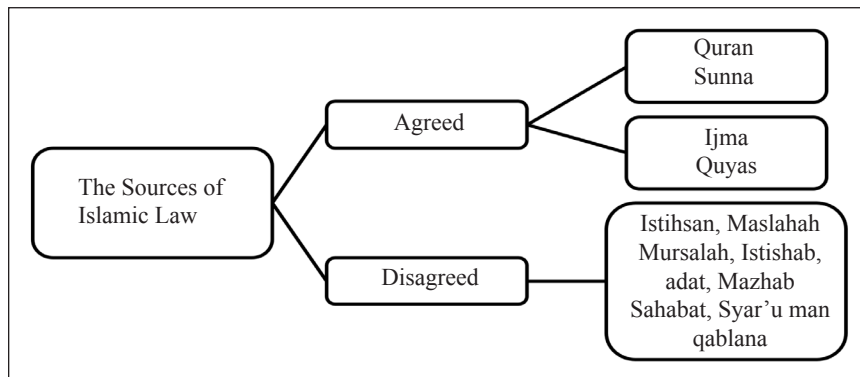
Figure 1. Details of sources of Islamic law

companion, go along *(Istishab),* Beneficence kindness*,* Custom (*urf),* the companions opinion *(Mazhab Sahabat),* and law before *the* prophet Muhammad (*Shar'u man qablana)* (Khallaf, 1972). More details on these will be presented later in this paper.

In the discourse of Islamic law, *maslahah* is divided into three, namely basic needs that must exist (*daruriyah)*, basic needs that do not have to exist (*hajiyah*) and needs for completeness of life (*tahsiniyah)*. *Tahsiniyah* is further divided into two types of additional needs (*sunnah*) and complementary needs (*mubah)* which are both obligatory and both can help individuals in an Islamic community to preserve their religion, soul, property, mind and descendants.

When the scholars of *ushul fiqh* discuss the method of legal reasoning to establish the law of its propositions, they regard *maslahah* as synonymous with *munasabah* (objective and reasonable decision) when looking for source and reason *(illat)* of law. Al-Gazali (as cited in Zahrah, n.d.) explained that when *Sunnah* and *Ijma'* were not found in the *Qur'an*, they could

be determined by *ijtihad* in two ways: (1) observation and classification *(as-Sabr wa at-taqsim)* and (2) objective and reasonable decision (*munasabah*).

From the previous description, it can be understood that the position of *maslahah* can be divided into three: (1) as a source of Islamic law; (2) as the purpose of Islamic law; and (3) as a method of establishing Islamic law. In the discussion of Islamic law, there is often a lack of clarity of the *maslahah* which is used, whether *maslahah* is a source of law, a purpose of law, or a method of establishing law. Unclear usage of *maslahah* causes the confusion in the use of *maslahah* among observers of Islamic legal studies.

The purpose of this paper is to review the use of *maslahah* and to determine the procedure in which it is correctly processed and implemented.

METHODS

The present paper is a review of related literature extracted from various sources. The sources for this paper were primarily

the *Quran*, *Hadith, usul fiqh, al- Ihkam fi usul ahkam* as well as *Kompilasi Hukum Islam di Indonesia* [The Compilation of Islamic Law in Indonesia] (2000), *Fatwa-fatwa Majlis Ulama Indonesia* [The fatwa of Indonesian Ulama Council: A Study on Indonesia Islamic Thought, 1975 - 1988] (Muhdzar, 1993), *Kontektualisasi Ajaran Islam* [Contextualization of Islamic teaching] (Nafis, 1996), *Pemahaman Islam*: *Antara rakyu dan wahyu* [Understanding of Islam: Between reason and revelation] (An-Najar, 1997), *Dekontruksi Shari'ah Wacana Kebebasan Sipil, Hak Asasi Manusia dan Hubungan Internasional dalam Islam* [Towards an Islamic Reformation of Civil Liberties, human rights, and International Law] (Ni'am, 2001), and *Reaktualisasi Ajaran Islam* [Reactualization of Islamic teaching] (Sjadzali, 1995).

The research model is a rationalistic qualitative research one based on the philosophy of rationalism. Muhajir (1996) stated that all science was derived from our intellectual understanding that was built on the ability to make logical arguments. Logical arguments are constructed in a descriptive-analytical way. Therefore, hypotheses are not required. Description is needed by the researcher to explain the truth or error of a concept or thought. The analysis used in this study is descriptive-comparative. The author first describes the three meanings of maslahah as they are. Next, he compares the differences that exists among the three types of *maslahah*, and finally he explains their use and application.

RESULTS AND DISCUSSION

Maslahah as the Purpose of Islamic Law

Zahrah (n.d.) stated that the ultimate purpose of Islamic law was that it benefited the members of the community. There is no law in either the *Qur'an* and *Sunnah* but there is some benefit in it. What is *Maslahah*? Al-Buti (1977) confirmed that *Maslahah* was the benefit determined by God for his servants covering the preservation of religion, soul, mind, descendants and property. This view is affirmed in the following verses:

> *And we have not sent you, but to be a mercy to the worlds. (Q. S, al-Anbiya' 21: 107)*
> *The Lord obliged the prayers of his servants be aimed to prevent evil and unjust acts. (Q.S. Al-Ankabut, 29:45)*
> *It is required that the wealth should not be gathered only to the rich. (Q.S.al-Baqarah 2: 179)*
> *And there is for you in Qishash (the assurance of continuity) of life, O you people of understanding, that you may become righteous. (Q.S.al-Baqarah 2: 179)*

It can be understood that *maslahah* may be either directly established by God as mentioned above or set by humans for the benefit of humankind which eventually becomes a custom. This is how a common *maslahahi* is achieved (Hasan, 1971).

Maslahah as the purpose of Islamic law can be divided into three types: (i) *Maslahah Tahsiniyat* which is associated with fairness,

maintaining propriety in the ways of worship and business interactions (*muamalah*), and goodwill in social interactions, such as the implementation of marriage contract, (ii) *Maslahah Hajiyat* which is associated with the difficulties encountered; for example, a young girl before the legal age to get married requires a guardian's permission, and (iii) *Maslahah Daruriyat* which is the basis of the establishment of law; it is the basis of *Shari'at*, and *Shari'at* maintains it. According to At-Tufi (2002),

> It emphasizes the preservation of religion by setting penalties for people who violate the teachings of their religion, the preservation of the mind or reasoning by giving punishment to the drunkard, the preservation of the soul by giving an appropriate penalty, preservation of the descendants by setting punishment for a person who is unfaithful to their partner, the preservation of dignity by giving punishment for the accused of adultery and the preservation of property by giving punishment for the thieves. (p. 139)

From the description of the three types of *maslahah*, it can be concluded that the establishment of objectives (*Maqashid*) *al-Shari'at* in the provisions of the law contains four aspects. First, the purpose of the good deeds is for the benefit of humans in the world and the hereafter. Second, the sharî'ah text is something that must be understood through the meaning of language so that the benefit contained can be achieved. Third, sharî'ah is a legal provision imposed on a human so that he must do it. Fourth, the purpose of *Sharî'at* is to provide the corridor of the law for humans. Obedience is needed as the effort to control human lust.

Maslahah as the Source of Islamic Law

The source of Islamic law is the evidence of *Shari'at*. It is the main reference in establishing Islamic law. Islamic law is derived from the dalil. For example, the law on zakat was derived from the *dalil wa atuz-zakat* (*al-Baqarah*, 2:43).

Legal sources such as *Ijma', Qiyas, istihsan* and *maslahah* should not be contradictory to the conditions contained in the *Qur'an* and *Hadith* both textually and implicitly. The determination of whether the *dalil* is contradictory or not to *nash* is another matter. If *maslahah* is contradictory to the *nash*, *maslahah* is the first to be considered for scrutiny. In this case, it is not that *maslahah* is contradictory to *nash* textually and implicitly. Therefore, the instructions (*dalil*) out of *nash* on one side can be called as the source of the law, and on the other side, can be called the method of *ijtihad*. The experts of Islamic local theory often mention *adillah ahkam* (law instruction) like *Ijma, Qiyas* and so on, as *turuq istinbat al-Ahkam*, which is the method of law establishment. This is where the confusion of the implementation often occurs.

Scholars such as Zuhaili (1977) provide several conditions to the implementation of *maslahah* which is often called *maslahah mursalah*:

(a) *Maslahah mursalah* must be in accordance with the purpose of Islamic law so that the existence of the instructions (*dalil*) or consensus (*ijmâ'*) which is *qat'î* is not eliminated. It must also be in accordance with the *maslahah* which has been shown by God and His Messenger.

(b) It must be rational. That is, when it is faced with the intellectual reasoning or sense, it can be accepted because it brings benefits and prevents damages; for example, when we apply for credit agreement in banking, a survey on our residence, job and monthly income should be conducted as the effort to avoid fraud so that the agreement is fair to both parties and prevents loss.

(c) It must be universal. It should include all Muslims. It should not be for the benefit of some people only because Islamic *Sharî'at* is for the benefit of all people and does not discriminate against any race, tribe, nation or religion. It is not like giving special treatment for people from the tribe X because he is of the same tribe as the president, governor, or minister.

From the practice of *maslahah* implementation as a source of law, several examples can be offered:

(a) The *Qur'ân* and *Sunna* do not set minimum wages, but it is an important need for government employees and other people such as factory workers, supermarket employees and other workers who work for more than eight hours. They deserve to receive a decent wage to meet their needs of food, beverages, clothing and residence. Based on the instructions (*dalil*) of *maslahah*, the government must determine the reasonable minimum wage for the workers for their benefit, so that they can have a good life.

(b) Another example of *maslahah mursalah* is issuing identity cards, passports, and marriage certificates. Based on the *dalil* of *maslahah*, it is a must to know the identity of the owner of a document. It is also for the sake of avoiding problems. For example, when someone is lost on the street and he has no identity at all, it will be difficult for others to locate him.

In the case of legal decision-making, MUI (Indonesian Council of Ulama) issued many *fatwas* which by many people are considered to violate the conditions in the *Qur'an*. The statement of the MUI *Fatwa* of June 1, 1980, that a muslim woman is

not allowed to be married to a non-muslem, and a muslem man is not allowed to marry a non-muslim woman, is inconsistent with *al-Maidah, 5: 5*, in which it is stated that it can be allowed – that marriage be allowed to preserve dignity among those who were given the bible before you. Fatwa prohibits this kind of marriage because the loss (*mafsadah*) is greater than the benefit (*maslahah*). Although this *fatwa* is specifically indicated in Indonesia, it is contradictory to what is clearly stated in the *Qur'an*. It also contradicts the classic *fiqh* texts which agree to grant permission to a muslem man to marry a woman from *ahl al-kitab*.*Maslahah* as the Method of Establishing Islamic Law

Maslahah as a method of establish*ing Is*lamic law is based on the purpose of Islamic law. *Maslahah* affirms tha*t Isla*mic law is mandated to realize and preserve the general welfare of mankind and for the greatest good. It is in contrast to the meaning of *maslahah* as a source of law and the purpose of law. *Maslahah as the method* of law enforcement brings goodness and benefits, such as trade that brings profit, according to At-Tufi (1998) who introduces four methods for *maslahah* as the cause of law:

(1) *Takhsis munfasil*. For exam*ple, a w*oman who has divorced should wa*it for t*hree months befor*e she* can re-marry (*al-Baqarah,* 282); however, this does not apply for those who currently had no s*exual* relationships (*al-Ahzab,* 49).

(2) *Tabyin an-nash* (explanation of the text). For example, the provisions for women who *divorced their husban*ds were determined by three *'quru'* (*al-Baqarah*, 228). The word quru 'needs to be explained, which means "holy" or means "menstruation"

(3) *Tahdidan-nash* (limitation of the text). To offer an example, some Islamic rules do not apply to non-believers.

(4) *Istisna'i* (exception); for example, the blood of the animal is *haram* but the liver is *halal*.

To justify these four methods, three reasons could be presented from the *Qur'an* and *Hadith*, as follows:

(1) Explicit justification: The law can be found on the text explicitly.

(2) Implicit justification: God's law cannot be found in nash of the implicit meaning. This kind of law is called a law based on what is implied by the text *nash*.

(3) Hidden justification: God's law can be found neither from the text (*nash*) nor from the implied meaning, but can be found in the essence of the whole *Shari'a* intention.

The law which is determined based on what is implied behind the text (*nash*) according to Al-Duwalibi (1959) is called *ijtihad*. According to Abu Zahrah (n.d.), *ijtihad* is meaningful *ijtihad* if it attempts to explain and establish *Shari'a* law for which

there is nothing in the text, but it is implied in nash thereby making it necessary to make decisions based on the rule of *maslahah.*

The law which is determined based on this maslahah method according to Muhammad Taqi al-Hakim (1977, as cited in Zuhaili, 1977) includes *ijtihad* because *ijtihad* method includes *ijma '*, *qiyas*, *istihsan*, *maslahah, urf, istishab* and so on.

Maslahah is used as a method of Islamic law because basically the law is to bring human benefit, and to avoid human misery.

Often the reviewers of Islamic law about *maslahah* or *istislah* are equated with the term *maslahah mursalah*, in contrast to the explanation of at-Tufi (1998) that the *maslahah* he meant was not like the concept of Imam Malik, even wider than that. The concept of *maslahah* at-Tufi (1998) does not only apply to legal problems that have no text, but also to legal problems that have *nash*. Therefore the method used is not *maslahah* like the concept of Imam Malik, but at-Tufi gives reason (*illat*) to texts and *ijma'* in the field of worship and the like and pays attention to *maslahah* in *mua'amalah* and the like. Thus it can be concluded that the assertiveness of *maslahah* as a special method of Islamic law includes:

(1) Legal problems that have no text
(2) Legal issues that have texts.
(3) Legal problems that have texts, but are contrary to reason.

To explore the laws of the text so that it can be applicable is an inevitable demand. The legal content of a text and the real condition of the community, whether the meaning of a text is still quite relevant, or whether it has experienced a difference, is conditio sine coanon as a material consideration in establishing the law. Even though the qat nash is 'i' of the instructions, but the legal content is related to the affairs of the society that is experiencing development, then there is no impossible temporal-casuistic law that is determined by the text to be ruled out, if the wisdom and *maslahah* want other. And if the wisdom and *maslahah* want to return to the legal provisions designated by the text, then that law must be determined.

Dahlan (1987) provided an example of corneal transplantation from people who had died to someone who needed treatment - of course there would be no textual answer in the text either in the *Qur'an* or *Hadith* because such things had never happened at the time of the Prophet , and it was not possible to find a connection with one of the texts in *nash*. Eye transplants are obviously of great benefit, that is blind people can take advantage of their vision, and there are also no other people's interests that are violated. There are issues with human cloning, plastic surgery, and marriage through technology tools such as telephone, internet, SMS. Most recently, as a result of the earthquake and tsunami on December 26, 2004 in Aceh and parts of Medan that took thousands of lives, and due to the difficulty of evacuation as there were scattered bodies of the deceased that caused unpleasant odors (and there was likelihood that there would be an outbreak of disease), there were suggestions from the community that the bodies be burned. How about the burning of bodies in Islam?

Four of these methods are used. Of course, by referring to the source of the law of maslahah, the problem can be solved in shar'i by looking for legal alternatives.

It could happen that a mujtahid in one problem within a different period of time is different, such as in the case of Imam Syafi'i, who has old opinions and new opinions.

MUI after reviewing and analyzing the problem of cloning, then establishes cloning of humans as haram, however, cloning of the legal plants and animals may be carried out for the benefit of humanity and/or to avoid harm.

The position of *maslahah* as mentioned above can be described in Figure 2.
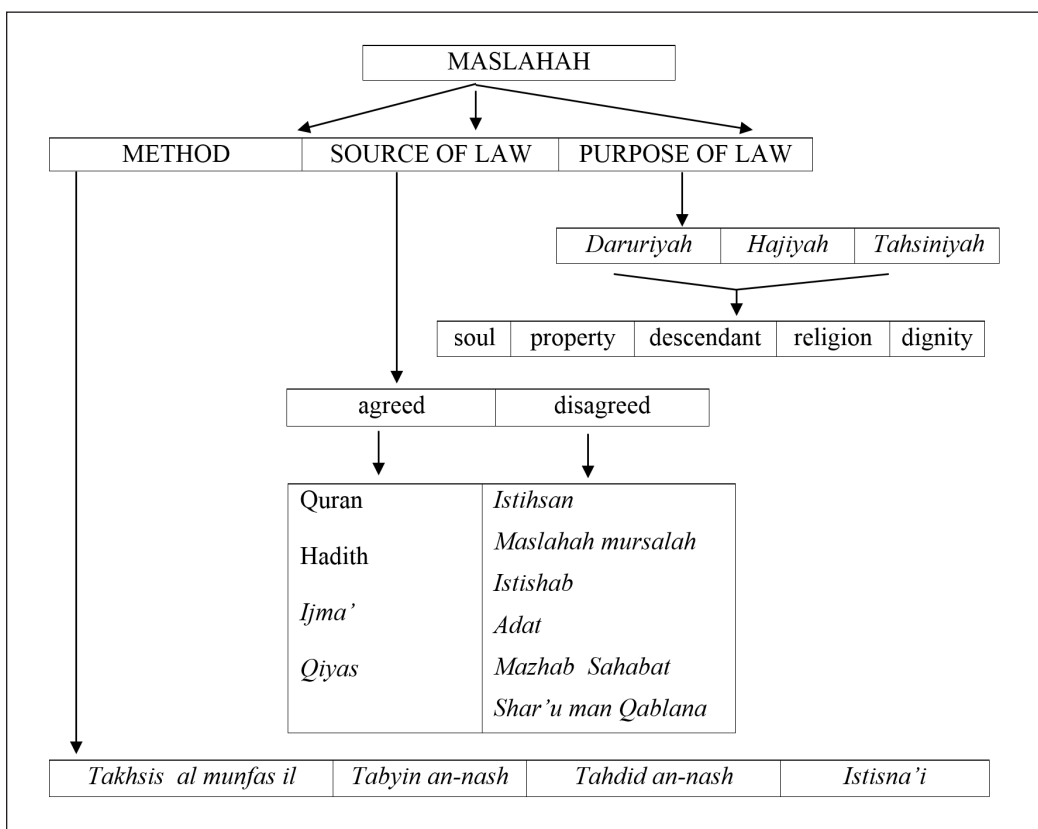
Figure 2. The position of *maslahah* as it is divided into three

CONCLUSION

Maslahah as the objective of Islamic law is the welfare that will be achieved by syaria' on the laws established. The design and thought of this goal is to attract benefit and avoid damage through 5 ways, namely: the preservation of religion, soul, mind, descendants and property.

Maslahah as a source of law means it is a legal provision based on *maslahah*. The idea is that when the *nash* of the *Qur'an* and

al-*Hadith* textually regulating it are absent, the establishment of the law is based on *maslahah*. The *maslahah* is divided into 3 types: *daruriyah, hajiyah* and *tahsiniyyah.*

Maslahah as legal *istinbat* method (the use of individual reasoning) is known as *istislahi* method. The methods used are:

(a) Using takhsis munfasil
(b) Tabyin an-nash
(c) Tahdid an-nash dan
(d) Istisna'i

The contribution of the findings of the differences in *maslahah* as a source of law, as a goal of law and *maslahah;* and as a method of legal reason is to eliminate confusion in its use in the practice of law. At the same time as the *maslahah* procedure is a legal method, Islamic jurists can apply it according to the procedure. The result of the application of the *maslahah* method is that *maslahah* is used as a legal source for social, legal and religious problems in line with *maslahah* as a legal goal.

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SOCIAL SCIENCES & HUMANITIES

Stressful Life Events, Parental Verbal Aggression and Depressive Symptoms in Malaysian Adolescents: The Moderating Role of Parental Warmth

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ABSTRACT

Depressive symptomatology is a serious mental health problem that has been observed among Malaysian adolescents. Hence, we conducted a cross-sectional study to identify the risk and protective factors for adolescent depressive symptoms. Specifically, we hypothesized that stressful life events, parental verbal aggression, and parental warmth are significantly associated with adolescent depressive symptoms. A sample of 1092 adolescents (13-19 years old; 447 boys and 645 girls) was recruited using probability proportional to size cluster sampling from 20 secondary schools in four states across Malaysia. Results of the multivariable logistic regression analysis revealed that stressful life events and maternal verbal aggression had significant main effects on depressive symptoms. In the moderation analyses, paternal warmth alleviated the influence of paternal verbal aggression on depressive symptoms. In contrast, both paternal and maternal warmth exacerbated the depressogenic impact of maternal verbal aggression. Such findings could improve prevention and intervention programs for combatting depressive symptoms in Malaysian adolescents.

INTRODUCTION

Adolescence is characterized by a dramatic increase in depressive symptoms and disorders (Bastin et al., 2015). In fact, a

meta-analysis of 41 studies conducted in 27 countries from every region globally revealed that the worldwide-pooled prevalence of any depressive disorder in children and adolescents was 2.6% (Polanczyk et al., 2015). Specifically, other studies have reported the prevalence of adolescent depression to range from 7.1% to 19.4% in 11 European countries (Balazs et al., 2012), 11.3% to 18% in the United States (Mojtabai et al., 2016; Saluja et al., 2004), 36.4% in Ethiopia (Demoze et al., 2018), 8.2% in Germany (Wartberg et al., 2018), 21% in Uganda (Nalugya-Sserunjogi et al., 2016), 20.3% in Brazil (Bahls, 2002) and 6.2% to 64.8% in China (Tang et al., 2018). Recent studies have documented that the prevalence rates for depressive symptoms among adolescents in Malaysia range from 10.3% to 39.7% (Ibrahim et al., 2014; Kaur et al., 2014; Ramli et al., 2008; Wahab et al., 2013). Such reports warrant concern considering empirical evidence demonstrating that depressive symptomatology among Malaysian adolescents is related to health-risk behaviors, such as smoking (Lim et al., 2014) and suicidal ideation or behaviors (Ahmad et al., 2014; Ibrahim et al., 2014; Talib & Abdollahi, 2015). Thus, it is crucial to identify risk and protective factors for the emergence of depressive symptoms to develop efficacious prevention and intervention strategies.

The risk-protective model of resilience provides an overarching framework for understanding the occurrence of depressive symptoms. A wealth of studies has investigated the applicability of the risk-protective model of resilience toward an understanding of adolescent depressive symptoms (e.g., Beam et al., 2002; Breton et al., 2015; Colman et al., 2014; Jaschek et al., 2016). Essentially, resilience involves coping with and disabling the negative effects of risk factors and traumatic experiences (Fergus & Zimmerman, 2005). In other words, the risk-protective model posits that protective factors interact with risks to diminish the latter's deleterious influence on adolescent outcomes (Zimmerman, 2013). Risk factors refer to "antecedent conditions associated with an increase in the likelihood of adverse, deleterious, or undesirable outcomes" (Kazdin et al., 1997). In contrast, protective factors equip adolescents with personal, social and contextual qualities indispensable for a desirable development (Zimmerman, 2013).

A large number of published studies have established that stressful life events are among the prominent risk factors for depressive symptoms. Stressful life events are "major or minor events that disrupt those mechanisms that maintain the stability of an individual's physiology, emotion, and cognition" (Ingram & Luxton, 2005). Hammen (2009) noted that any undesirable event that a vulnerable person believed would bring about a loss of his sense of being successful, competent, or worthwhile could elicit depression. Notably, adolescents often encounter an array of life events that may result in significant changes in their lives, such as birth of siblings, changing from one school to another, parental separation, death

in the family, and serious injury or illness, that are potential stressors which they need to cope with and adapt to (Johnson, 1982).

A considerable amount of literature has supported the hypothesized effect of stressful life events on adolescent depressive symptoms (e.g., Fox et al., 2010; Hazel et al., 2014; Sanchez et al., 2012; Shapero et al., 2015; Young, 2016; Zhang et al., 2013). In particular, adolescent depressive symptomatology has been significantly predicted by major life events including death of a parent or witnessing violence (Carter et al., 2015) as well as separation, social adversity, and family environment events (Jaschek et al., 2016). Correspondingly, minor stressful life events have also been significantly associated with adolescent depressive symptoms such as interpersonal or relationship stressors (Agoston & Rudolph, 2016; Herres & Kobak, 2015), and school-related hassles (Sokratous et al., 2013; Wang et al., 2016). Despite this overwhelming observation, the applicability of such finding towards explaining adolescent depressive symptoms among Malaysians remains understudied as pertinent research has primarily focused on adult samples (e.g., Kadir & Bifulco, 2011; Maideen et al., 2014). Given the upsurge of stressful life events during adolescence (Hankin, 2006), alongside elevated emotional experiences (Casey et al., 2010), the lack of related studies that sampled Malaysian adolescents was reckoned a major drawback of existing literature.

Recently, researchers have manifested a growing interest in parental verbal aggression as a risk factor for psychopathological symptoms. Parental verbal aggression comprises "verbal attacks and threats toward adolescents by a primary caregiver" (LeRoy et al., 2014). The prevalence of parent-adolescent verbal aggression has been estimated to range from 29.7% (Sachs-Ericsson et al., 2006) to 33% (LeRoy et al., 2014). In an earlier study, Straus and Field (2003) reported that the prevalence rates of verbally aggressive parenting behaviors ranged from 25% to 94% in nonclinical samples and 41% to 92% in clinical samples. Further, Chang et al. (2003) articulated that shouting, name calling, frequent negative commands, manifest expressions of anger, and making threats made up harsh parenting behaviors. In fact, parental verbal aggression has been described as a form of emotional abuse or psychological maltreatment (LeRoy et al., 2014; Polcari et al., 2014), which can put a strain on children's emotion regulation skills (Chang et al., 2003; Wolfe & McIsaac, 2011). As a result of parental verbal aggression, a child may become less emotionally stable or experience intensely distressing emotions (Khaleque & Rohner, 2012; Rohner & Brothers, 1999).

Surprisingly, only a handful of studies have examined the association between verbally aggressive parenting and adolescent depressive symptoms (e.g., Donovan & Brassard, 2011; Wang & Kenny, 2014). Instead, most studies on parental verbal aggression have focused on its links with depression in emerging adults (e.g., Polcari

et al., 2014; Taillieu & Brownridge, 2013; Teicher et al., 2006), or with general internalizing symptoms in children (e.g., Anonas & Alampay, 2015; McKee et al., 2007; de Zoysa et al., 2010). Such scarcity of research may be due to the prominence of studying other forms of harsh parenting. In fact, parents' physical aggression has received much attention (Teicher et al., 2006; Wang & Kenny, 2014) despite evidence that parental verbally aggressive behaviors may have more damaging effects than physical aggression (Teicher et al., 2006). Literature likewise suggests that verbal or symbolic actions displayed by caretakers that generate psychological pain to the child are among the most invasive and worst forms of stressful events in a child's day-to-day life (Wolfe & McIsaac, 2011).

Nonetheless, most individuals who face stressful life events do not develop depressive symptoms or disorders (Hammen, 2016). As a matter of fact, a great number of children and adolescents exhibit resilience amidst experiencing risk factors for depression (Gladstone & Beardslee, 2009). For this reason, the pathways through which adverse life events influence depressive symptoms have integrated the vital role of protective factors. The nature of such mechanisms is elucidated by the stress buffering model, which specifically identifies stressful life events as risk factors, and perceived social support as a protective factor for the development of child outcomes. The central assumption of this theory is that social support ameliorates the potential depressogenic effects of undesirable experiences in life (Burton et al., 2004). In other words, the stress buffering model is consistent with the risk-protective model of resilience in emphasizing the vital role of protective factors in mitigating the development of adolescent depressive symptoms in the presence of risk factors, that is, stressful life events.

There is robust empirical support for the stress-buffering model if parental support is examined as a protective factor against stressful life events (Hazel et al., 2014). Intimate confiding relationships provide sufficient esteem and information support to individuals undergoing life stressors (Cohen & Wills, 1985). When a person is going through life challenges and difficult emotions, he often seeks out people close to him, such as his parents, for support and guidance (Velez et al., 2016). In this regard, parental warmth could be a source of social support for young individuals (Ge et al., 2009). Accordingly, Davidson and Adams (2013) operationalized social support from parents as involving parental warmth, responsiveness, nurturance, and affective communication. Specifically, parental warmth contributes to the adolescent's development of positive mental representations of his relationship with his parents and restricts over-activated behavioral and emotional responses (Alegre et al., 2014). Hence, warm parenting may serve as a buffering factor between familial and environmental negative life experiences and situations and individual outcomes (Jaggers et al., 2017).

However, evidence for the protective role of parental warmth in the associations between risk factors and depressive symptoms has been contradictory. While some researchers found significant moderating effects (e.g., Ge et al., 2009; Hazel et al., 2014; Quach et al., 2015), others did not observe the role of parental warmth in protecting adolescents who are facing undesirable life situations and/or harsh parenting from symptoms of depression (e.g., Burton et al., 2004; Jaschek et al., 2016; Wang & Kenny, 2014; Zimmerman et al., 2000). Such conflicting findings impede generalizations of the moderating role of parental warmth.

Overall, it is yet to be clarified whether the same evidence for the relationships between stressful life events, parental verbal aggression, parental warmth, and depressive symptoms revealed in Western research hold true for Malaysian adolescents due to sparseness of pertinent data. This study therefore set out to assess the extent to which these risk and protective factors significantly impact Malaysian adolescents' depressive symptoms. There are two other deficiencies in literature that merit consideration. First, only a few studies distinguished maternal from paternal verbal aggression and warmth. Inasmuch as mothers may adopt different parenting strategies than fathers (Braza et al., 2015; McKinney & Renk, 2008), a sex-specific analysis of parenting behavior would be more enlightening. Secondly, stressful life events and parental verbal aggression have been studied separately as risk factors. Since it is implausible for a single etiological model to sufficiently explain depression, a host of factors must be simultaneously examined (Hankin, 2006). Against this background, the present study utilized a multivariable framework for investigating risk and protective factors for depressive symptoms. Specifically, this research aimed to address the aforementioned gaps by a cross-sectional investigation of depressive symptoms in Malaysian adolescents, with stressful life events and parental verbal aggression as risk factors, and parental warmth as a protective factor. In particular, this research sought to:

1. Determine if stressful life events, paternal verbal aggression, and maternal verbal aggression will significantly predict adolescent depressive symptoms.

   Hypothesis 1a: Increasing number of stressful life events recently experienced is associated with depressive symptoms.

   Hypothesis 1b: A higher level of perceived paternal verbal aggression is related to symptoms of depression.

   Hypothesis 1c: Greater levels of perceived maternal verbal aggression correspond to an elevated likelihood of depressive symptoms in adolescents.

2. Determine if parental warmth significantly interacts with stressful life events and parental verbal aggression in predicting adolescent depressive symptoms.

Hypothesis 2a: Paternal warmth will diminish the depressogenic impact of stressful life events.

Hypothesis 2b: The depressogenic influence of paternal verbal aggression will be buffered by paternal warmth.

Hypothesis 2c: Paternal warmth will reduce the relationship between maternal verbal aggression and adolescent depressive symptoms.

Hypothesis 2d: Maternal warmth will buffer adolescents from depressive symptomatology when faced by stressful life events.

Hypothesis 2e: Maternal warmth will lessen the depressogenic impact of paternal verbal aggression.

Hypothesis 2f: The association between maternal verbal aggression and depression will be alleviated by maternal warmth.

MATERIALS AND METHODS

The course of this study was steered by a quantitative research design. A nationally representative sample comprising 1092 adolescents from urban and rural areas of four states in Malaysia, namely, Johor (southern region), Kelantan (eastern region), Kuala Lumpur (central region) and Pulau Pinang (northern region), was selected through probability proportional to size cluster sampling. The respondents were recruited from 13 urban and 7 rural secondary schools from 18 districts across the country. With the assistance of authorized personnel

from each school, random sampling was used to select one class of students enrolled in Form 1, Form 2, Form 4, or Form 6. Students in Form 3 and Form 5 were prohibited from participating in the study for they had to prepare for the national examinations. A written informed consent was obtained from the participants and their parents or guardians before administering the survey. Data gathering was done for three months from July to October 2015 by trained enumerators and graduate research assistants. Participants completed the self-administered survey in group sessions for approximately 30 to 45 minutes. Afterwards, they received a token for taking part in the research. Prior to data collection, the study was approved by the ethics committee of the Universiti Putra Malaysia, Ministry of Education, State Education Department, school principals, and classroom teachers.

Measures

Participants completed a series of questionnaires containing self-report measures. The level of depressive symptoms was assessed using the Malay version of Beck Depression Inventory (BDI-Malay) (Mukhtar & Oei, 2008). The BDI-Malay is a self-report inventory with 20 items that measure symptoms of depression. For each of the 20 items, participants endorsed one of three statements about their feelings in the past two weeks. Each item listed four statements and responses were scored on a 0-3 scale, ranging in intensity from the absence of depressive symptom (0) to its severe form (3). The total score was

computed by adding the score marked by the respondent for every item. Higher scores indicated more severe depressive symptoms. According to Beck et al. (1988), the cut-off score for BDI should be lowered to include the maximum number of cases with depressive symptoms. Following the recommendations by these authors, a cutoff score of 10 was used to identify Malaysian adolescents with depressive symptoms. The BDI-Malay has good internal consistency ranging from 0.71 to 0.91 and test-retest reliability of 0.80 (Mukhtar & Oei, 2008). For this study, the BDI-M likewise had good internal consistency reliability with a Cronbach's alpha coefficient of 0.90.

The Life Events Checklist-Malay (LEC) (Baharudin et al., 2015) was used to measure frequency of stressful life events experienced by the respondent within the past six months. Respondents indicated how often they encountered each of 23 life events, with the following response options: 0 "never," 1 "once," and 2 "more than once." A total score was calculated by summing the responses on all items. Higher scores meant more frequent exposure to stressful life events. Baharudin et al. (2015) reported a Cronbach's alpha coefficient of 0.83. For this study, LEC also had good internal consistency reliability with a Cronbach's alpha coefficient of 0.83. Sample items include, "Parent, sister, or brother died", "Parents were separated or divorced," "I got a bad grade in school", and "I argued with my friend/parent". The scale comprised both major and minor negative stressful life events. Such a scale was deemed suitable in view of findings of prior studies (e.g., Overbeek et al., 2010; Unger et al., 2001) that negative life events are more significantly associated with depression than positive stressors.

Using the Malaysian Parenting Behaviour Inventory (MPBI; Baharudin et al., 2014), respondents self-reported the frequency of a number of parenting behaviors for each parent. Respondents used a five-point Likert scale (0 = never to 4 = very often) to endorse how often ten expressions of warmth and six verbally aggressive behaviors were demonstrated by their parents. The MPBI comes in two forms, one for measuring the parenting behaviors of the mother and one for the father. The total score for each parent was computed by summing individual item scores. Higher scores indicated that the respondent experienced more parental warmth or verbal aggression from parents. Both subscales have good internal consistency, as shown by the following Cronbach's alpha scores: maternal warmth (0.88), maternal verbal aggression (0.78), paternal warmth (0.92), and paternal verbal aggression (0.84) (Baharudin et al., 2014). For the present study, the Cronbach alpha coefficients were: maternal warmth (0.87), maternal verbal aggression (0.73), paternal warmth (0.89), and paternal verbal aggression (0.78) which indicate good internal consistency reliabilities. Sample items for parental warmth included "Say love to you," and "Hug and kiss you." The parental verbal aggression subscale included items such as "Scream or yell when angry at you," and "Threaten to punish you on your wrong doing."

Data Analysis

Univariate descriptive statistics were employed for a preliminary understanding of the prevalence of depressive symptoms, stressful life events, parental verbal aggression, parental warmth, and demographic characteristics of adolescents. Then, bivariate analyses using chi-square tests and student's t-tests were performed to compare categorical and continuous variables, respectively. To determine the unique effect of each predictor variable on depressive symptoms, univariable logistic regression was first analyzed. Hosmer and Lemeshow (2000) underscored that a univariable analysis was a necessary preliminary step to ascertain the potential importance of a single independent variable in predicting the outcome variable. They recommended a variable with a *p*-value of less than 0.25 to be a candidate for inclusion in the multivariable model.

Subsequently, three hierarchical multivariable logistic regression models tested the associations between the variables of interest. A group of predictors were entered the regression model in a sequential or blockwise entry. Such entry method allows for the assessment of changes in the individual variable effects after the addition of another block of predictors (Osborne, 2015). Gender, paternal warmth, and maternal warmth were entered in block 1. Next, stressful life events, paternal verbal aggression, and maternal verbal aggression were entered in block 2. This served as Model 1 in the multivariable regression analysis which tested hypotheses 1a, 1b, and 1c. Finally, three two-way interactions were entered in the last block to test hypotheses 2a to 2f. Models 2 and 3 differed only at the last block, wherein paternal warmth was the moderator in the second model, while maternal warmth was the moderator in the third model. All independent and moderator variables were standardized before the multivariable tests to generate easily interpretable odds ratios. Lastly, significant two-way interactions were plotted to more fully explore the nature of the moderation relationships. For bivariate tests and binary logistic regression, the significance level was set at a p-value less than 0.05. All statistical analyses were conducted using SPSS version 20 for Windows (SPSS Inc., Chicago, IL).

RESULTS AND DISCUSSIONS

Descriptive and Bivariate Statistics

A total of 1092 adolescents participated in this study, in which 40.9% were males and 50.9% were 13 to 14 years old. A summary of the descriptive and chi-square statistics of the demographic variables are presented in Table 1. With actual scores that ranged from zero to 57, results showed that the average score for depressive symptoms was 13.02 (SD = 9.50). Using a cut-off score of 10, approximately 57% of Malaysian adolescents were classified as having depressive symptoms, which ranged from mild to severe. Such prevalence rate is higher than what has been reported by previous studies in Malaysia (e.g., Ibrahim et al., 2014; Kaur et al., 2014), Germany (Wartberg et al., 2018), United States (Saluja et al., 2004), Uganda (Nalugya-Sserunjogi

et al., 2016), Europe (Balazs et al., 2012), and Brazil (Bahls, 2002), but within the range of estimates observed in China (Tang et al., 2018). However, such comparative findings must be interpreted with caution since these studies utilized different instruments as well as cut-off scores to measure depressive symptoms. Among the demographic characteristics, only gender was significantly related to symptoms of depression ($\chi^2 = 10.00$, p $< .01$), with a higher proportion of girls having depressive symptoms than their male counterparts. In view of this, all multivariable regression models controlled for gender. This outcome corroborates previous findings that rates of adolescent depressive symptoms are higher for females than for males (e.g., Alloy et al., 2016; Ge et al., 2003; Hankin et al., 2015; Salk et al., 2016).

Table 1

Descriptive and chi-square statistics of the demographic variables

Variables	Frequency (Percentage) N = 1092	Percentage of those with Depressive Symptoms N = 624	Chi-Square (X^2)
Gender			10.00**
Male	447 (40.9)	36.9	
Female	645 (59.1)	63.1	
Age			2.42
13-14	556 (50.9)	48.9	
15-19	536 (49.1)	51.1	
Race			2.80
Malay	830 (76.0)	77.6	
Chinese	177 (16.2)	15.7	
Indian	64 (5.9)	5.1	
Others	21 (1.9)	1.6	
Locality			0.03
Urban	746 (68.3)	68.1	
Rural	346 (31.7)	31.9	
Mother's education			3.74
None	16 (1.5)	1.7	
Primary	103 (9.4)	10.6	
Secondary	649 (59.4)	59.3	
Tertiary	324 (29.7)	28.4	
Father's education			1.77
None	15 (1.4)	1.6	
Primary	119 (10.9)	10.4	
Secondary	602 (55.1)	56.4	
Tertiary	356 (32.6)	31.6	

Note. N = total sample size
** denotes *p* < 0.01

As shown in Table 2, results likewise demonstrated that adolescents with depressive symptoms had significantly higher mean scores for stressful life events (t = -8.11, p < 0.001), paternal verbal aggression (t = -4.88, p < 0.001), and maternal verbal aggression (t = -6.31, p < 0.001) than those without symptoms. Conversely, adolescents without depressive symptoms exhibited significantly higher levels of paternal warmth (t = 5.19, p < 0.001) and maternal warmth (t = 5.91, p < 0.001) than those with symptoms.

Table 2
Descriptive and T-test statistics of the main research variables

| Variables | Overall Sample Mean (SD) N = 1092 | Depressive Symptoms | | T- test |
		Yes M (SD)	No M (SD)	
SLE	15.41 (7.41)	17.91 (7.56)	14.16 (7.02)	-8.11***
PVA	9.25 (4.37)	10.15 (4.56)	8.80 (4.20)	-4.88***
MVA	10.40 (4.34)	11.55 (4.48)	9.82 (4.15)	-6.31***
PW	22.86 (7.82)	21.15 (8.11)	23.72 (7.53)	5.19***
MW	25.77 (7.23)	23.88 (7.79)	26.72 (6.84)	5.91***

Note. N = total sample size; M = mean; SD = standard deviation; SLE = stressful life events; PVA = paternal verbal aggression; MVA = maternal verbal aggression; PW = paternal warmth; MW = maternal warmth
*** denotes *p* < 0.001

Regression Analyses

In the univariable analyses, all three risk factors significantly predicted symptoms of depression. Specifically, higher levels of stressful life events (OR = 1.08, 95% CI: 1.06-1.10), paternal verbal aggression (OR = 1.10, 95% CI: 1.06-1.13), and maternal verbal aggression (OR = 1.12, 95% CI: 1.09-1.15) were associated with higher odds of having depressive symptoms. Results of the multivariable logistic regression analyses for predicting depressive symptoms are shown in Table 3. In Model 1, stressful life events (OR = 1.58, 95% CI: 1.38-1.82) and maternal verbal aggression (OR = 1.33, 95% CI: 1.09-1.62) had significant main effects on adolescent depressive symptoms, above and beyond other predictors in the model;

thereby supporting hypotheses 1a and 1c, respectively. In contrast, paternal verbal aggression did not significantly predict depressive symptoms; hence, hypothesis 1b failed to be supported.

Moreover, two moderation models tested the protective role of parental warmth against the depressogenic impact of stressful life events and parental verbal aggression. In Model 2, results showed that the interaction of stressful life events with paternal warmth did not emerge as a significant predictor of depressive symptoms; hence, hypothesis 2a failed to be supported. In contrast, hypothesis 2b was supported, in that, paternal warmth had a significant buffering effect for the association between paternal verbal aggression and symptoms

Table 3
Multivariable logistic regression for predicting depressive symptoms

Variables	Model 1 OR (95% CI)	Model 2 OR (95% CI)	Model 3 OR (95% CI)
Gender	1.65*** (1.27-2.16)	1.66*** (1.27-2.17)	1.68*** (1.29-2.21)
PW	0.86 (0.70-1.05)	0.86 (0.70-1.06)	0.86 (0.70-1.05)
MW	0.82* (0.67-1.00)	0.82 (0.67-1.00)	0.81* (0.66-0.99)
SLE	1.58*** (1.38-1.82)	1.58*** (1.37-1.81)	1.59*** (1.38-1.83)
PVA	1.13 (0.92-1.38)	1.04 (0.84-1.29)	1.14 (0.93-1.39)
MVA	1.33 ** (1.09-1.62)	1.41** (1.14-1.75)	1.31** (1.07-1.60)
SLE x PW		0.98 (0.85-1.13)	
PVA x PW		0.81* (0.66-0.98)	
MVA x PW		1.36** (1.11-1.66)	
SLE x MW			0.91 (0.78-1.05)
PVA x MW			0.95 (0.78-1.16)
MVA x MW			1.23* (1.01-1.50)

Note. OR: odds ratio; CI: confidence interval
PW: paternal warmth; MW: maternal warmth; SLE: stressful life events; PVA: paternal verbal aggression; MVA = maternal verbal aggression
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

of depression (OR = 0.81, 95% CI: 0.66-0.98). As visualized in Figure 1, among adolescents with low levels of paternal warmth, the probability of having depressive symptoms increased with elevated levels of paternal verbal aggression. However, with high paternal warmth, depressive symptoms decreased even with increasing paternal verbal aggression. Furthermore, a significant interaction between paternal warmth and maternal verbal aggression on symptoms of

depression was also observed (OR = 1.36, 95% CI: 1.11-1.66). However, hypothesis 2c, which suggested a buffering relationship, was still not supported since findings demonstrated that the association between maternal verbal aggression and depressive symptoms was exacerbated by high paternal warmth, as illustrated in Figure 2.

In Model 3, the significant moderating influence of maternal warmth was evident only on the relationship between maternal
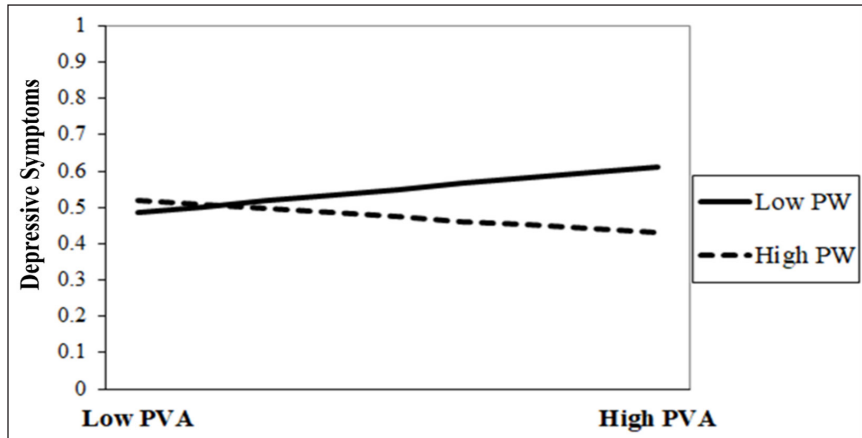
Figure 1. The interaction of Paternal Verbal Aggression (PVA) and Paternal Warmth (PW) on depressive symptoms
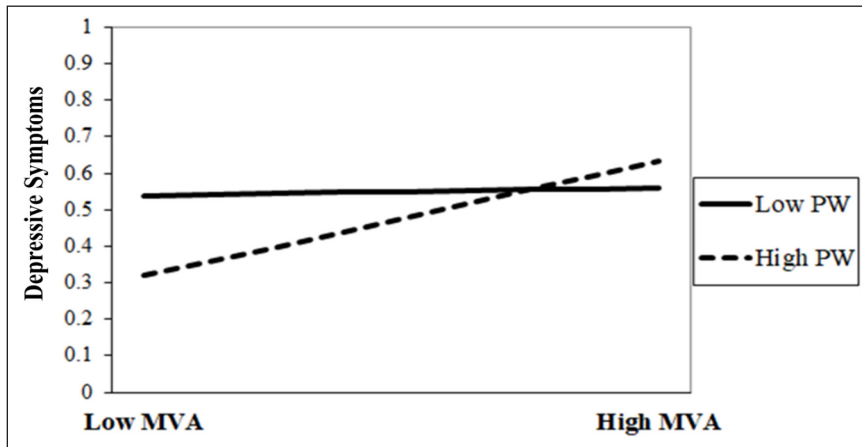
Figure 2. The interaction of Maternal Verbal Aggression (MVA) and Paternal Warmth (PW) on depressive symptoms

verbal aggression and depressive symptoms (OR = 1.23, 95% CI: 1.01-1.50). As revealed in Figure 3, adolescents with low levels of maternal warmth were highly likely to exhibit depressive symptoms regardless of the degree of maternal verbal aggression. Conversely, with greater maternal verbal aggression, the probability of showing symptoms of depression continued to rise despite high levels of maternal warmth. In other words, while a significant interaction

effect was revealed, hypothesis 2f still failed to be supported since maternal warmth increased the depressogenic impact of maternal verbal aggression instead of diminishing it. Moreover, maternal warmth did not buffer the associations of both stressful life events and paternal verbal aggression with adolescent depressive symptoms; as such, hypotheses 2d and 2e were likewise not supported by the findings.
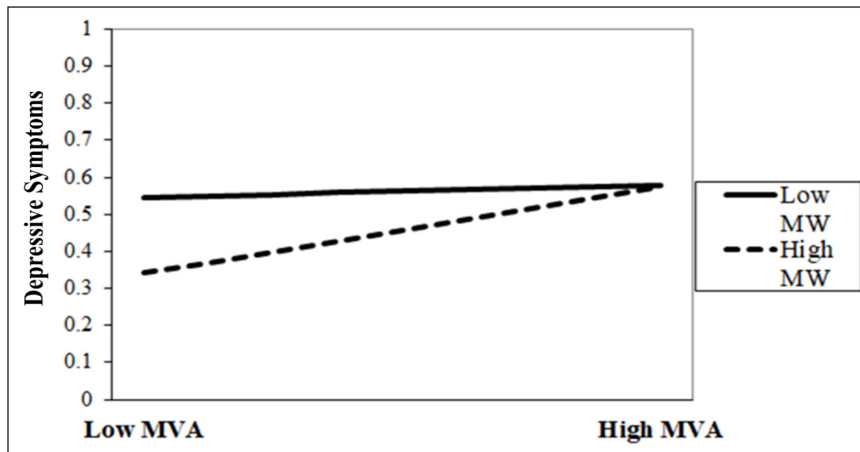
Figure 3. The interaction of Maternal Verbal Aggression (MVA) and Maternal Warmth (MW) on depressive symptoms

Discussions of Findings on Hypotheses Testing

The most obvious finding to emerge from this study was that stressful life events significantly predicted depressive symptoms. Such an outcome was not surprising given the overwhelming results from past studies that total stressful life events brought about a depressogenic risk for adolescents (e.g., Fox et al., 2010; Natsuaki et al., 2007; Sanchez et al., 2012; Shapero et al., 2015; Sun et al., 2016; Young, 2016). As explained by scholars, undergoing multiple stressful life events is more influential to the development of depression than a single stressor (Meyer et al., 1993; Morales & Guerra, 2006). Burton et al. (2004) elucidated that when individuals experience only one stressful event, generating suitable coping resources may not be that difficult; in contrast, going through a manifold of adverse life events may overstrain a person's means of coping, which puts him at risk for developing disorders.

Parental verbal aggression was also examined as a risk factor for depressive symptoms. In the multivariable analysis, maternal verbal aggression had a direct influence on depressive symptoms. This finding is in harmony with results from prior research that maternal verbal aggression predicted adolescent depressive symptoms (e.g., Donovan & Brassard, 2011; Wang & Kenny, 2014); while paternal verbal aggression was not associated with internalizing symptoms in children (Anonas & Alampay, 2015). Several studies have suggested that harsh parenting from the mother has a stronger effect on the child than that of the father (Chang et al., 2003).

Wang and Kenny (2014) suggested that such empirical outcome may be due to the fact that children spend more time with their mother than they do with their father, and that mothers appear to exhibit more harsh forms of discipline. In fact, our univariate analysis revealed a higher mean score for MVA (M=10.40; SD=4.34) than

PVA (M=9.25; SD=4.37). Even though contemporary Malaysian women may already be pursuing higher education or are engaged in employment, they still perform the primary responsibility of rearing their children (Mellström, 2009). Hence, the constant interaction between the mother and the child may expose the latter to more MVA.

In addition, consistent with gender role theories, Chang et al. (2003) stressed that children might have a more negative emotional response to maternal aggression than that of the father since such behavior went against the traditional role of the mother, which was to exhibit warm and caring behaviors toward the child. Indeed, within the Asian context, the mother is supposed to provide a loving environment at home (Jankowiak, 1992) and foster a strong emotional relationship with the child (Chao & Tseng, 2002). In fact, a study of Malaysian adolescents by Yap et al. (2014) demonstrated that mothers accorded more importance to emotional support to the child than fathers did. In view of this, when the child experiences rejection through maternal verbal aggression, then they become emotionally distressed (Khaleque & Rohner, 2012).

Focal to this study was the exploration if parental warmth would protect adolescents from the depressogenic impact of stressful life events and parental verbal aggression. Contrary to the risk-protective model and stress-buffering framework, results from the present study did not find support for the hypothesized role of parental warmth

in mitigating the influence of stressful life events on depressive symptoms. The nonsignificant interaction between paternal warmth and stressful life events on depressive symptoms substantiated findings from previous studies (e.g., Ge et al., 1994; Ge et al., 2009). For example, Ge and associates (2009) found that closeness with the father did not moderate the effects of family and personal stressful life events on adolescent depressive symptoms. They speculated that this might be due to the lack of attention and responsiveness exhibited by fathers, which were supposedly helpful to adolescents who were going through life stress. In contrast, the finding that maternal warmth did not buffer the stress-depression link disputes findings from past studies (e.g., Ge et al., 1994; Ge et al., 2009), which found that maternal warmth significantly safeguarded adolescents from the influence of stressful life events and other risk factors on depressive symptoms.

A plausible explanation for the overall lack of evidence for the protective role of parental warmth may be the nature of stressful life events assessed in this research. As presumed by Cohen and Wills (1985), the stress-buffering role of certain types of social support may be influential only to specific forms of stressful life events. Nonetheless, this study investigated aggregated stressful life events rather than domain-specific. Hazel et al. (2014) similarly noted that such a cumulative measure of stressful life events might obscure the specific types of stressors which could be ameliorated most by social support. Hence, significant findings for

the moderating effect of parental warmth may have emerged if this study focused on domain-specific stressful life events.

This study yielded some significant findings on the impact of parental warmth in moderating the relationship between parental verbal aggression and adolescent depressive symptoms. In contrast to the results by Wang and Kenny (2014), paternal warmth moderated the depressogenic impact of paternal verbal aggression. Researchers have reasoned that by exhibiting high levels of warmth, parents compensate for their harsh disciplinary strategies (McKee et al., 2007), or counteract the undesirable lessons communicated by their hostile parenting (Simons et al., 2012). Simons et al. (2012) further noted that within the domains of parental warmth, children learnt that parents' verbally and physically aggressive behaviors toward them were normative of intimate relationships. Wang and Kenny (2014) also suggested that within the context of a parent-child relationship that was characterized by love and trust, children who were harshly disciplined might not necessarily feel rejected, but instead imbibe their parent's values and behaviors; hence, parental warmth may act as a protective factor against hostile parenting. Apparently, an affectionate and warm parent-child bond facilitates healthy emotional growth during adolescence (del Barrio et al., 2016). When parental warmth is exhibited in the family, adolescents may not hesitate to share their thoughts and experiences with their parents, which in turn, lead to greater parental knowledge of their whereabouts, activities,

and acquaintances (Son & Choi, 2013; Yun et al., 2016). Such parent-child quality of interaction has been shown to reduce depressive symptoms in adolescents over time (Garthe et al., 2015).

In accord with findings of other studies (e.g., McKee et al., 2007; Wang & Kenny, 2014), results of this research demonstrated that maternal warmth did not buffer against the effects of fathers' verbally aggressive behaviors on adolescent depressive symptoms. However, an interesting finding involved the significant interaction between parental warmth and maternal verbal aggression. What is surprising is that despite the presence of high paternal or maternal warmth, depressive symptoms continued to rise at increasing levels of maternal verbal aggression. Although this finding looks counter-intuitive, it mirrors the observation by Anonas and Alampay (2015), wherein high maternal warmth increased the effects of greater levels of parental verbal punishment on child internalizing symptoms. Wang and Kenny (2014) speculated that even within the context of a warm parent-child bond, harsh verbal discipline still strengthened depressive symptoms due to its threats to the adolescent's sense of self. As pointed out by Turner and Finkelhor (1996), inconsistent parenting, wherein parental support is concurrent with frequent punishment, may result in a sense of unpredictability and heightened distress in adolescents. It may be argued that adolescents who are experiencing undesirable family risk factors will be protected more from depressive

symptoms if they receive less, rather than high emotional support from parents (Beam et al., 2002; Gore & Aseltine, 1995).

CONCLUSIONS

It was empirically established that experiencing multiple stressful life events and maternal verbal aggression increased depressive symptoms in adolescents. Moreover, warm parenting by the father mitigated the influence of paternal verbal aggression on adolescent depressive symptoms; therefore, substantiating the risk-protective model as well as the stress-buffering framework. However, both paternal and maternal warmth aggravated the depressogenic impact of maternal verbal aggression. Hence, parental warmth was not a protective factor against the depressogenic impact of maternal verbal aggression. In addition, there was no inter-parental protective influence of parental warmth, in that, paternal warmth did not reduce the depressogenic impact of maternal verbal aggression and maternal warmth was not at all related to paternal verbal aggression. By and large, adolescents' perceptions of parenting behaviors highlighted the distinct roles played by mothers and fathers. Accordingly, mothers' and not fathers' harsh parenting was predictive of depressive symptoms. In contrast, fathers' and not mothers' positive parenting operated as a protective factor against the depressogenic influence of parental verbal aggression.

On the whole, results substantiated assertions of theories on the associations between stressful life events, parental verbal

aggression, and adolescent depression, as well as the buffering role of paternal warmth. The present study may also offer suggestions to policy-makers and practitioners concerning possible avenues for reducing depressive symptoms among Malaysian adolescents. Overall, clinicians, parents, and school personnel must work together in developing prevention and intervention programs to ensure that adolescents do not develop depressive symptoms.

However, some limitations of this study need to be acknowledged. This research was cross-sectional; hence causality between the predictors and depressive symptoms could not be established. Nonetheless, given that within the Southeast Asian setting less is known as to the relationships among the variables of interest, such an approach was useful as it provided immediate clarifications on the issues at hand. To extend the findings of this research, future work should employ longitudinal and prospective designs. Secondly, data were based solely on adolescents' self-report. Since self-report measures could potentially compromise internal validity, the use of multiple sources of information would be preferable as it may reduce the effect of subjectivity (Li et al., 2013). Future studies should interview multiple informants, such as parents and teachers, to provide corroboration to the reports made by adolescents. Nevertheless, regardless of potential inaccuracies in the self-reporting of adolescents, their perceptions are important aspects of their behavioral and cognitive

functioning; therefore, adolescents' reports may be more influential to their well-being than actual behaviors of others (Brown et al., 1986; as cited in Beam et al., 2002). Lastly, only a measure of depressive symptoms was utilized rather than a clinical assessment of depressive disorders. Consequently, other researchers can carry out follow-up studies that investigate a clinical sample of adolescents.

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SOCIAL SCIENCES & HUMANITIES

Cognitive-Behavioral Intervention to Enhance Sexual Assertiveness in Women Who Exhibit Premarital Sexual Compliance in the Greater Jakarta Area, Indonesia

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ABSTRACT

Premarital sexual compliance is common among women and is influenced by gender role socialization. Sexual assertiveness reduces the likelihood of engaging in sexual compliance. This study examined the effectiveness of cognitive-behavioral intervention in enhancing sexual assertiveness in women who exhibited sexual compliance. This was a quasi-experimental study conducted with a pretest-posttest nonequivalent control group design. Each group consisted of five participants recruited through purposive sampling. Participants in the intervention group participated in five individual sessions, preceded by a pre-session and followed by a follow-up session. The participants in the control group were given a psychoeducation book to read and had no face-to-face sessions. Analysis was conducted through the comparison of quantitative data measured by the Indonesian version of the Sexual Assertiveness Questionnaire for Women (SAQ-W) scale. Participants' changes in cognition and behavior before and after the intervention were also observed. It was found that cognitive-behavioral intervention successfully enhanced sexual assertiveness in women who exhibited sexual compliance. Participants in the intervention group were able to identify what they wanted and did not want in sexual situations, modify maladaptive thoughts leading to unassertive behaviors, and apply behavioral techniques to facilitate the occurrence of assertive behavior in sexual contexts.

Keywords: Cognitive-behavioral intervention, sexual assertiveness, sexual compliance

INTRODUCTION

A preliminary study conducted by the authors in February 2017 of 2231 unmarried heterosexual Indonesian women ages 15-43, most of whom were residing in the Greater Jakarta area, found that many women were sexually active prior to marriage (Kristanti, 2017). In all, 45% have had oral sex, 6% have had anal sex, and 34% have had penis-in-vagina sex. Notwithstanding the widespread opinion that premarital sexual activities are pleasurable for both participating parties, around 30-40% of premarital sexual activities occur out of compulsion (French & Neville, 2016; Hickman et al., 2004; Young & Furman, 2008). The most surprising finding is that the majority (89%) of women who engaged in compulsory sexual activities gave their consent to the sexual activity in the absence of any physical violence or verbal threats from the partner, and they did so during a conscious and non-intoxicated state (Kristanti, 2017). This condition, women giving their consent to engage in sexual activities without (or unaccompanied by) the desire to perform those activities, is known as sexual compliance (French & Neville, 2016; Impett & Peplau, 2002; O'Sulivan & Allgeier, 1998).

The high levels of sexual compliance discovered in these women prompt this research to further examine what causes women to agree to get involved in unwanted sexual activities. The socialization of gender roles plays a part in shaping sexual compliance, because women develop identities oriented toward fulfilling other people's needs, maintaining close relations with others, or giving emotional support to others (Hyde & Else-Quest, 2013; Impett & Peplau, 2003; Walker, 1997). The reasoning women employ in sexual compliance is consistent with this concept of gender socialization. Women feel responsible for satisfying their partners' sexual needs, do not want to hurt their partners' feelings or make them feel rejected, want to avoid tensions and conflict, want to feel accepted by their partners, and believe that sexual activities will make their partners love them more and will improve the quality of the relationship (Gavey as cited in French & Neville, 2016; Impett & Peplau, 2002; Kristanti, 2017; Lewin, 1985; O'Sulivan & Allgeier, 1998). The social valuation of virginity is also a strong reason to consent to unwanted sexual relations. Women who lose their virginity before marriage are usually demeaned by stigma and terms such as "broken", "damaged", "cheap", and "easy" (Bennett, 2005). They may find it difficult to risk being left by their partners whom they've already had sex with because they worry that no other man will want to marry them (Kristanti, 2017). Therefore, they may have a tendency to acquiesce to their partners' sexual requests, despite it being against their wishes.

On the other hand, in accepting invitations from their partners to engage in sexual activities, women face another conflict, that incited by religious values in Indonesia, which hold that premarital sex is a sin (Bennett, 2005; Kristanti, 2017). From a religious as well as a cultural point of view,

premarital sex is considered socially deviant, unhealthy, immoral, illegal, and dangerous (Bennett, 2005, 2007; Holzner & Oetomo, 2004). In Islam, the majority religion in Indonesia, premarital sex is called *zina*, an offence punishable by the *shariah,* the Muslim justice system (Bennett, 2005). This internal religious conflict makes women unsure of what they should do in sexual situations. Detecting this uncertainty, men are socially expected to behave according to their sexual script, persistently persuading and seducing until the female partners agree to engage in sexual activity (therefore presenting sexual compliance).

The complexity underlying sexual compliance has manifold implications. At first, women may experience positive feelings, such as satisfaction, happiness, and love as a result of having complied with their partners' needs. The long-term effects, however, are predominantly negative feelings, such as guilt and sinfulness, feeling dirty, being disgusted with oneself, feeling tainted, fearing pregnancy, and feelings of worthlessness, which may affect their psychological state (Christopher, 1988; Kristanti, 2017). Unwanted sexual activity may also have negative health consequences for women, such as, among others, pregnancy-related risks or sexually transmitted diseases, such as HIV/AIDS or cervical cancer. These things may happen because women who engage in unwanted sexual activities tend to feel reluctant to ask for protection or contraceptives (Katz & Tirone, 2009; Liu, 2006; Thiangtham et al., 2010).

One of the solutions that may help women escape the sexual compliance problem is by developing sexually assertive behavior patterns (Carlson & Johnson, 1975; Greene & Navarro, 1998; Morokoff, 2000; Rickert et al., 2002; Schry & White, 2013; Testa & Dermen, 1999). Assertiveness itself is the ability to defend personal rights as well as the ability to express opinions, feelings, and desires directly, without the accompaniment of anxiety or guilt, while still respecting the rights of others (Alberti & Emmons, 1970; Linehan, 1979; Rich & Schroeder as cited in Rakos, 2006). Women who are sexually assertive can behave sexually according to their wishes, in spite of her partner's needs, without feeling guilty or worried. She also knows and is sure of what she wants sexually, the boundaries between the sexual behaviors she is willing and unwilling to do, and can communicate these to her partner. Interventions to increase sexual assertiveness must focus on identifying and testing irrational beliefs systems or a number of traditional norms related to gender and sexuality cognitively believed by women, norms that make them fear losing other people, hurting others' feelings, or that they are behaving too aggressively; then, such interventions must prepare women with the skills needed to perform assertive behaviors (Walker, 1997; Wolfe & Fodor, 1975). The cognitive-behavioral approach responds to this need; it teaches individuals to identify non-adaptive cognitive patterns and how they can create negative emotions. If one changes how one thinks, interprets, and assumes, a shift of

emotions toward positivity can occur, and more adaptive patterns of behavior can be brought out (Kazdin as cited in Dobson & Dozois, 2010; Spiegler & Guevremont, 2010; Westbrook et al., 2011).

The utilization of the cognitive-behavioral approach to increasing assertiveness in women, which includes sexual assertiveness, has gained empirical support (Linehan et al. as cited in Linehan, 1979; Muehlenhard et al., 1989; Wolfe & Fodor, 1977). A controlled, randomized experiment performed by Weindhardt et al. (1998) found that interventions based in cognitive-behavioral techniques were effective for increasing assertiveness in women who were at risk of being infected with HIV. A recent study by Ilkchi et al. (2011) found that cognitive-behavioral therapy could significantly reduce anxiety and increase self-efficacy and assertiveness in anxious female students.

Reflecting on the success of the aforementioned studies, the authors became interested in implementing this strategy and examining the effectiveness of the cognitive-behavioral approach in increasing women's sexual assertiveness in the context of premarital sexual compliance. The intervention carried out in this study was intended to support participants in clearly identifying their sexual boundaries and what they want in sexual situations, identifying and modifying cognitions that inhibit assertive behaviors in the sexual context, and learning behavioral techniques to facilitate the development of assertive behaviors in the sexual context. These aims were achieved through an intervention module developed by the authors, based on several studies of cognitive-behavioral interventions (Jakubowski-Spector, 1973; Linehan, 1979; Muehlenhard et al., 1989; Westbrook et al., 2011; Wolfe & Fodor, 1975), with a few adjustments to address the needs of female Indonesian participants.

MATERIALS AND METHODS

Design

The current study was a quasi-experimental study with a two-group design, measured before, after, and two weeks post intervention (follow-up). Gravetter and Forzano (2012) described this research design as pretest–posttest nonequivalent control group design.

Participant

The participants of this study were ten people (five in the control group and five in the intervention group), with the following criteria: women, aged 18–29 years, unmarried but in a romantic relationship, heterosexual, had engaged in a sexual activity they did not want with their current partners even though they had never experienced physical violence or threats from the partner, and have low scores ($\leq$ 42) in the Relational Sexual Assertiveness (RSA) subscale on the adapted Sexual Assertiveness Questionnaire for Women (SAQ-W; Walker, 2006) instrument.

Ethics

Approval of this research was obtained from The Ethics Committee of the Faculty of Psychology at Universitas Indonesia. Informed consent was read, discussed, and signed by the first author and the participants.

Procedure

The authors contacted the respondents of the preliminary study matching the participant criteria of the current study, invited them to participate in this study, and sent them a proposal for participation in the research through the webpage survey.ui.ac. id. Potential participants were informed that they would fill out a questionnaire that would serve as a screening tool (SAQ-W). Their scores were recorded as the pre-test. If their scores matched the requirements for becoming a participant, they were contacted to join the cognitive-behavioral intervention (being placed into the intervention group). If their scores did not match the criteria or they were not willing or unable to join the intervention for any other reason, they were placed into the control group, receiving a psychoeducational book on sexual compliance and sexual assertiveness developed by the authors. Eight weeks after the pre-test, both the intervention group and the control group were asked to fill out the same measurement (SAQ-W) that would serve as a post-test. Two weeks after the post-test, both groups were also asked to fill out a follow-up measure (SAQ-W).

Measure

The adapted version of the Sexual Assertiveness Questionnaire for Women (SAQ-W) instrument, developed by Walker (2006), was used to measure participants' sexual assertiveness. The SAQ-W uses a 5-point-scale (1 = strongly disagree; 5 = strongly agree) to measure how suitable the 30 statements on sexual assertiveness are to the participant's condition. There are four factors in the SAQ-W: RSA, Sexual Confidence and Communication Assertiveness (SCCA), Commitment-Focused Sexual Behavior, and Sex-Related Negative Affect. Among these four factors, Walker (2006) identified the first factor (RSA) (including items such as "*I go along with what my partner wants sexually, even when I'm uncomfortable*"; "*I engage in sexual behavior when I don't really want to because I'm afraid my partner might leave me if I don't*") and the second factor (SCCA) (including items such as "*I don't really know what I want sexually*"; "*I lack confidence in sexual situations*") as the two main components of sexual assertiveness. RSA refers to the extent of female assertiveness affected by the focus on the partner and the partner's sexual needs. Women with high RSAs behave as they wish sexually, regardless of their partners' requests, without feeling guilty or worried. However, women with low RSAs tend to prioritize and comply with their partners' sexual requests, even when she wants something else. Moreover, SCCA illustrates the extent of women's awareness of their own desires and

sexual needs and how well they are able to communicate it to their partners. Following Walker, the authors will only use two factors (subscales) in this current study, namely, the RSA, which consists of 14 items, and the SCCA, which consists of 7 items.

The adaptation of SAQ-W involved translation, back-translation, psychometric testing, and the development of a norm. In a trial conducted among 681 female respondents who are unmarried but have been in a romantic relationship, it was found that the RSA as well as the SCCA subscales are both reliable (Cronbach's alpha = 0.929; 0.729) and valid according to the criterion validity procedure. The criterion used for the validity procedure was whether or not the respondents had experienced compulsory sexual activities. The norms for the RSA subscale are that scores between 14 and 42 indicate low relational sexual assertiveness, while scores between 43 and 70 indicate high relational sexual assertiveness. The norm for the SCCA subscale are that scores between 7-21 indicate low sexual confidence and communication, while scores between 22-35 indicate high sexual confidence and communication. The norms were validated by conducting the chi-square test to the expectancy tables obtained by those cut-off scores. The cut-off scores were determined using the theoretical means of the two subscales.

Course of Treatment

A cognitive-behavioral intervention is a psychological intervention that emphasizes and elaborates on cognitive, emotional, and behavioral processes to help clients overcome complicated problems (Westbrook et al., 2011). Based on a review of several cognitive-behavioral intervention programs for assertiveness, a few techniques are found to be commonly exercised to manage assertiveness in women (Jakubowski-Spector, 1973; Linehan, 1979; Muehlenhard et al, 1989; Wolfe & Fodor, 1975). These techniques were used to increase sexual assertiveness in women in this study and were placed in a series of intervention sessions, summarized as in Table 1.

All interventions for the participants in the intervention group were conducted by the first author, who served as the therapist. First, the therapist conducted a pre-session to build rapport and perform the initial interview. In the first session, psychoeducation on sexual compliance was conducted, including the definition of sexual compliance, the concept of consent and desire, and information on men's sexuality, as well as the reasons commonly expressed by Indonesian women for consenting to unwanted sexual activity. Next, the participants were counseled to help them identify pros and cons themselves when engaging in sexual activities they do not actually want. Using the two-column technique, participants were able to weigh and decide which items from the two sides (pros and cons) were more important to them, so that they could formulate sexual boundaries with their partners.

In the second session, the participants received psychoeducation on sexual assertiveness, covering the definition of sexual assertiveness as well as the

Table 1
Cognitive-behavior intervention program for increasing sexual assertiveness

Contact	Description of activities
	Measuring SAQ-W for pre-test
Pre-session	Rapport building and completion of personal information, initial interview, explanation of program, and completion of informed consent.
1st Session	Psychoeducation on sexual compliance, counseling about internal conflicts and setting boundaries regarding sexual activities the client is willing and not willing to do.
2nd Session	Psychoeducation on sexual assertiveness, psychoeducation and counseling to help client identify factors that are hindering them from behaving sexually assertive, discussion of case formulation.
3rd Session	Introducing the ABCDE technique, cognitive restructuring and assigning homework, psychoeducation on the overt component in assertiveness.
4th Session	Writing of script to be assertively communicated to partner, role-play of script and assigning homework.
5th Session	Sessions recap, planning the next steps to be more sexually assertive, measuring SAQ-W for post-test, termination.
Follow-up	Progress monitoring, measuring SAQ-W for follow-up, delivering results (comparing pre-test and post-test results), filling out the evaluation form regarding the intervention program and therapist.

differences between submissive, assertive, and aggressive behavior. Through psychoeducation and counseling, the participants were informed of the factors that may hinder women from becoming assertive and became more aware of the beliefs they have held that have blocked them from behaving assertively. A discussion of case formulations based on the cognitive-behavioral framework was also conducted. All five participants felt that this discussion helped them better understand the source of their sexual compliance and consequently learnt what they could do to be more sexually assertive.

In the third session, the ABCDE (A= activating event/antecedent; B = belief; C = emotional and behavioral consequences; D = disputing irrational thoughts and beliefs; E = cognitive and emotional effects of revised beliefs) technique for recognizing and disputing unhelpful thoughts was introduced. Participants were asked to think of a time when they found it difficult to refuse an invitation to engage in a sexual activity they did not wish to do (A), as well as identify thoughts and feelings that hindered them from behaving assertively in that situation (B and C). After that, participants were asked to dispute their thoughts (D), that is, to think of new thoughts that could help them to be more assertive in the given situation (E). Participants then continued practicing their disputes by making a table. In the table, participants were asked to identify negative thoughts that had hindered them from being sexually assertive, describe the socialization of gender roles that incited those previous thoughts, and dispute these with their own thoughts through cognitive restructuring. Participants were given homework, namely to continue working on their table. In

general, all five participants felt that the cognitive restructuring process helped them to develop a different perspective for looking at their problem, also equipping them with tools they could use to escape their vicious thought cycle. Table 2 reports an example of the cognitive restructuring process performed by one of the participants.

Table 2
An example of the cognitive restructuring process done by one participant

Old thought	Gender role socialization	Dispute
"I have been doing sexual activities as a routine in my relationship, therefore it is my responsibility to always satisfy him [my partner]."	"It is the wife's responsibility to cater to her husband's needs. I feel that he is my future husband, so I must keep doing the sexual activities even though I do not want to do them."	"I do not have to serve him all the time. When I do not feel comfortable, then he must respect my wishes."

At the end of the third session, psychoeducation was given on the principles of assertive communication as per Rakos (2006), including: (1) content, that an assertive statement must contain the desire, affect, and opinion of the subject, be direct, specific, and respectful, and use an I-statement; (2) paralinguistic elements, that an assertive message must be delivered firmly with moderate response latency and duration; (3) non-verbal behavior, that an assertive message must be delivered with constant eye contact but not rigidly, a sincere facial expression that is also serious, the use of hand gestures and flexible arms, and a relaxed and attentive posture; and (4) interaction skills, that is, timing, initiation and persistence, and the ability to control stimuli.

During the fourth session, the intervention progressed into the behavioral component. Participants were asked to write a role-play script communicating their sexual boundaries to their partners in an assertive manner. They were asked to refer to the sexual boundaries they set on the first session and then write them according to the principles of assertive communication that were given to them on the third session. The therapist gave feedback on the script, and the participants were then asked to communicate their script to their "partners," who they imagined was sitting across from them in an empty chair. The therapist also asked the participants to imagine the responses that their partners would give and ask them to reply to those responses until an agreement on sexual boundaries in their relationship is made. In general, all five participants performed the activity well and they reported feeling readier to behave assertively to their partners. As homework, they were asked to assertively deliver their points regarding sexual boundaries to their partners and evaluate their own performance on an evaluation sheet.

In the fifth session, the homework was discussed and the sessions to date were summarized. The therapist asked the participants to mention the important points from the first session to the last and helpful ideas they had gleaned, as well as the changes

they felt before and after the intervention. The therapist also helped participants make a concrete plan for the things they could do to be more sexually assertive. In the follow-up session, the therapist discussed the improvements experienced by the participants after termination and also asked them to give feedback about the intervention. Figure 1 below summarized the participant recruitment procedure.
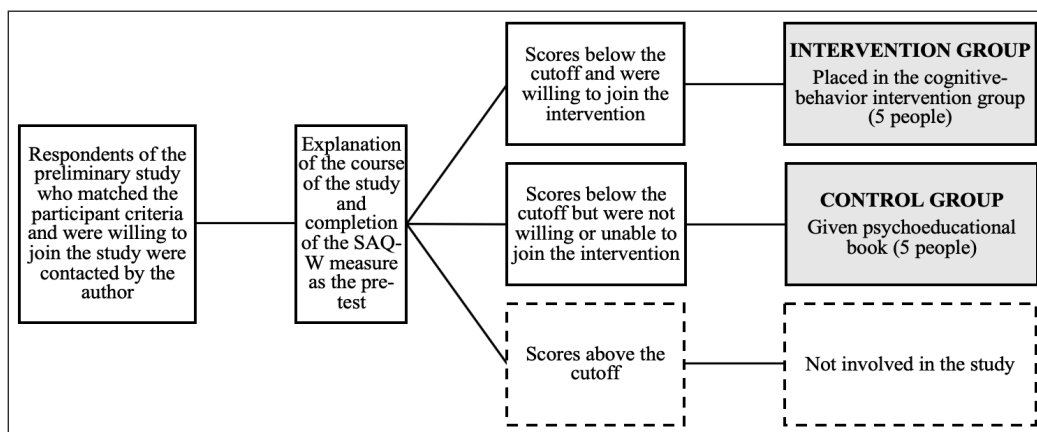
Figure 1. Participant recruitment procedure

RESULTS

The results of the study are presented based on changes on the RSA and SCCA subscales. In general, both the intervention and control groups experienced increases in RSA, but the intervention group experienced greater improvement. In Figure 2 and 3, which show the changes for each participant in each groups, the increases that occurred in the intervention group can be seen to be more uniform compared to those of the control group. Figure 4 shows that for intervention group, all participants successfully improved their RSA scores in great strides from low to high, whereas in the control group, there were participants who had great and small improvements, and one even maintained a low RSA score.
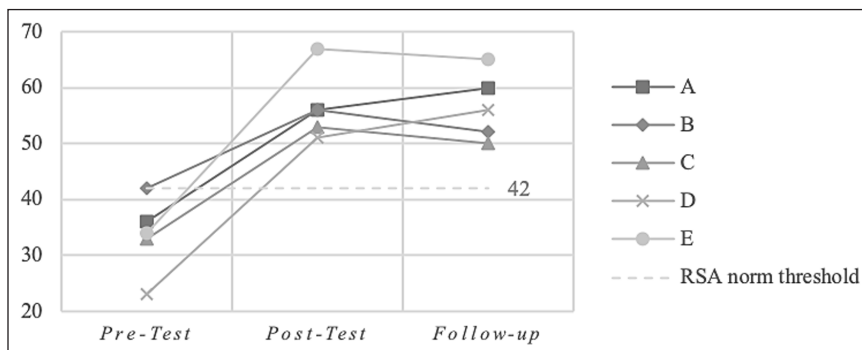
Figure 2. RSA changes in the intervention group
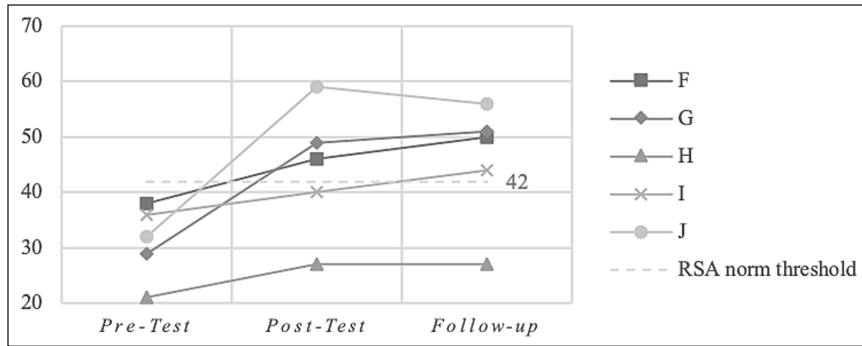
Figure 3. RSA changes in the control group

In general, both intervention and control group experienced improvements in their SCCA scores; however, the intervention group experienced greater improvement than the control group. In the pre-test, the SCCA scores of the control group were higher than those of the intervention group's, but in the post-test and follow-up, the SCCA scores of the intervention group exceeded the control group's scores as shown in Figure 5.
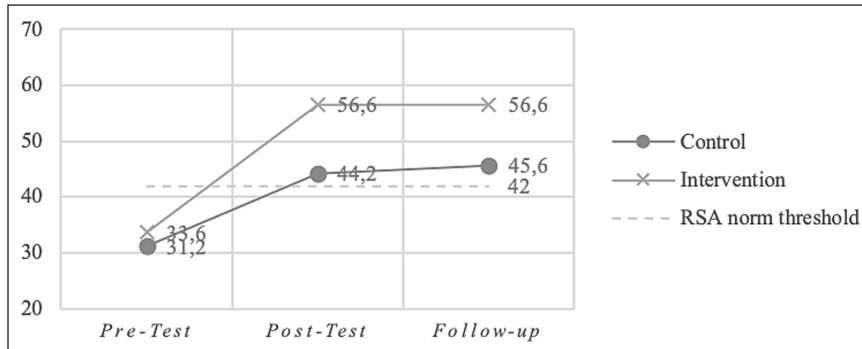
Figure 4. Comparison of RSA changes between the intervention and control group
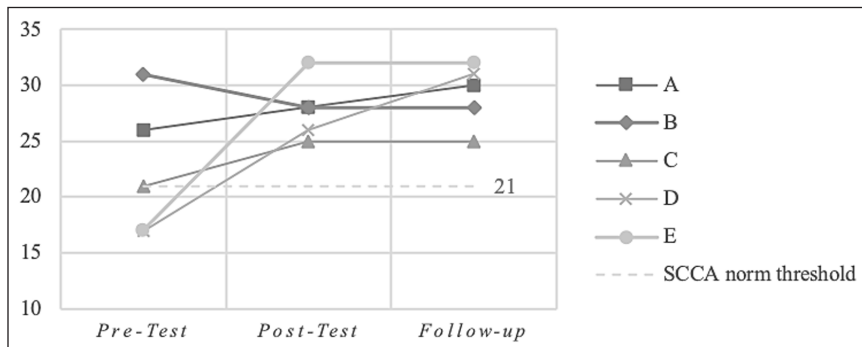
Figure 5. SCCA changes in the intervention group

Figure 6 and 7 illustrate changes experienced by each participant in each group. Although one participant in the intervention group showed a decrease in SCCA, in the end, all the participants in the intervention group had high SCCA scores. Meanwhile, in the control group, there was still one participant who had a low SCCA score relative to the norm.
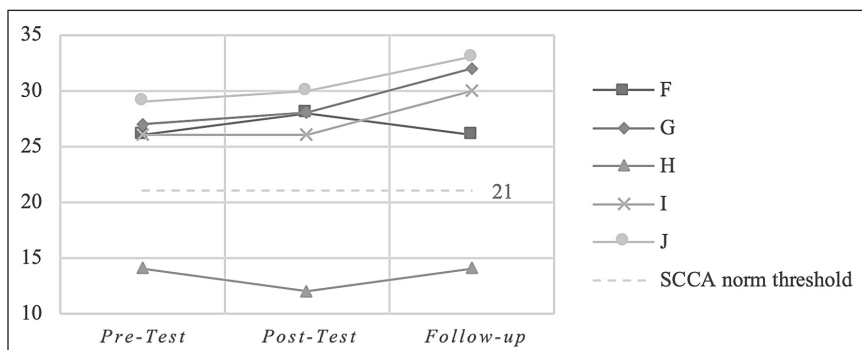
Figure 6. SCCA changes in the control group
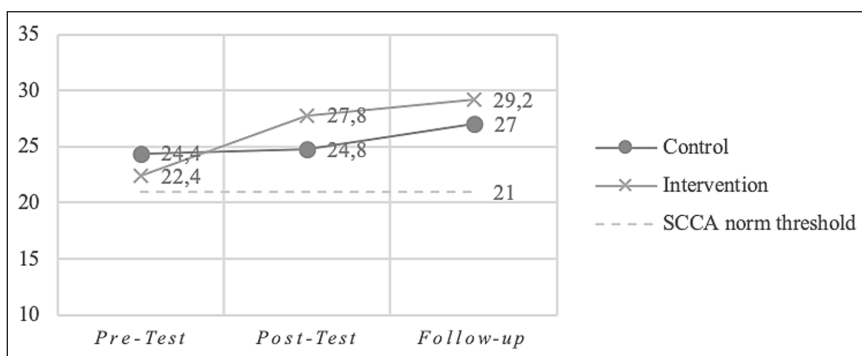
Figure 7. Comparison of SCCA changes between the intervention and control group

Other than changes in RSA and SCCA scores, participants in the intervention group also showed several qualitative changes, which are: (1) becoming able to identify their sexual wishes and boundaries ("At this point, I think I am comfortable to limit my sexual activity [with my partner] to kissing and hugging only. I don't want to have sexual intercourse, and I know that video sex call is also not for me"); (2) feeling confident enough to communicate those sexual boundaries to their partners ("I think now I know where I stand and I am ready to talk about it with my partner"); (3) being able to identify and modify thoughts that have been hindering them from behaving assertively in the sexual context ("I think I used to have a tendency to think of the worst, 'what if he leaves me', and such.' Now I think if I already expressed my objection to his sexual request and he doesn't respect my wishes, it's not on me … Wow, why didn't I think

about it this way sooner?!"); and (4) being able to assertively express refusal or sexual boundaries to their partners ("I feel like in our relationship, we have done some sexual activities that I am actually not comfortable with … I know that it is important for you, but honestly, it made me feel as I am living in a sin and it's not for me … I want us both to feel equally comfortable in pursuing this relationship forward").

DISCUSSIONS

There are a few points worth discussing. First, to the surprise of the authors, the control group also experienced an increase in sexual assertiveness, especially in the RSA subscale, although its quantity is not as great as that of the intervention group's and not all participants in the control group experienced a substantial increase. This finding indicates that psychoeducational books can also help participants improve their sexual assertiveness and can be used as a simple alternative intervention if face-to-face intervention cannot be performed.

The impact of cognitive-behavioral intervention on the two subscales of sexual assertiveness (SAQ-W), which are RSA and SCCA, is also a point to consider. An interesting pattern was found, which is that the RSA scores only increased if the individual already had high SCCA scores. In other words, before a person can behave assertively according to their wishes in a sexual situation, they need to be quite sure of their sexual boundaries and feel confident enough to express them. A real example of this notion can be seen among the

participants of the control group. The four of them who experienced an increase in RSA at the post-test had SCCA scores high above the norm from the beginning. This means that when an individual is already certain of her sexual desires and boundaries, then information from a psychoeducational book is sufficient to help her be more sexually assertive. Another support for the SCCA as a possible mediator to RSA changes is found in the authors experience when conducting the intervention for the intervention group. The authors felt that it was much harder to deliver intervention sessions to participants with low SCCA scores than it was to deliver them to those with high SCCA scores. Therefore, the authors suggest that future research systematically examine the role of SCCA as a mediator between the intervention and RSA.

During the follow-up, an interesting result was found in changes in sexual assertiveness scores, compared between both groups. The RSA scores of the control group continued to improve, whereas the scores of the intervention group were stagnant. This may be explained by the principle of regression toward the mean (Gravetter & Wallnau, 2013), which states that individuals with extreme scores will tend to get lower scores nearer to the mean when next measured. This decrease in score was not caused by any deterioration in the participant, but is more a statistical fact of life. This is what happened to the participants in the intervention group. Meanwhile, the control group did not experience very large increases in their scores, so their pre-test

scores were not extreme. They generally showed increases of scores and did not show any regression toward the mean for the next measurement. Moreover, the participants in the intervention group were instructed to do several tasks within a limited period of time; meanwhile, participants in the control group were not instructed to do so. It is possible that they had their own pace in progressing with the information given in the psychoeducational book. Therefore, they could still continue to process the information even after the period of intervention had ended, which would explain why their RSA scores continued to increase.

The next finding to be discussed concerns the part of the intervention the participants felt was most beneficial: the activity about the dysfunctional thought cycle and the creation of disputes. This appreciation of a standard tool of cognitive-behavioral therapy shows that the cognitive-behavioral approach is indeed the right approach to address the sexual compliance issue.

Furthermore, the probable long-term effects of the intervention should be discussed. A limitation of this study is that follow-up was done only two weeks post termination, although findings did show that the effect of the intervention was relatively stable during this two-week period. However, there may not have been enough important incidents in this period to test whether the improvement in sexual assertiveness of the participants can be maintained in the long run. One of the

things that may increase the likelihood of the intervention having a more stable long-term effect would be for the setting of sexual boundaries were to be done gradually. Some participants in this study set sexual boundaries that are a long way off from the usual sexual activity they have performed with their partners, such as limiting the sexual activity to a light kiss when the two usually have sexual intercourse. During the intervention process, their partners can accept the new setting of sexual boundaries; however, a long-term evaluation is yet to be done to review whether the participants or partners continues to act according to the sexual boundaries. Based on this consideration, it would perhaps be better if the setting of sexual boundaries were done gradually, starting with assertive refusal of sexual advances. After the participants become comfortable with expressing refusal, they can then try to set the sexual boundaries that they are truly comfortable with.

This study is not immune to several limitations, which can be addressed in future studies. The first concerns the use of a control group that may not have the same characteristics as the intervention group. The authors have made sure that the RSA mean of the intervention group was equal to that of the control group, but no measurement was made and no variables were identified for factors that could have influenced the results of the study. Another limitation of the study is the lack of a control group that received no treatment. In this study, the control group was given a psychoeducational book as the authors' form of accountability for the

participants of this study, and this gesture could already be considered as a simple intervention. According to Gravetter and Forzano (2012), this limitation makes it impossible to identify time-related effects, which may have jeopardized the internal validity of the study. Based on this limitation, we suggest that future researchers utilize a wait list control group. With regard to the content of the cognitive-behavioral intervention itself, there are a few points that can be added to improve the benefits felt by the participants such as among others, information regarding sexual health or the use of contraceptives because women who show sexual compliance tend to also not be assertive in asking the use of protection (Katz & Tirone, 2009; Liu, 2006; Thiangtham et al., 2010).

Methodologically, future studies can be done with larger samples so the impact of the intervention can be generalized and statistical testing can be done to prove the effectiveness of the intervention. Also, before placing participants into intervention or control groups, researchers should identify and measure external variables that may affect relationships between the independent and the dependent variables. The results of this study would be even more valid if the control group were completely left alone or not given any treatment; one solution for this would be to use a waitlist control group system. Moreover, to monitor the long-term effects of the study, more follow-up sessions can be held at 3 months, 6 months, or 1 year after termination. Future

studies can also systematically explore the hypothesis of the SCCA as a mediator to RSA changes using a large sample size.

On a more practical note, the authors can reproduce and disseminate the psychoeducational book with an easy conscience because it was found to have helped increase assertiveness in women who show sexual compliance. When explaining the course of the cognitive-behavioral intervention, it would be better if the setting of sexual boundaries were done gradually, as demonstrated in the previous discussion. Beyond this, it is important for there to be future studies that include the topic of sexual health and the use of contraceptives in the intervention module. For instance, a psychoeducation could be performed on the dangers of performing sexual activities without protection, the right to use contraceptives, and the types of contraceptives available, with a follow-up where participants report on mentioning the use of contraceptives as they establish their sexual wishes and boundaries with their partners.

CONCLUSIONS

Interventions using a cognitive-behavioral approach can increase sexual assertiveness in women who show premarital sexual compliance. The increase caused by the intervention is greater than obtained by just reading a psychoeducational book. Participants involved in cognitive-behavioral intervention experienced positive changes, not only quantitatively, as measured by

the RSA and SCCA subscales, but also in evident qualitative changes. Participants became more able to identify their sexual boundaries and what they want out of sexual situations, identify and modify thoughts that may hinder them from acting assertively in sexual contexts, and use behavioral techniques that can facilitate the appearance of assertive behavior in sexual contexts.

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SOCIAL SCIENCES & HUMANITIES

The Mediating Role of Passion for Work on the Relationship between Task Significance and Performance

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ABSTRACT

This study examines harmonious and obsessive passions as underlying psychological processes influencing the effects of task significance on performance. Using self-determination theory to account for the mediation effect, we argue that the relationship between task significance and employee performance is indirect, and harmonious and obsessive passion play a significant role as mediators. The data were collected from healthcare workers at an Indonesian government organization (N = 434) and were analyzed using the Hayes PROCESS macro. The results showed that task significance was positively and significantly correlated with harmonious passion and obsessive passion. Harmonious passion was positively and significantly correlated with performance, but obsessive passion was not correlated with performance. Furthermore, harmonious passion fully mediated the effect of task significance on performance, but obsessive passion did not mediate this relationship. The theoretical and practical implications of the findings are discussed.

Keywords: Harmonious passion, obsessive passion, performance, task significance

INTRODUCTION

Since the Jaminan Kesehatan Nasional [National Health Insurance Program] was enacted in Indonesia in early 2014, healthcare workers have been in high demand (Yasmi, 2014). Healthcare workers' performance includes maintaining service quality and efficiency to meet customer expectations. The program has entailed an increase in current healthcare workers' job demands that has negatively influenced

their performance (Janssen, 2001). For organizations, individual performance is an important component of organizational effectiveness, both to realize profit and to deliver services (Sonnentag & Frese, 2002). Performance is also important to individuals themselves, because performing at a high level and accomplishing tasks is a source of intrinsic reward and satisfaction (Lawler & Porter, 1967; Sonnentag & Frese, 2002), which in turn motivates them to improve their performance (Judge et al., 2001).

Performance can be affected by multiple factors, including situational and individual factors. Situational factors include job design (Christini & Pozzoli, 2010), the social support of co-workers (AbuAlRub, 2004), leadership (Breevaart et al., 2014), and job-demand resources (Gilboa et al., 2008). Individual factors include passion (Astakhova & Porter, 2015; Burke et al., 2015; Ho et al., 2011; Yahui & Jian, 2015) and job characteristics (Allan et al., 2016; Hackman & Oldham, 1976).

Job characteristics comprising task significance, task identity, task feedback, task variety, and autonomy, are important for enhancing individuals' intrinsic motivation to do their job and to improve their job performance (Hackman & Oldham, 1976). In the current study, we focus particularly on task significance, since this job characteristic is important in today's economy, especially for healthcare workers, who are aware that their work benefits other people (Grant, 2008). Grant (2008) contended that task significance deserved to be studied in its own terms. Task significance refers how a

job influences the lives or work of others, whether inside or outside an organization (Hackman & Oldham, 1976). Thus, individuals who feel that their job impacts upon other people will be encouraged to spend time and energy doing the job, which will enhance their job performance.

However, Humphrey et al. (2007) in their meta-analytical study of 259 studies on the relationship between task significance and job performance found that the corrected correlation between the two variables was relatively low ($r = 0.16$). Moreover, a low correlation coefficient between task significance and job performance was further identified by Allan et al. (2016) and Hackman and Oldham (1976) ($r = 0.11$ and $r = 0.12$, respectively). Low correlation coefficients indicate that other variables are serving as the underlying mechanism for the relationship between task significance and performance. Indeed, previous studies found that meaningfulness, perceived social worth (perceptions of being valuable in the social environment), and social impact mediated the relationship between task significance and performance (Allan et al., 2016; Grant, 2008).

In this study, we investigate passion as an underlying mechanism mediating task significance and job performance. Passion is defined as a strong tendency to invest energy in an activity or work that one prefers, due to the fulfillment of values while spending time on the activity (Vallerand, 2015; Vallerand et al., 2003). Jobs that have a significant impact on others are considered valuable as they permit employees to love their work and

encourage them to invest energy and time to maintain a high performance (Franco et al., 2004). Studies have found that passion for one's work affects performance (Astakhova & Porter, 2015; Burke et al., 2015; Ho et al., 2011).

In Vallerand et al.'s (2003) dualistic model of passion (DMP), passion is categorized as either harmonious or obsessive. The distinction between harmonious passion and obsessive passion is based on *self-determination theory* (Deci & Ryan, 2000; Vallerand et al., 2003). Self-determination theory is concerned with the fulfillment of one's basic psychological needs, including the need for autonomy (desire to feel capable of managing one's own actions and behaviors), competence (desire to feel effective and able to master challenges), and relatedness (desire for relatedness with others) (Deci & Ryan, 2000). Whether these basic psychological needs are fulfilled depends on how an activity is internalized into one's identity. The distinction between harmonious and obsessive passions can also be explained by autonomous and controlled motivation (Deci & Ryan, 2000; Vallerand et al., 2003). Harmonious passion is produced by autonomous motivation when one internalizes the preferred activity into one's self identity and freely perceives the activity as important and meaningful without feeling compelled to conduct the activity. Thus, the preferred activity exists in harmony with other aspects of one's individual life (Vallerand et al., 2003). Therefore, the fulfillment of all three basic

psychological needs leads to harmonious passion. In contrast, obsessive passion derives from controlled motivation, an external motivational urge that pushes employees to accomplish their tasks. Its internalization is derived from intrapersonal pressures stemming from sources such as self-esteem, and/or interpersonal pressures such as social acceptance and reward; thus, these lead to conflicts between work and other aspects of life (Vallerand et al., 2010). In this case, the fulfillment of two of the three basic psychological needs, particularly the need to demonstrate competence and experience relatedness, leads to obsessive passion.

Based on the above explanations, jobs involving a significant impact on others may induce employees to experience either harmonious or obsessive passion for their work, depending on how they internalize their job. Those who regard the job as meaningful and important may perform the job well due to intrinsic motivation (Hackman & Oldham, 1976) which fulfills their basic psychological needs for autonomy, competence, and relatedness. This enables employees to identify with their work and self-endorse their actions (Deci & Ryan, 2008). In this regard, employees tend to possess an autonomous motivation or a harmonious passion (Vallerand et al., 2003) for their work. Meanwhile, important and meaningful jobs that affect others may impose pressure on the individual. When one is motivated to perform the job but controlled by factors such as approval motives, ego-involvements, or avoidance of shame (Deci

& Ryan, 2008), these internal and external factors put pressure on individuals to invest in their work excessively to increase their self-esteem (Gagné & Deci, 2005). In this case, employees fulfill their needs for competence and relatedness, but not their need for autonomy, and this process derives from obsessive passion. Thus, we predict the following:

Hypothesis 1a: Task significance is positively associated with harmonious passion.

Hypothesis 1b: Task significance is positively associated with obsessive passion.

Regardless of whether employee possess autonomous or controlled motivations, both types of motivation energize and direct employees' behavior (Deci & Ryan, 2008). Similarly, Vallerand et al. (2007) contended that passion was the main source of energy that drove individuals to persist through difficult periods in their activities and even helped them achieve their optimal performance level. Hence, individuals possessing harmonious passion will be intrinsically motivated to focus on their tasks, which in turn will lead to high performance. As predicted by self-determination theory, an intrinsically motivated individual experiences their work as a reward in itself that fulfills their needs for autonomy, competence, and relatedness (Deci & Ryan, 2000).

Similarly, obsessive passion may also motivate performance. According to self-determination theory, although external rewards may diminish the effects of intrinsic motivation, they can still boost performance in the short-term because obsessive passion fulfills the need for competence and relatedness (Deci et al., 1999). Previous studies have found obsessive passion is positively correlated with job satisfaction (Burke et al., 2015) and performance (Yahui & Jian, 2015). This supports Vallerand et al.'s (2007) assumption that passion is the main source of energy for doing one's job. Based on this, further hypotheses for this study are proposed as follows:

Hypothesis 2a: Harmonious passion is positively related to job performance.

Hypothesis 2b: Obsessive passion is positively related to job performance.

Drawing on self-determination theory (Deci & Ryan, 2000), we argue that harmonious and obsessive passion mediate the relationship between task significance and job performance. When individuals perceive tasks as significant, they occupy themselves with these jobs or activities and fulfill their three basic psychological needs for autonomy, competence, and relatedness. In these conditions, individuals possess an autonomous motivation to perform their job, which leads to high performance. Conversely, when individuals perceive work tasks as significant but they are inherently controlled by internal and/or external factors, only two of the basic psychological needs are fulfilled, particularly for competence and relatedness. In this case, individuals will experience controlled motivation or obsessive passion, which still leads to high

performance because high performance is needed to enhance these individuals' self-esteem. Individuals driven by obsessive passion are compelled to pursue success and avoid failure (Vallerand et al. 2007). Based on these arguments and the results of previous studies, further study hypotheses are proposed as follows:

Hypothesis 3a: Harmonious passion will mediate the effect of task significance on job performance.

Hypothesis 3b: Obsessive passion will mediate the effect of task significance on job performance.

Hypothesis 3c: Harmonious and obsessive passion will mediate the effect of task significance on job performance.

MATERIALS AND METHODS

Participants and Procedure

In 2017, the government office that supervised 22 community health centers and 1 regional public hospital in Mandailing Natal district, North Sumatera Province, Indonesia was approached to obtain access to the human resources department records and collect performance data from 576 eligible healthcare workers. All participants were civil servant/government employees. Questionnaires enquiring into demographic data, task significance, harmonious passion, and obsessive passion were sent to all 576 employees in a closed envelope through their institution. An envelope was attached to the questionnaire so that participants could complete their questionnaires and return them in a closed cardboard box

that we provided at every institution. To link the data retrieved by self-report with performance data from the organization's records, participants were asked to give their identities, but they were assured that their data would be kept confidential and would be used for research purposes only. Participants were also assured that they could withdraw from participating at any time. The participants completed the questionnaires in approximately fifteen minutes.

The number of questionnaires returned was 499 (response rate 86.63%). 65 responses were excluded from further analyses, because the participants did not complete the biodata needed to match their responses with the job performance data. Therefore, the final sample consisted of 434 participants. The mean age of the participants was 37.73 years (SD = 6.42) and 388 (89.4%) were female. In all, 149 participants (34.3%) had 5 to 10 years of work experience as government employees. Participants' positions included 208 (47.9%) midwives, 136 (31.3%) nurses, and 35 (8.1%) doctors; 310 were diploma graduates (71.4%), 92 (21.4%) were university graduates, 3 participants (0.7%) had postgraduate qualifications and the other 29 (6.7%) were high school graduates.

Measures

The original measures were in English. The translate-back translation procedure as suggested by Beaton et al. (2000) was employed. After the questionnaire was completed, a pilot study was conducted on

131 civil servants from various departments in Semarang, Central Java Province, Indonesia. The pilot study used a more diverse population of civil servants than the actual study, ranging from administrative local government employees to healthcare employees. However, they were civil servants or government employees with some similar trainings during their employment years. The pilot study was conducted to determine whether the participants would understand the survey instructions and statements and to measure the validity and reliability of the instrument. According to Kline (1999), an alpha coefficient of $\alpha \geq 0.70$) is considered good. The alpha coefficients for task significance and harmonious passion in the pilot study were acceptable ($\alpha = 0.78$ and $\alpha = 0.76$, respectively), but obsessive passion did not meet the standard ($\alpha = 0.67$). Several items were added and modified before conducting the research. The reliability coefficients of each variable used in our study are given below.

Task significance was measured using the four-item Work Design Questionnaire developed by Morgeson & Humphrey (2006). The task significance scale was measured using a 5-point Likert scale (1 = never and 5 = very often). An example item follows: "The results of my work are likely to significantly affect the lives of other people." The coefficient alpha for this measure was considered good ($\alpha = 0.82$).

Harmonious passion and obsessive passion were measured using the DMP, which was developed by Vallerand et al. (2003). Responses were given to all items on a 7-point Likert scale (1 = strongly disagree and 7 = strongly agree). A sample item for harmonious passion was "This work is in harmony with other activities in my life." A sample item for obsessive passion was "This activity is the only thing that really turns me on." The alpha coefficients for harmonious and obsessive passion were acceptable ($\alpha = 0.76$ and $\alpha = 0.76$, respectively).

Performance was measured using the objective measurement data for performance appraisal collected from the human resources department of the Department of Health of the Mandailing Natal District in North Sumatra, Indonesia. This department supervises 26 community health centers and two government hospitals. The performance assessment of the civil servants includes job goals and work behavior. An assessment of employee job goals is conducted by comparing the realization of work with work targets, which include the following aspects: (a) quantity, (b) quality, (c) time, and (d) cost. An assessment of work behavior includes the following aspects: (a) service orientation, (b) integrity, (c) commitment, (d) discipline, (e) cooperation, and (d) leadership. The performance data for this study were obtained through a combination of employee job goals (60%) and work behavior assessments (40%). The performance data used in this research were collected during the year 2016.

Control Variables. Tenure and age were controlled in this study. Ng and Feldman (2010) found that longer-term employees demonstrated a better in-role performance. Performance outcomes also vary due to the employee's age (Waldman & Avolio, 1986).

RESULTS AND DISCUSSIONS

To establish the construct validity of task significance and work passions, we conducted a confirmatory factor analysis (CFA). The results of the CFAs are reported in Table 1. The proposed three-factor model (including task significance, harmonious passion, and obsessive passion as latent variables) were compared with two theoretically plausible alternative models, including a *one-factor model* where all indicators were allowed to load onto one latent variable, and a *two-factor model*, where indicators of task significance were allowed to load onto one latent variable, and indicators of harmonious and obsessive passion were loaded onto one latent variable.

Goodness-of-fit indices are recommended by Hu and Bentler (1999), and those most frequently reported in CFA studies include: the root mean square error of approximation (RMSEA), the standardized root mean residual (SRMR), the comparative fit index (CFI), and the goodness-of-fit index (GFI). RMSEA should be equal to or less than 0.06, CFI should be greater than 0.90, GFI should be greater than 0.90, whereas an SRMR below 0.08 indicates a good fit (Hair et al., 2010; Hu & Bentler, 1999). The results indicated that the *one-factor model* provided a worse fit, and the *two-factor model* provided a better fit than the *one-factor model*, but a *three-factor model* fit the data significantly better than the other two models. Task significance, harmonious passion, and obsessive passion were the three distinct components of the three-factor model.

Table 2 presents means, standard deviations, correlations, and coefficient alphas for the study variables. The results of the correlation analyses showed that age and job tenure were significantly correlated with job performance ($r = 0.30$, $p < 0.001$; $r = 0.28$, $p < 0.001$, respectively). Task significance was not significantly correlated with job performance ($r = 0.04$, $p = 0.367$) but was positively correlated with harmonious passion and obsessive passion ($r = 0.31$, $p < 0.001$; $r = 0.22$, $p < 0.001$). Harmonious passion was positively correlated with job performance ($r = 0.10$, $p = 0.030$), but obsessive passion was not significantly correlated with job performance ($r = 0.09$, $p = 0.050$).

Table 1
Results of confirmatory factor analysis (N = 434)

Model	Latent variables	df	χ^2	CFI	GFI	RMSEA	SRMR	$\Delta\chi^2$	Δdf
Hyphothesized model	Task significance, HP, OP	62	227.06	0.93	0.93	0.07	0.05		
One-factor model	General factor	65	1360.02	0.59	0.67	0.21	0.16	1132.96	3
Two-factor model	Passion, Task significance	64	705.20	0.77	0.80	0.15	0.11	478.14	2

Notes: **HP** (*Harmonious Passion*), **OP** (*Obsessive Passion*), **CFI** = *Comparative Fit Index*, **GFI** = *Goodness-of-Fit Index*, **RMSEA** = *Root Mean Square Error of Approximation,* **SRMR** = *Standard Root Mean Square Residual*

Table 2
Means, standard deviations, and correlations between study variables

	Variable	*M*	SD	1	2	3	4	5
1.	Age	37.73	6.42					
2.	Tenure	11.34	7,07	0.79**				
3.	Task significance	3.59	0.68	0.03	0.04	(0.82)		
4.	HP	5.77	0 .66	-0.01	-0.06	0.31**	(0.76)	
5.	OP	3.47	1.26	0.05	0.06	0.22**	0.24**	(0.76)
6.	Performance	85.58	3.75	0.30**	0.28**	0.04	0.10*	0.09

Notes: **N** = 434. Performance data were obtained from objective performance appraisals. **Age** and **job tenure** were measured in years; **Task** (task significance) was measured on a 5-point scale; and **HP** (harmonious passion) and **OP** (obsessive passion) were measured on a 7-point scale. Coefficient alpha reliabilities are presented on the diagonal. **p <0.01, *p < 0.05.

The hypotheses were analyzed using mediation template 6 of Hayes' PROCESS macro on SPSS software, with two mediators examined based on the relationship between task significance and performance. The confidence intervals were produced using a bias-corrected method with 1,000 bootstrap samples. As age and tenure were previously correlated with performance (Ng & Feldman, 2010; Waldman & Avolio, 1986), we included these variables as covariates in our model.

Hypothesis 1a stated that task significance would be positively related to harmonious passion. The results showed that task significance was positively related to harmonious passion (a_1 = 0.29, *SE* = 0.042, *95% CI* [0.2036, 0.3708], supporting Hypothesis 1a. Hypothesis 1b stated that task significance would be positively related to obsessive passion, and results showed that task significance was positively related to obsessive passion (a_2 = 0.18, *SE* = 0.0780, *95% CI* [0.0317, 0.3383]); therefore, Hypothesis 1b was also supported. Hypothesis 2a proposed that harmonious

passion would be positively related to job performance, and Hypothesis 2b proposed that obsessive passion would also be positively related to job performance. Our results supported Hypothesis 2a but not Hypothesis 2b (b_1 = 0.11, *SE* = 0.0513, *95% CI* [0.0048, 0.2067]; b_2 = 0.04, *SE* = 0.0501, *95% CI* [-0.0625, 0.1345], respectively). Hypothesis 3a stated that harmonious passion would mediate the relationship between task significance and job performance. According to the results shown in Figure 1, the total effect of task significance on performance (before harmonious passion and obsessive passion were involved as mediators) was not significant ($c_{total\ effect}'$ = 0.0307, *SE* = 0.0458, *95% CI* [-0.0593, 0.1208]), and after harmonious and obsessive passions were involved as mediators, the direct effect of task significance on performance remained nonsignificant $c_{direct\ effect}'$ = -0.0100, *SE* = 0.04, *p* > 0.05). As shown in Figure 1, the indirect effect of task significance on job performance through harmonious passion was significant (*indirect effect₁* = 0.0327,

SE = 0.0173, *95% CI* [0.0012, 0.0696]), supporting Hypothesis 3a. Hypothesis 3b proposed that the indirect effect of task significance on job performance through obsessive passion would be significant, but the results did not support this hypothesis (*indirect effect$_2$* = 0.0039, SE = 0.0066, *95% CI* [-0.0073, 0.0194]). Finally, Hypothesis

3c which proposed that harmonious and obsessive passion together mediated the relationship between task significance and performance was not supported, because the indirect effect of harmonious and obsessive passion was not significant (*Indirect effect$_3$* = 0.0041, SE = 0.0062, *95% CI* [-0.0076, 0.0170]).

Indirect effect $_1$ = 0.0327, SE = 0.0173, *95% CI* [0.0012, 0.0696]

a_1 = 0.29**

Harmonious Passion

b_1 = 0.11*

Task Significance

c = 0.0307 (-0.0100)

Job Performance

a_2 = 0.18*

Obsessive Passion

0.12

Indirect effect$_2$ = 0.0039, SE = 0.0066, *95% CI* [-0.0073, 0.0194]
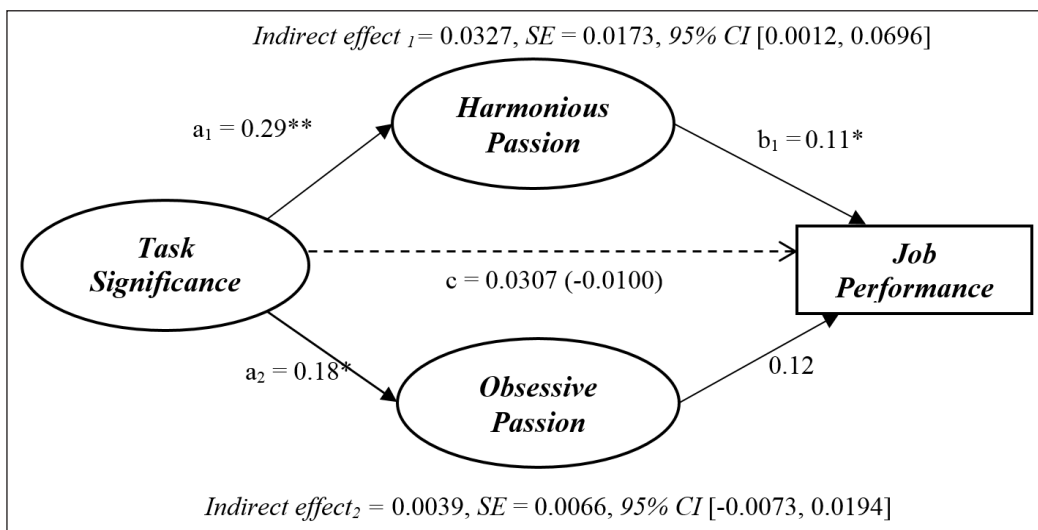
Figure 1. The mediating effects of harmonious and obsessive passion on the relationship between task significance and job performance
Notes. Direct effects are shown in brackets. Indirect effect3 = 0.0041, SE = 0.0062, 95% CI [−0.0076, 0.0170]

This study investigated the underlying mechanisms mediating task significance and job performance among healthcare workers in a government organization in Indonesia. The results showed that harmonious passion mediates the relationship between task significance and performance, but obsessive passion does not.

To the best of our knowledge, this is the first study to examine the mediating effects of passion on the relationship between task significance and individual work

performance. The current study found that the link between task significance and both types of passion was significant, suggesting that work that is perceived to be significant to other people induces experiences of both harmonious and obsessive passion during task performance. It was found that task significance enhances harmonious passion because individuals experience the fulfillment of their basic psychological needs for autonomy, competence, and relatedness. We found also that task

significance enhances obsessive passion when individuals experience the fulfillment of only two of the three basic psychological needs, namely competence and relatedness, even when they are experiencing pressures that impede their need for autonomy.

Our findings indicate also that harmonious passion positively predicts job performance, because it enables employees to accomplish tasks independently, allowing them to focus more effectively thus enhancing their job performance (Trepanier et al., 2014). However, obsessive passion was not related to job performance, and this result contradicted our hypothesis. Our results support previous findings that obsessive passion is unrelated to job performance (Astakhova & Porter, 2015; Burke et al., 2015; Ho et al., 2011). This implies a depletion of energy due to pressure to do the job, which is in conflict with other activities in an individual's life, and in turn negatively affects their job performance (Vallerand, 2015).

Thus, according to our findings, task significance was not related to performance. This contrasts with previous studies which have found a correlation between task significance and performance (Allan et al., 2016; Hackman & Oldham, 1976; Humphrey et al., 2007). We argue the uniqueness of this result in the literature may be related to our sample of public healthcare employees, whose workplaces are characterized by a rigid hierarchy and formal bureaucracy (Rainey, 2009). Complex bureaucratic systems may lessen the intrinsic value of task significance, reducing its impact on job performance.

Our study found that harmonious passion mediates the relationship between task significance and job performance. According to self-determination theory (Deci & Ryan, 2000), when individuals perceive their job has an impact on others, they internalize the activity as part of their identity but can still manage to control the activity so that the job remains in harmony with other aspects of their life. This leads to the satisfaction of their needs for autonomy, competence, and relatedness. The fulfillment of the three basic psychological needs will intrinsically motivate individuals to invest time and energy in the job that leads to high job performance.

One advantage of this study was its use of objective performance data from organizational records, which reduced the possibility of common method bias (Podsakoff et al., 2003). However, this study had a few limitations that future researchers must consider. One is that our study captured a short period of the link between task significance and work passion only, and did not examine the relationship longitudinally. As Ethier and Deauz (1994) argued, the process of identity formation from passion is not static and may change over time. Therefore, subsequent research related to task significance, passion, and performance must be conducted using studies with longitudinal designs. Another limitation is that the study sample was generally homogenous, as it was confined to governmental employees, which may affect its generalizability. In future research, this study should be replicated with employees in other industries or private organizations,

and with other professions, because passion may be dependent on the characteristics of organizations and professions.

Practical Implications

This study has some practical implications for organizations. The present findings offer some insights into how to promote and maintain optimal employee functioning. As task significance facilitates harmonious passion and obsessive passion, interventions could target this job characteristic. For instance, it is important to identify which activities enable employees to see their work as significant and meaningful. Organizations should provide opportunities for employees to experience tasks responsibly by allowing them to craft their own job, which would meet their needs for autonomy and competence, and would offer employees flexibility with determining, planning, and performing tasks, and experiencing mastery while completing the task.

Another way would be to facilitate sharing sessions for employees with supervisors or co-workers about experiences related to the significance of their work. This would enhance employees' meaningful perceptions of the work they do. Organizations could also facilitate sharing sessions between employees and clients, patients, or other beneficiaries of their work, to share experiences related to the work they have done, where beneficiaries can share the impact employees' work has had on their lives. This is important, as employee motivation programs are rarely conducted in government organizations.

CONCLUSIONS

Drawing on self-determination theory, our results demonstrated that harmonious passion mediated the relationship between task significance and performance. The internalization of task significance can lead to the fulfillment of all three basic psychological needs for autonomy, competence, and relatedness. When these needs are fulfilled, they result in harmonious passion because individuals are motivated to do the job when they can freely manage activities, which in turn enhances their performance. In contrast, obsessive passion does not mediate the relationship between task significance and performance because the internalization of task significance fails to fulfill one of the three basic psychological needs. When the need for autonomy remains unfulfilled, the individual is controlled by other factors, resulting in obsessive passion, which does not enhance work performance. These results confirm previous findings on the indirect relationship between task significance and performance, and contribute to the literature by demonstrating harmonious passion is an underlying mechanism mediating the relationship between task significance and performance. However, these findings cannot be generalized to other populations because our sample was specific to government employees. Thus, we will consider replicating the findings with other populations.

ACKNOWLEDGMENT

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Impact of Abnormal Audit Fees on Audit Opinion and Quality in ASEAN Countries

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ABSTRACT

Positive abnormal audit fee decreases audit quality. A high abnormal audit fee reduces audit quality because it interferes with the auditor's independence and objectivity. In addition, high audit fee allows a creation of economic bonding between auditors and clients. Likewise, a negative abnormal audit fee also decreases audit quality. This is because the auditor adjusts his/her audit effort and procedures according to the fee paid by his/her client. This study examines the effect of an abnormal audit fees on audit opinion and audit quality in five ASEAN countries which are Indonesia, Malaysia, Philippines, Singapore, and Thailand. The sample comprises companies listed on the stock exchanges in the five countries between 2010 and 2014. The regression result shows that a positive abnormal audit fee does not have a significant effect on the probability of a company to get an unqualified audit opinion. These results indicate that there is no opinion shopping.

Keywords: Abnormal audit fee, agency theory, audit quality, discretionary accruals, opinion shopping

INTRODUCTION

An abnormal audit fee is defined as the difference between the actual audit fee and the expected level of audit fee or "normal" audit cost of the audit engagement made

(Choi et al., 2010). In the previous research by Choi et al. (2010), Hope et al. (2009) and Higgs and Skantz (2006), the total audit fee was broken down into a normal and abnormal components and was tested for a relationship between abnormal audit fee and audit quality.

This study is an extension of Xie et al. (2010) and Choi et al. (2010) for the impact of an abnormal audit fee on the probability of a better audit opinion and audit quality. The samples used in the previous research were companies listed on the China Stock

Exchange in 2010 (Xie et al., 2010) and in Korea from 2000 to 2003 (Choi et al., 2010). In this study, the sample comprises companies listed on the stock exchanges of five ASEAN countries between 2010 and 2014. The selection of the ASEAN region is motivated by its developing countries that has attracted many investors due to their low labor costs. Currently ASEAN is in the stage of establishing regional economic cooperation (ASEAN Economic Community - AEC) where one of its agendas is ASEAN capital market integration. For this integration, high-quality financial information is needed. To improve the quality of financial information, a quality audits are also needed.

The previous research found a positive correlation between audit fee and audit opinion where a high audit fee led to a better audit opinion (Chen et al., 2005; Fang & Hong, 2008). Opinion shopping occurs when there is a negotiation between an auditor and an auditee (management). As mentioned by Antle and Nalebuff (1991), the resulting financial statements depend on the negotiation strategy used by the auditor. This negotiation is an act in which the auditor consults the management regarding the conformity of the financial statements to the generally accepted standards. Negotiation is based on information generated in regular audits. The auditor examines the company's finances and seeks evidence to verify or deny the management statement (Robertson, 1990). Gibbins et al. (2001) stated that auditors believed that negotiations were an important part of their responsibilities and

also a part of the services they provided to clients. Thus, the independence and objectivity of the auditor in conducting assurance becomes disrupted by the actions of a management that conducts opinion shopping to get opinions according to its needs (Gavious, 2007). This research investigates whether a positive abnormal audit fees affect the probability of a company to get an unqualified opinion.

According to Choi et al. (2010), abnormal audit fees can be divided into a lower audit fees and a higher audit fees. A lower audit fee deals with the client's bargaining power, whereas a higher audit fee is associated with an economic ties with clients. In a broad sense, abnormal audit fees can be seen as "client-specific quasi-rent" (DeAngelo, 1981). The positive existence of this client-specific quasi-rent creates an incentive for auditors to compromise their independence of a particular client (Chung & Kallapur, 2003; DeFond et al., 2002; DeAngelo, 1981). Dye (1991) on the basis of his analysis, showed that audit quality was disrupted when auditors were overpaid. Based on these studies, it can be considered that the quality of audits decreases along with the high audit fees paid by clients. This is due to a several factors, such as the economic attachment between the auditor and the client, and the greater benefit the auditor receives over and above the cost, which may result in the auditor allowing opportunistic earnings management actions. They also make the auditor to compromise their independence to their clients which eventually degrades the quality of the audit.

This research aims to investigate whether a abnormal audit fees both positive and negative affect an audit quality.

Literature Review and Hypothesis Development

In accordance with agency theory, there is a conflict of interest between shareholders and agents (management). Agents are parties granted power by shareholders and they have the duty and responsibility to increase the value of the company and the interests of a shareholders. However, problems arise when the management misuses the powers for personal gain by ignoring the interests of the shareholders (Jensen & Meckling, 1976).

The auditor is the party chosen and paid directly by the auditee who, in this case is the management (Gavious, 2007). Dontoh et al. (2004) pointed out that it was the management that appointed or dismissed the auditor and paid them for the audit and non-audit services they performed.

In assessing the suitability of financial statements with generally accepted accounting standards, a proper and appropriate professional judgment is required (Ruiz-Barbadillo et al., 2004). Therefore, in a financial statement, there is a proportion of responsibility on the management as the appraised party and also the auditor as the party conducting the appraisal so that the financial statements of the company can be seen as a joint effort between the management and the auditors. Antle and Nalebuff (1991) suggested that the resulting financial statements depended on the negotiation strategy used by the auditor.

An assessment of the fairness of a financial statement is indicated by an opinion issued by the auditor. There are several types of opinions that can be issued by the auditor, but an unqualified opinion indicates that a financial report is reliable and free of material misstatement. This opinion is considered to be ideal for management needs as it increases user confidence in the financial statements made by the management. Opinions issued by auditors are not only limited to the reliability of financial statements and free from material misstatements but also include an assessment of the viability of the company (going concern). Opinions related to this are referred to as "going concern opinions."

For auditors, giving a going concern opinion is a difficult and problematic as described Louwers (2007) that the going concern determination is one of the most difficult and complex decisions faced by the auditing profession. This difficulty is due to the fact that the auditor should provide an assessment of the survival of the company, they need to be very careful in doing so. For the management, opinions of going concern are avoided because the manager has an interest in building an image as the good steward (Watts & Zimmerman, 1986). In addition, going concern opinions are avoided by managers for the fear that the opinion could accelerate the bankruptcy of the company. Lennox (2002) referred to this as a self-fulfilling prophecy. When a going concern opinion is obtained by a company,

the market reacts negatively such that company value decreases. This causes the company difficulty when it seeks funding to address the going concern issue.

Consequent to the auditor's going concern opinion, the company is at risk of losing the trust of investors and other parties who fund the company when they experience problems related to the continuity of their business. Thus, the management will seek an unqualified opinion as a form of guarantee to the users of the financial statements that the company is in a good condition. According to Xie et al. (2010), problems arises when the management wants an unqualified opinion when it cannot be supported by reliable and qualified financial statements, which encourage the management to take other actions to retain the unqualified opinion.

Based on the abovementioned thinking, it is assumed that the company that wants to obtain or maintain an unqualified opinion but are not supported by a reliable and qualified financial statements performs an action that leads to the fraud of so-called "opinion shopping." Opinion shopping is done by management to provide high audit fees to the auditor. Previous research finds a positive correlation between higher audit fee and audit opinion; in other words, a high audit fees leads to a better audit opinion (Chen et al., 2005; Fang & Hong, 2008). Opinion shopping occurs when there is a negotiation between the auditor and the auditee (management). As mentioned by Antle and Nalebuff (1991), the resulting financial statements depended on the

negotiation strategy used by the auditor, whereby the auditor consulted with the management regarding the conformity of the financial statements to the generally accepted standards. The negotiation is based on information generated in regular audits. The auditor examines the company's finances and seeks an evidence to verify or deny the management's statements (Robertson, 1990). Gibbins et al. (2001) stated that auditors believed that negotiations were important, part of their responsibilities, and also part of the services they provided to clients.

Because auditors are appointed and dismissed by the management and operate as a business entities (e.g., public accountant firms) that aim to maximize profits, auditors tend to serve the requests of clients (management) to maintain loyalty. Thus, the independence and objectivity of the auditor in conducting assurance is disrupted by the actions of the management through opinion shopping to get opinions according to their needs (Gavious, 2007).

A high audit fee is paid by the management in the form of an additional cost in order for the auditor to continue providing or even enhance the opinion on an unqualified opinion. A higher fee implies a greater probability of the management to maintain or obtain an unqualified opinion. Therefore, based on the above explanation, the following hypothesis is proposed:

H1: A positive abnormal audit fee increases the probability for a company to receive an unqualified opinion.

The auditor comes as an independent party to conduct assurance against the financial statements objectively and ascertain whether the financial statements prepared by the management are reliable, of good quality, and free from material misstatement.

Dopuch and Simunic (1982) and Watts and Zimmerman (1986) stated that the basic purpose of the audit process was to enhance the quality of the financial reporting process through the provision of audits with quality improvement. In other words, to improve the quality of the financial reporting process, the quality of audit should be improved. DeAngelo (1981) also maintained that audit quality was determined by two factors: (1) the auditor's ability to test accounts in financial statements and identify errors or anomalies through technical competence and (2) objectivity through independence. However, after an audit was conducted, it was not followed by a quality improvement by the management. This was because under agency theory, as explained in the development of the first hypothesis, there was a conflict of interest between the main party and the agent (management), in which the agent was authorized to run the company in order to improve the welfare of the main party. However, due to the power given in running the company's operations, the management is also trying to take advantage to maximize profits for their own interests, thereby ignoring their basic tasks (Jensen & Meckling, 1976).To maximize their own personal interests, it is necessary to manipulate the financial statements in order to trick the principal on the condition of the company so that the main party remains confident that what the management is doing is entirely in the interests of the main party.

The implementation of audit work by auditors with an objective to improve the quality of financial statements enables the auditor to discern any manipulative matters performed by the management and not in accordance with generally accepted accounting standards. This, of course, causes the management to worry that improved audit quality will reduce the ability of the management to maximize their personal interests.

With this in mind, it can be expected that there are actions taken by the management to manipulate the quality of the audit. These actions come at the cost of high audit fees with the aim that auditors can reduce the audit quality through a negotiation between the auditor and the auditee, therefore, a company financial statements can be seen as a joint effort between the management and the auditors. This shows that the resulting financial statements depend on the negotiation strategy used by the auditor (Antle & Nalebuff, 1991). However, negotiations to reduce audit quality undermine the auditor's independence and objectivity.

There are two significant factors that influence the negotiation to reduce audit quality which are client bargaining power and economic bonding with clients (Casterella et al., 2004). The bargaining power of clients and economic ties with clients are based on the notion that the

management has power over the auditors in terms of appointment and dismissal. In addition, the public accountant firm also has a business goal to maximize profit and thereby have a high dependency on the client. Therefore, the two factors can reduce audit quality and undermine the independence of auditors.

In a perfectly competitive market for audit services, audit fees reflect the cost of the auditor's business and risk mitigation (Choi et al., 2008, 2009; Simunic, 1980). Actual cost differences can reflect the specific business and client risk differences. When auditors receive a high audit fees, it is assumed that they have an incentive to allow clients to perform opportunistic earnings management. Economic theory shows that this relationship is valid as long as the net gain received from the audit engagement is greater than its cost (Kinney & Libby, 2002). The auditor allows such management action because the profit to be received by the auditor is greater than the cost to be paid. Francis and Simon (1987) and El-Gammal (2012) demonstrated that audit quality had a positive and significant impact on audit fees.

Choi et al. (2010) stated that lower fee audit due to the bargaining power of the client, while higher audit fees were related to economics bonding with clients. The existence of economic bonding is supported by the argument about "client-specific quasi-rent", where it creates incentives for auditors to compromise their independence (Chung & Kallapur, 2003; DeFond et al., 2002) and eventually decreases the audit quality (Dye, 1991).

Based on these studies, it can be considered that the quality of audits decreases along with an increase in audit fees. This is due to several factors such as the economic attachment between the auditor and the client and the greater benefit that the auditor receives beyond the cost, which may result in the auditor allowing opportunistic earnings management actions. Based on the above explanation, the following hypothesis is proposed.

H2: A positive abnormal audit fee negatively affects audit quality.

As mentioned before, abnormal audit fee are divided into two types, a positive and negative abnormal audit fees. Based on the previous hypothesis, the positive abnormal audit fees will decrease the audit quality because high audit fees create economic ties between the auditor and the client, thereby reducing auditor independence and objectivity. Choi et al. (2010) found that negative abnormal audit fees did not have a significant influence on audit quality. In this case, the auditor has several incentives to compromise the quality of the audit, but with a negligible or zero audit service fee, the auditor's need for such incentives is not met; therefore, it is unlikely that the auditor will compromise the quality of the audit. The auditor compromises the quality of the audit when the profit earned is greater than the cost to be borne, but for the abnormal negative audit fee, this is not the case, therefore the auditor will perform its duties in accordance with the initial objective of the audit engagement.

According to Choi et al. (2010), when the abnormal audit fee was at a negative value, there were three possibilities. The possibilities were diverse and did not excluded the possibility of compromise between the auditor and the client regarding audit quality. First, for clients with negative abnormal audit fees, auditors had little incentive to compromise audit quality by agreeing to client pressure on substandard reporting. This was because auditor profits by retaining unprofitable or slightly profitable clients were not adequate to cover the expected costs of substandard reporting (e.g., increased risk mitigation and loss of reputation). The observable result, therefore, there was no relationship between abnormal audit fee and the magnitude of discretionary accruals for clients with negative abnormal audit fees. Second, there was a possibility that the lower the negatively abnormal audit fee the less the incentive for the auditor to compromise their independence, thus improving audit quality (the smaller the value of the discretionary accruals). Under such conditions, it could be observed that there was a positive relationship between abnormal audit fee and audit quality for clients with negative abnormal audit fees. Third, when the auditor bears a low audit cost in anticipation of the high audit costs of a favorable agreement in the future (thus, audit fee are now negative in the current period), it made the auditor vulnerable to client pressure to approve biased financial reporting according to the client's wishes). The existence of a discounting condition in the early engagement period (low-balling effect) could disrupted the auditor's independence. Based on this, it could be observed that there was a significant negative relationship between abnormal audit fee and audit quality for clients with negative abnormal audit fees.

Based on the above three possibilities related to the effect of abnormal audit fee on audit quality, it cannot be ascertained directly whether the negative abnormal audit fees gives a positive, negative, or even has no significant effect to the client. Therefore, based on the above explanation, the third hypothesis is formulated:

H3: A negative abnormal audit fees affect audit quality.

MATERIALS AND METHODS

Research Model

The model used in this study to test Hypothesis 1 was based on the research model by Xie et al. (2010). This study used the same model with an addition of natural logarithmic variables of gross domestic product (LNGDP) of the five selected countries. This addition is aimed to distinguish interstate characteristics between the countries. Model 1 used to test Hypothesis 1 is as below:

$$LOGIT\,(OP\,t{=}i) = \beta i,0 + \beta 1\,ABNFEE_{it} + \beta 2\,SIZE_{it} + \beta 3\,\Delta ROA_{it} + \beta 4\,\Delta LEV_{it} + \beta 5\,GROWTH_{it} + \beta 6\,LOSS_{it} + \beta 7\,LOSSLAG_{it} + \beta 8\,AUDCHG_{it} + \beta 9 LASTOP_{it} + \beta 10\,Big4_{it} + \beta 11 LNGDP_{it} + \varepsilon_{it} \qquad (1)$$

where,

OP = Audit opinion for year t, where 1 for obtained unqualified opinion, 0 otherwise.

ABNFEE = Abnormal audit fee.

SIZE = Natural logarithm of asset at the end of tax year.

ΔROA = Change in ROA (ROA = net income divided by total assets).

ΔLEV = Change in leverage (leverage = total liabilities divided by total assets).

GROWTH = Growth of the company (shown by growth rate of total assets).

LOSS = 1 if net income for the year is negative, 0 otherwise.

LOSSLAG = 1 for negative $t-1$ net incomet-1, 0 for otherwise.

AUDCHG = 1 if auditor is different from previous auditor, 0 otherwise.

LASTOP = Opinion in previous year; 1 for unqualified opinion, 0 otherwise.

BIG4 = 1 for companies audited by Big Four, 0 otherwise.

LNGDP = Natural logarithm of total gross domestic product at the end of the year for each country.

The model used to test Hypotheses 2 and 3 is based on the research model of Choi et al. (2010). This study used the same model with an addition of natural logarithmic variables of gross domestic product (LNGDP) of the five selected countries. This addition is aimed to distinguish interstate characteristics between the countries. Model 2 used to test Hypotheses 2 and 3 is as follows:

$$ABS\_DAC_{it} = \beta0 + \beta1\ ABNFEE_{it} + \beta2\ SIZE_{it} + \beta3\ BIG4_{it} + \beta4\ BTM_{it} + \beta5\ CHGSALE_{it} + \beta6\ LOSS_{it} + \beta7\ LEV_{it} + \beta8\ AUDCHG_{it} + \beta9\ ROA_{it} + \beta10\ LNGDP_{it} + e_{it} \qquad (2)$$

where,

ABS_DAC = Absolute discretionary accrual

ABNFEE = Abnormal audit fee

SIZE = Natural logarithm of total assets

BIG4 = 1 for companies audited by Big Four, 0 otherwise

BTM = Book-to-market ratio

CHGSALE = Change in previous year's sales divided by total assets

LOSS = 1 if net income in the current year is negative, 0 otherwise

LEV = Total liabilities divided by total assets

AUDCHG = 1 for the first year of audit contract with the company, 0 otherwise

ROA = Return on assets for year $t-1$

LNGDP = Natural logarithm of gross domestic product at the end of the year for each country

To measure ABNFEE using Choi et al.'s (2010) model, some variables (PENSION, REPORT_LAG, RESTAT, NBS, and NGS) are eliminated as they are difficult to obtain. The abnormal audit fee model (Model 3) is as follows:

$$AFEE_{it} = \beta0 + \beta1 LNTA_{it} + \beta2\ INVREC_{it} + \beta3\ EMPLOY_{it} + \beta4\ LOSSLAG_{it} + \beta5\ LEV_{it} + \beta6\ ROA_{it} + \beta7\ LIQUID_{it} + \beta8$$

$BIG4_{it} + β9\ SHORT\_TEN_{it} + β10\ BTM_{it}$
$+ β11\ CHGSALE_{it} + ε_{it}$ \hfill (3)

where,

AFEE = Natural logarithm of actual audit fee

LNTA = Natural logarithm of total assets

INVREC = Inventory and receivables divided by assets

EMPLOY = Square root of total employees

LOSSLAG = 1 for negative $t − 1$ net income, 0 for otherwise

LEV = Leverage (total liabilities divided by total assets)

ROA = Return on assets (net income divided by total assets)

LIQUID = Current assets divided by current liabilities

BIG4 = 1 for companies audited by Big Four, 0 otherwise

SHORT_TEN = 1 for audit in first or second round of audit, 0 othewise

BTM = Book-to-market ratio

CHGSALE = Change in last year's sales divided by total assets in the current year

$ε_{it}$ = Error coefficient of company i in year t that later will be used as an estimated value of **abnormal audit fee**

ABS_DAC was used to measure audit quality as it could capture the quality of accounting information. The DA values themselves have been used in many studies, such as Healy (1985), DeAngelo (1986), Dechow and Sloan (1991), Jones (1991),

Dechow et al. (1995) and Fitriany et al. (2016). This research used the absolute discretionary accrual model by Kothari et al. (2005) as formulated follows.

$$\frac{TAC_{it}}{TA_{it-1}} = β0 + β1\left(\frac{1}{TA_{it-1}}\right)$$

$$+ β2\left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TA_{it-1}}\right) + β3\left(\frac{PPE_{it}}{TA_{it-1}}\right)$$

$$+ β4 ROA_{it-1} + ε_{it}$$

where,

TACit = Total accruals of company i in period t

NI = Net income

CFO = Cash flow from operating activities

TAit-1 = Total assets at the end of year $t − 1$

ΔREVit = Change in net sales from year $t − 1$ to t

ΔARit = Change in total net receivables from year $t − 1$ to t

PPEit = Total gross property, plant, and equipment of company i in year t

ROAit = Return on assets for year $t – 1$

$ε_{it}$ = Error coefficient of company i in year t that later will be used as an estimated value of discretionary accrual

RESULTS AND DISCUSSIONS

Sample Selection

Five countries within the ASEAN region which are Indonesia, Malaysia, Philippines, Singapore, and Thailand were selected on the basis of the companies listed on the

stock exchange in each country. These countries were chosen because they have many companies that have been listed on their respective stock exchanges. Sample selection was conducted by using purposive judgment sampling where it must be a non-financial companies, posses an information about audit fees and a complete data for all variables. Financial company were excluded from the sample as the financial report formats were different. Based on the data from Thomson Reuters Eikon, there were 3,100 companies listed as at 2014 with 521 companies from Indonesia, 919 companies from Malaysia, 733 companies from Singapore, 677 companies from Thailand and 250 companies from Philippines. The further analysis focused on data for year 2010. From the 3,100 selected companies, 2,686 companies were excluded as they were from financial industry, possed no information on audit fees and no complete data for all research variables. From the remaining 1,292 samples, the number for abnormal audit fees was calculated by using Choi's (2010) model. The residual value (error) showed the number of abnormal

audit fees for each company. From the 1,292 samples, 549 companies had a positive abnormal audit fees and 743 companies had a negative abnormal audit fees. The positive value means the company paid an audit fee above the normal rate to the auditor whilst the negative value means the company, and vice versa. The details for the sample selection of Model 1 are presented in Table 1.

The total number of sample for Model 2 was 1,145 companies which was lesser than Model 1 because some data were deleted as it became an outlier on absolute discretionary accrual (ABSDAC) variable. The ABSDAC was dependent variable for Model 2. The details for the sample selection of Model 2 are presented in Table 2.

Descriptive Statistics

Model 1. An analysis of the descriptive statistics was performed to understand the characteristics and distribution of the data. The result can also show the fairness of the data used. The analysis was performed by observing the mean, median, standard deviation, and minimum/maximum values.

Table 1
Sample selection for Model 1

Criteria	2010	2011	2012	2013	2014
Company listed in each year	3,100	3,100	3,100	3,100	3,100
- Financial Industry	(648)	(648)	(648)	(648)	(648)
- No information about audit fee	(1,519)	(1,306)	(1,649)	(1,797)	(1,795)
- Incomplete data	(519)	(707)	(595)	(529)	(552)
Sample	414	439	208	126	105
Total observation			1,292		
Sample with positive abnormal audit fees			549		
Sample with negative abnormal audit fees			743		

Table 2
Sample selection for Model 2

Criteria	2010	2011	2012	2013	2014
Company listed in each year	3,100	3,100	3,100	3,100	3,100
- Financial Industry	(648)	(648)	(648)	(648)	(648)
- No information about audit fee	(1,519)	(1,306)	(1,649)	(1,797)	(1,795)
- Incomplete data	(569)	(771)	(615)	(541)	(553)
Sample	364	375	188	114	104
Total observation			1,145		
Sample with positive abnormal audit fees			487		
Sample with negative abnormal audit fees			658		

There were some descriptive statistics used to describe the research data. This was related to the presence of the two models used to test the proposed hypotheses in this study. Model 1 was used to test the effect of audit fees to audit opinion and model 2 was used to test the effect of positive and negative audit fees to audit quality. Table 3 below summarized the descriptive statistical obtained.

Table 3 presented the descriptive statistical analysis for Model 1 (Hypothesis 1). OP variables were dependent variables with binary form and indicated by values 1 and 0. OP variables were opinions received by firms in period t. The highest score was 1, which describes a company with an unqualified opinion; opinions other than unqualified opinion were shown with a value of 0.

Table 3
Descriptive statistic of Model 1

Variable	Average	Std. Deviation	Min	Max
OP (Opinion Audit)	0.6867	0.4643	0	1
ABNFEE Positive	362,548.20	613,041.90	1,189.80	3,263,669
SIZE (USD)	1,584,421,883.78	5,195,234,412.72	949,537.86	53,328,542,009.01
ΔROA	-0.0018	0.1115	-0.5684	0.5604
ΔLEV	-0.0029	0.1002	-0.5077	0.5290
GROWTH	0.0875	0.1721	-0.5134	0.6815
LNGDP (Million USD)	13,728.57	17,560.48	2,145.24	56,284.33
DUMMY VAR	**DUMMY=1**	**DUMMY=0**		
LOSS	14.03%	85.97%		
LOSSLAG	10.56%	89.44%		
AUDCHG	22.77 %	76.23%		
LASTOP	82.51%	17.49%		
BIG4	54.00%	46.00%		
Observations	549			

Based on the descriptive statistics in Table 3, it was seen that the ABNFEE was the independent variable. This variable was obtained after conducting a regression on the audit fee model. ABNFEE was the residual value of the audit fee model and was used as a proxy for an abnormal audit fee. The average abnormal audit fees was USDS 362,548, the maximum value was USD 3,263,669 and the minimum value was USD 1,189.80. The data used to test Hypothesis 1 was a positive abnormal audit fee only because hypothesis 1 predicted companies that paid audit fees above normal (positive abnormal audit fee) have a high probability of getting an unqualified opinion.

The operationalization of the SIZE variable was the natural logarithm of the total assets of the firm in the corresponding period. However, in the table of descriptive statistics above, total assets represented the dollar value of assets and not the value of natural logarithms. The unit of currency used for all data in this study was USD. The average total assets was USD 1,584,421,883, with a minimum value of USD 949,537 and a maximum value of USD 53,328,542,009.

ROA was used as a proxy to assess performance of company. Higher ROA values indicated better corporate performance. Negative ROA values resulted from a company reporting a net loss in year t. ROA described the company's ability to turn their assets into income, thus, the higher the ROA the more effective the company. ROA variables in this study had a vary characteristics because the standard deviation was higher than the average value.

The LEV variable was a change in the leverage of the firm. The average change in corporate leverage was increased by 0.29%, with a minimum value of −5.07% and a maximum value of 5.2%. GROWTH samples have an average of 0.0875, with a minimum value of −0.51 and a maximum of 0.68.

LOSS and LAGLOSS described the condition of the company's financial statements, scored 0 if the company had a positive net income and 1 if the company had a negative net income. These variables had an average of 0.14 and 0.10, respectively. Therefore, only 14% of the sample experienced losses in year t and 10% in year $t − 1$. AUDCHG indicated whether the company had changed its auditor in the last two years. The average indicated that 22% of firms had changed the auditors. The BIG4 dummy variable indicated the condition of the auditing firm in relation to the Big Four. The average indicated that 54% of firms used the Big Four.

Model 2. The descriptive statistics presented in Tables 4 and 5 were the result of regresion for abnormal values of positive and negative audit fees using Model 2. The presented values followed the outliers test and then winsorized to overcome the issue of data including outliers (above the upper limit or below the lower limit).

Table 4

Statistic descriptive of Model 2 – Positive ABNFEE

Variables	Mean	Std. Dev.	Minimum	Maximum
ABS_DAC	0.0725	0.0719	0.0001	0.3101
ABNFEE positive (USD)	391,832.38	678,166.73	1,189.80	3,464,234
SIZE (USD)	1,784,417,074	5,488,962,508	982,964	53,328,542,009
BTM	0.85	0.5976	-0.136	3.3417
CHGSALE	0.081	0.2476	-0.7821	0.9893
LEVERAGE	0.3995	0.2254	0.005	1.0302
ROAt-1	0.0334	0.1551	-0.767	0.8266
GDP (USD)	14,326.67	18,144.54	5,145.24	56,284.33
DUMMY VAR	**DUMMY=1**	**DUMMY=0**		
BIG4	56.00%	44.00%		
LOSS	19.00%	81.00%		
AUDCHG	24.00%	76.00%		
Observations	487			

Table 5

Statistic descriptive of Model 2 – Negative ABNFEE

Variables	Mean	Std. Dev.	Minimum	Maximum
ABS_ DAC	0.0733	0.0704	0.0001	0.3101
ABNFEE negative (USD)	-378,248.42	403608.82	-3,365,507	-16.72
SIZE (USD)	1,860,689,881	4,168,519,808	8,130,108	44.450.479.402
BTM	0.7652	0.5596	-1.781	2.8246
CHGSALE	0.122	0.2428	-0.7821	0.9893
LEVERAGE	0.51	0.2031	0.0038	1.2048
ROAt-1	0.0467	0.1286	-0.767	0.7674
GDP (USD)	14,704.15	18,050.84	2,145.24	56,284.33
DUMMY VAR	**DUMMY=1**	**DUMMY=0**		
BIG4	54.00%	46.00%		
LOSS	16.00%	84.00%		
AUDCHG	24.00%	76.00%		
Observations	658			

Abnormal Audit Fee and Audit Opinion

Table 6 showed *P* value of 0.0000, meaning the research model could be used to predict results. The pseudo R-squared of 0.1795 indicated that the independent variables could explained 17.95% of the dependent variable and the rest of 82.05% was explained by other factors which were not yet included in the model. The coefficient of the positive ABNFEE variable was insignificant, meaning an above-normal audit fee did not cause the company to have a higher

Table 6
Regression result of Model 1

Variables	Prediction	Coefficient		Prob.
ABNFEE positive	+	0.0000		0.176
SIZE	-	0.1696	**	0.013
ΔROA	+	-1.3506		0.113
ΔLEV	-	-3.4712	***	0.003
LOSS	-	0.3070		0.202
GROWTH	+	2.5192	***	0.000
LOSSLAG	-	0.1797		0.134
AUDCHG	+	0.0105		0.487
LASTOP	-	1.5476	***	0.000
BIG4	+	-0.0101		0.484
LNGDP	+	0.3293	***	0.000
Pseudo R^2	0.1795			
Prob>Chi^2	0.000			
Observation	549			

Dependent variable: Audit opinion

probability of obtaining an unqualified audit opinion. This result was inconsistent with the prediction of Hypothesis 1, which stated that when the auditor received a positive abnormal audit fee it would incentivized negotiations between the auditor and the client through opinion shopping. This result was inconsistent with the findings of Xie et al. (2010) and Fang and Hong (2008) in China which found that abnormal audit fees related to audit opinion when the level of quality of accounting information was low. The insignificance of the results in this study probably because it did not distinguish a qualified and non-qualified financial reports.

Positive Abnormal Audit Fee and Audit Quality

Table 7 showed a *P* value of 0.0000, meaning the research model could be used to predict results. The pseudo R-squared of 0.0755

indicated that the independent variables could explained 7.55% of the dependent variable and the rest was explained by other factors which were not yet included in the model. The coefficient of the positive ABNFEE variable was positively significant. This means that the greater the value of positive ABNFEE the greater the value of ABS_DAC. Because ABS_DAC was inversely proportional to audit quality, the greater the value of positive ABNFEE the lower the audit quality. Impaired audit quality implies any profit management action performed by the client.

These results showed that Hypothesis 2 was supported. When the auditor received a high audit fee, the auditor tend to tolerate the earnings management actions performed by the client such that it degraded the quality of the audit. The provision of high abnormal audit fees enabled the creation of

Table 7
Regression result of Model 2

Variables	Pred	Coefficient		Prob.
ABNFEE positive	+	0.0000	***	0.000
SIZE	-	-0.0047	**	0.016
BIG4	-	-0.0010		0.452
BTM	-	-0.0189	***	0.000
CHGSALE	-	-0.0177		0.115
LOSS	+	0.0033		0.365
LEV	+	0.0413	***	0.010
AUDCHG	+	0.0051		0.299
ROA	-	-0.0217		0.238
LNGDP	-	-0.0067	**	0.045
R^2	0.0755			
Prob>F	0.0000			
Observation	487			

Dependent variable: Audit quality proxied by ABS_DAC

economic ties between auditors and clients that could disrupted auditor independence and objectivity. The results of this study were in accordance with the results of Krauß et al. (2015) who found that abnormal audit fee negatively affected audit quality, which implies that a premium abnormal audit fee was a significant indicator of compromised auditor independence.

Negative Abnormal Audit Fees and Audit Quality

Based on Table 8, *P* value of 0.0000 means the research model could be used to predict results and R-squared value of 10.78%. This means that the independent variables used had been able to explain 10.78% of the dependent variable (ABS_DAC) while the rest (89.22%) was explained through other factors outside the variables that had been used in this research. Negative ABNFEE proved to have a significant

positive effect on ABS_DAC or a negative effect on audit quality (because ABS_DAC inversely related to audit quality). It means, audit fees improved the action of earnings management and decrease the quality of audit. Based on the development of the third hypothesis, this was because the auditor bore a low audit cost in anticipation of high audit costs of a favorable deal in the future (so audit fee are now negative in the current period). This made the auditor vulnerable to client pressure to approve biased financial reporting (as the client wishes). This result was in accordance with Choi et al. (2010) who demonstrated a negative relationship between the negative abnormal audit fees and audit quality. Blankley et al. (2012) argued that audit quality might be disrupted by discounted fees because auditors would adjust their audit effort and audit procedures according to their wages, e.g., lowering audit hours or assigning inexperienced

Table 8
Regression result of Model 3

Variables	Pred	Coefficient		Prob.
ABNFEE negative	+/-	0.0000	*	0.072
LNTA	-	-0.0047	***	0.004
BIG4	-	-0.0010		0.205
BTM	-	-0.0189	***	0.000
CHGSALE	-	-0.0177		0.460
LOSS	+	0.0033		0.251
LEV	+	0.0413	***	0.000
AUDCHG	+	0.0051	***	0.004
ROA	-	-0.0217		0.365
LNGDP	-	-0.0067		0.426
R^2	0.1078			
Prob>F	0.0000			
Observation	658			

Dependent variable: Audit quality proxied by ABS_DAC

auditors (Gregory & Collier, 1996). In addition, based on research by Hoitash et al. (2007) and Hribar et al. (2014), abnormal audit fee negatively affect audit quality.

CONCLUSIONS

The results of this study are in accordance with agency theory, where conflicts of interest not only occur between the principal and the management but also between the management and the auditor. The existence of economic ties between auditors and clients leads to a decrease in auditor independence and objectivity. The management that wants to maximize profits will try to influence the auditor's judgment, for example, by providing an incentive in the form of higher audit fees to the auditor. With a higher audit fees, the auditor tends to allow the earnings management practices by his clients. In addition, the management wish to obtain an unqualified audit opinion for the sake of the company's business continuity. However, in this study, there is no significant effect between abnormal audit fees and the probability of obtaining a good opinion. This study finds that a positive abnormal audit fees can reduce audit quality because they interfere with the auditor's independence and objectivity. Negative abnormal audit fees can also reduce audit quality because there is a possibility that auditor will reduce their audit efforts and procedures according to the fees received.

This study finds that many companies have not disclosed the amount of audit fees in their financial statements. Therefore the regulator needs to encourage the disclosure of audit fees so that financial statement users can estimate whether the audit fee is still within a normal scale. If the audit fee is abnormal, it may effect the audit quality. Regulators need to make a policies to set

a minimum standard for audit fee, such as rate per hour for audit partners, supervisors, managers and auditors.

Limitations

There are some limitations in this study. The model used to estimate the value of discretionary accruals in this study, Kothari et al. (2005) utilized ROA to detect earnings management practices. In this study, no other existing models such as the Kasznik's (1999) model and Jones's (1991) model are used for comparison. This study used audit fee data, thus, many companies in the sample were eliminated for the lack of data on abnormal audit fees. Future research is expected to look more deeply at the financial statements of each company to obtain a comprehensive data. In this study, the only variables used as controls to view the intercountry characteristics is the gross domestic product (GDP) per capita during the sample selection period. Further research is expected to consider other characteristics such as applicable laws, geographical conditions, corporate governance, related government regulations, and others. This study is subject to limitations in data collection also because of the considerable sample scope of the five ASEAN countries, thus, data can only be obtained through Eikon and Datastream which contain many unknown values for each variable. It is suggested to discover at other sources by looking directly at the financial statements of each company and other valid sources.

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Corporate Governance Practices of Contributory Pension Scheme Operators in Nigeria

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ABSTRACT

Unlike the previous defined benefit pension scheme in Nigeria, the current contributory pension scheme (CPS) is characterised by separation of ownership and management of pension fund. In view of agency problem this portends, the need to empirically examine corporate governance (CG) practices of operators is of importance for CPS survival. Thus, this study examines corporate governance practices of operators of CPS in management and custody of the CPS fund. Survey data from 212 managers and assistant managers of CPS operators were analysed using one-sample t-test and mixed ANOVA. The results showed significant practices of CG mechanisms in the form of board independence, director independence, board disclosure and audit committee effectiveness. Significant difference was found in practice of above CG mechanisms. However, there was no significant difference in GC practices among various types of CPS operators. Similarly, the interaction of CG mechanisms with CPS operator type was also found to be insignificant. Based on the results, good corporate governance practices in the management of CPS fund is evident. However, it is recommended that there is an urgent need to intensify regulatory role of the part of CPS regulator- National Pension Commission to ensure that operators are not lacking behind in practices of various mechanisms of CG.

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INTRODUCTION

The study examines corporate governance practices among the operators (pension fund administrators [PFAs] and pension fund custodians [PFCs]) of contributory pension scheme (CPS) in Nigeria. It is established that good corporate governance practice facilitates stakeholders' trust in stewardship of the operators of CPS to effectively manage the pension fund (Ekpe, 2016). Unlike the previous defined benefit pension scheme, the current CPS in Nigeria is characterised by separation of ownership and management of pension fund which might lead to agency problem. In line with standard global practice, National Pension Commission [PenCom] as the regulator of Nigerian CPS issued a code of corporate governance (CG) in 2008 as part of its regulatory responsibility. Similar to other industry-specific codes of CG in Nigeria, PenCom's code of corporate governance aims at protecting the interest of major stakeholders in the pension industry especially CPS participants (contributors and retirees). This is line with corporate governance aim of proper management of resources under the stewardship of managers to ensure that such resources are managed in the best interests of their owners.

CG has widely gained importance in management of multitude of enterprises where the ownership is separated from management. Historically, the advocacy role of large pension funds such as California Public Employees' Retirement System [CalPERS] and California State Teachers Retirement System [CalSTRS] was instrumental to the emergence of CG (Becht et al., 2003; Cadbury Committee, 1992; Romano, 1993). The advocacy drive evolved due to managerial abuses and board tendency to act in their own interests rather that of the plan participants who own and bear associated risks of pension fund failure with the aim of eliminating management abuses (Cocco & Volpin, 2007; Kowalewski, 2012). Although, literature has emphasized the role of CG in boosting stakeholders' trust in Nigerian CPS industry (Ekpe, 2016; Okoye & Eze, 2013). Yet, no empirical study has so far examined the CG practices among the operator of Nigerian CPS industry in Nigeria. Thus, the study fills this gap.

Despite the long history of CG in Organization for Economic Co-operation and Development (OECD), literature has documented weak external and internal governance mechanisms among pension plans (Kowalewski, 2012). Available empirical findings in the banking sector indicate that the situation is no different among Nigeria banks. This may have a spill over effect on the Nigerian CPS industry. In relation to Nigerian CPS industry, Ekpe (2016) had established that managers of emerging CPS industry had high tendency to overlap their stewardship with other business interests. Other studies (Akinkoye & Olasanmi, 2014; Nwannebuike & Ike,

2014; Okike, 2007; Proshare, 2014) also noted that weak corporate governance practices could prevail in CPS industry as documented in other industries such as banking. These assertions to date are yet to be tested empirically in relation to CPS industry. This study gives further insight into CG practices of various operators (PFAs and PFCs) of the CPS which are treated as heterogeneous groups due to their distinct function as well as ownership. Thus, we examine the implementation of four mechanisms of CG and further test for differences among operators charged with different functions in the management of CPS as well.

Research evidence has documented mixed and mostly weak evidence on level of corporate governance practices in Nigeria. More so, the evolving CG empirical studies were drawn largely from the banking sector with mixed findings (Abiola, 2012; Aina, 2013; Bhagat & Bolton, 2013; Idam, 2015; Ogbechie & Koufopolous, 2010; Turley & Zaman, 2007) across countries with no empirical study yet on the emerging CPS industry in Nigeria (Okoye & Eze, 2013). Although Ekpe (2016) recently examined how corporate governance might affect stakeholders' trust in CPS industry, the study however fell short to indicate the level of CG practices in the industry. In view of this gap with respect to CG practices in the pension industry, this study was conducted to provide empirical insight into CG practices among the operators of CPS industry.

Examining the corporate governance of Nigerian CPS is significant for some rationales. First, CPS has become a vital and indispensable part of the Nigerian financial system within its 13 years of coming into effect. As a such, the need to strengthen the corporate governance practices of CPS operators to be at be at par with other players in Nigerian financial system is timely. Second, CPS fund has proved to be easier and cheaper domestic source of providing funding for corporate entities and various tiers of government in Nigeria. Thus, CPS has provided the needed finance to curtail fiscal sustainability challenge that could have unfolded due to protracted challenge of declining oil revenue- which has been the main source of revenue to Nigeria since independence. Third, given that CG addresses conflicting interests of ownership and management of pension fund, examining the CG practices of CPS operators can provide guides to policymakers and regulators to prevent weak implementation of CG that might spell doom for the future income payment of post-retirements benefits to employees. The remaining part of the study is organised as follows. The next section focuses on related literature on CG generally and its mechanisms of board independence, director independence, board disclosure and audit committee effectiveness specifically as well as hypotheses development. The materials and method were presented in the section that follows. Results and discussion of analyses of data and conclusion of the study follow in that order.

LITERATURE

Corporate Governance

According to Cadbury Committee (1992), "Corporate governance is the system by which companies are directed and controlled". Corporate governance (CG) involved mechanisms put in place to monitor the actions, policies, and decision of agents of corporation to align the conflicting interests of agent (management) and that of other relevant stakeholders in the corporation (OECD, 2004). Though, good CG is pivotal to the activities of pension funds while acting in their fiduciary capacity (OECD, 2004), empirical studies have reported mixed findings on the impact of CG. The mixed results could be due to difference in governance structures and regulatory framework among countries with attendant tendency of management to consider CG as simply a technical matter of low-priority that can be evaded when its implementation is not convenient as well as use of different mechanisms of CG (Lehn et al., 2007; Rahman & Bremer, 2016). While several mechanisms of corporate governance have been identified, this study focuses on four mechanisms of CG reviewed below:

Board Independence

Board independence has remained a vital mechanism of corporate governance mechanism, yet what constitutes the independence of board has remained mixed (Almania, 2017; Beltratti & Stulz, 2009; Erkens et al., 2012; Malik & Makhdoom, 2016). In an attempt to clarify board

independence, Lefort and Urzúa (2008) identified two bases of independence of board members to include presence of outside directors and professional directors. Professional directors are mostly experts appointed by institutional investors or controlling shareholder while outside directors are elected by minority shareholders. As a mechanism of CG, board independence addresses agency problem from separation of owners of the resources from managers who might operate the firm in their own interest (Romano, 1993). Thus, the criteria for independence of board is associated with whether board member are free from undue influence of the management or not to discharge their responsibilities.

In developed countries with long history of CG, much attention has been focused on board independence and its committee. As such, as high as 80% of boards listed companies are considered as independent (Gunes & Atilgan, 2016; Weir & Laing, 2001). Despite the high rate of board independence in these countries, the effects of board independence remained mixed. For instance, Erkens et al. (2012) documented negative effect of board independence on stock returns of 296 firms across 30 countries during financial crisis of 2007-2008. In consistent with Erkens et al., Beltratti and Stulz (2009) found similar evidence of negative relation between board independence and performance of banks in selected European countries. Almania (2017) examined the impact of board independence on leverage of 122

non-financial Saudi Arabian firms over 2012-2015. The results show a significant but negative impact of independent board on firms' leverage proxied by proportion of total debt to total assets.

The negative impact of board independence documented by Almania (2017) and Erken et al. (2012) is not consistent with study of Fortune Global 500 firms over 2005-2012 across 18 countries by Malik and Makhdoom (2016). Based on data of 33 US firms and 67 non-US firms, it was reported that board independence enhanced transparent decision making. Similar evidence was found in a meta-analysis of 27 studies conducted by Garcia-Meca and Sanchez-Ballesta (2010). The study reported that board independence (proxied as the proportion of independent directors on firms' board) positively related to voluntary disclosure. Whereas, Vafeas (2003) found no evidence to confirm that outside directors significantly affect CG practices of firms, Bhagat and Bolton (2013) examined the impact of board independence on firm performance in two scenarios: before and after introduction of Sarbanes Oxley Act, 2002. The results show two conflicting evidences of significant negative and positive relationship between board independence and firm performance before and after the Act respectively. These conflicting results calls for examining the practices of corporate governance mechanisms in an emerging industry like Nigerian CPS in view of different regulatory environment and governance structure across countries.

Director Independence

Director independence is a position of being devoid of conflict of interest by a director (Van den Berghe & Baelden, 2005). Extant literature conceptualized director independence from multiple perspectives. Director independence has been established on the basis of nonemployee status of the directors in the firm as well as absence of financial, family, donor and social relationships (Johnson, 2008). Empirical findings on director independence has largely stand mixed across industries and countries. For instance, Kang et al. (2007) found that in Australia, 83% of sampled companies duly appointed adequate number of independent directors in their board and board committees as required by Australian corporate governance regulations. Wan (2003) also examined the influence of independent director on board to reduce executive pay and boost firm performance. The results based on data of US firms show that the presence of independent director neither reduce executive pay nor improve firm performance. Further analysis of the sampled firms establish that firm-industry specific factors largely account for difference in executive pay. Whereas, studies have also reported significant positive relationship between proportion of independent directors and debt ratio (Abor & Biekpe, 2007; Jensen, 1986).

On the contrary, Agrawal and Knoeber (1996) documented negative relationship between proportion of independent director on board and performance of firms. In contrast, Petra (2005) stated that outside

independent directors did appear to strengthen corporate boards. Besides, studies and anecdotal report have recognised presence of outside directors on board as a way of attaining director independence. Vafeas (2003) noted that the presence of outside director was instrumental towards proper monitoring of management. Such monitoring of management actions as noted by Petra (2005), ensures that managers make decision in the best interest of stakeholders- to whom the resources under their stewardship belong. Thus, the presence of independent director is a mechanism that minimise agency conflicts between owners and managers (Fama & Jensen, 1983). The effect of director-chief executive officer (CEO) tie and compensation on director independence compromise was also examined by Westphal and Zajac (1995). It was found that when CEO appointed a director, there was a probable risk that such director might support the CEO rather than to discharge their duty of monitoring the CEO. The implication of their finding is that under such scenario the independence of director may be jeopardized.

However, the option of compensation of the independent director may minimize the risk based on evidence provided by Podder et al. (2013). They examined the impacts of director compensation options on their independence using 2006-2010 data of 104 insurance companies in the US and found that equity-based compensation aligned the interests of independent directors and stakeholders they represented. On the contrary, Deutsch et al. (2011) noted

that compensating independent director using equity option negatively affected the risk taking in board decision–making. Notwithstanding failure to locate study that relate impact of cash compensation on director independence, empirical evidence of independent director cash compensation on earning management presented by Ye (2014) showed positive relationship based on 2002-2008 data of Chinese listed firms. The finding indicates that higher cash compensation may compromises the independence of director to effectively discharge their oversight on financial reporting.

Board Disclosure

Corporate board disclosure has become a subject of growing concern (Garcia-Meca & Sanchez- Ballesta, 2010). Broadly speaking, emerging markets tend to be characterized by high level of information asymmetry (Uyar & Kilic, 2012). Such information asymmetry has led to distrust in corporate management (Patel & Dallas, 2002). Therefore, Sihombing and Pangaribuan (2017) proposed that timely information dissemination to various stakeholders significantly reduced such information asymmetry. Also, Engel et al. (2010) stated that presence of reputable directors minimized such information asymmetry between firms and investors as the reputable status offered them some discretion on information disclosure (Turley & Zaman, 2007). Thus, the need for adequate disclosure cannot be under-estimated in general and on Nigerian CPS industry in

particular towards minimizing the effect of such information asymmetry.

However, poor disclosure of executive and non-executive information sensitive to market dealings to facilitates stakeholders' confidence, CEO compensation, directors' remuneration, and transactions with related-parties were documented in Nigeria (Okike, 2007). This may have accounted for investors' reluctance to channel their resources to environment where corporate disclosure is low (Ejuvbekpokpo & Esuike, 2013). Therefore, poor level of disclosure among firms no doubt constitutes a serious threat to the growth of developing countries due to loss of confidence by investors to inject the needed capital for investment (Okpara & Kabongo, 2010). Aina (2013) posited that disclosure of remuneration of directors and senior executives of Nigerian firms eliminated controversy and unsustainable pay. On the contrary, Sanda et al. (2005) stated that disclosure of reliable financial and non-financial information enhanced investors' participation in stock of a firm. Adegbite (2012) also noted that disclosure improved participation of investor in a firm that provided information on ownership structure of the firm and matters relating to members of board and key employees.

Audit Committee Effectiveness

As a board sub-committee, audit committee (AC) is a vital mechanism of CG that its effectiveness has continued to be a global concern. To arrest the concern, several reports and professional publications have focused on AC effectiveness among CG mechanisms (Cadbury Committee, 1992; Deloitte, 2015; Hong Kong Society of Accountants [HKSA], 2002; PricewaterhouseCoopers, 2011). Traditionally, AC is established to facilitate a continuous communication between the board and external auditors through regular meetings. Such meetings are held to review internal accounting controls system and audit process to improve financial statements credibility (Rahman & Ali, 2006). Besides, audit committee assists investors to obtain relevant information for decision making based on external audit (Okike, 2007). While justifying the need for audit committee in a meta-analysed study, DeZoort et al. (2002) affirmed that AC was vital to protect stakeholders' interests. In a comparative study, Gunes and Atilgan (2016) examined the impact of AC effectiveness (ACE) on performance of Turkish and UK banks during 2006–2010. ANOVA results of data obtained from 10 banks in each of the country showed significant difference of effect of AC effectiveness on performance (proxied by return on asset and return on equity) among Turkish banks. Contrarily there was no significant differential effect found among UK banks. The differential effect was attributed to varying independence level of AC members in UK (100%) and Turkey (19%) due to relatively long history of corporate governance in UK compared to Turkey.

Another paradigm of literature has focused on the impact of audit committee members' skills on the performance of

their function. With the aim of comparing the effect of AC effectiveness (proxied by independence and expertise) on restatement of accounts, Carcello et al. (2011) used matched data of 2000-2001 financial statements of equal sample (104) for restating firms and non-restating ones. The results of conditional logistic regression showed that the higher the independence of the AC, the lower the tendency of restatement of financial statements. They also found a significant negative relationship between AC expertise and account restatement with no significant effect of CEO involvement in selection of AC members on the relationship. McDaniel et al. (2002) corroborated that inclusion of financial experts as members of audit committee improved the focus on financial reporting quality far deeper than financial literates due to differences in judgement of financial experts and financial literates. The study established that the differences might lead to different basis of opinion on financial reporting issues

In a study of Thai listed firms, Kamolsakulchai (2015) examined effect of audit committee effectiveness (proxied by members' expertise) on financial reporting quality (exponential of discretional accrual) of three industries (Agro & food, Technology and industrial) over 2008-2012. The results showed positive significant effects of AC expertise on discretional accrual with significant difference across three industries. Literature has further investigated how interaction with other control mechanisms affect audit committee

effectiveness. In a case study conducted by Turley and Zaman (2007), interview analyses showed that interactions of audit committee with internal controls (internal auditor and senior management) and external controls (external auditor) had effect on the potential achievement of audit committee effectiveness. Based on the review of related studies on the four mechanisms of CG, the following hypotheses are proposed:

H1: there is significant board independence practices by operators of CPS in Nigeria

H2: there is significant director independence practices by operators of CPS in Nigeria

H3: there is significant board disclosure practices by operators of CPS in Nigeria.

H4: there is significant audit committee effectiveness practices by operators of CPS in Nigeria.

Ownership and Corporate Governance

According to Petra (2005), through ownership shareholders take control of firms. Consequently, there is need for CG regulations to take cognisance of corporate ownership (Adegbite, 2012). By design, there are two categories of CPS operators: pension fund administrators (PFAs) and pension fund custodians (PFCs). While, PFAs are charged with management of the CPS fund, the PFCs are the custodians of the fund. PFAs are in two sub-categories of open PFAs and closed PFAs. Open PFAs manage the pension fund of employees engaged by unrelated employers while closed PFAs are

established by employers to manage the pension fund of their employees (Pension Reform Act, 2004). Therefore, closed PFAs represent a kind of related-parties in terms of ownership on the basis that the employers that established the PFAs may have influence on their activities unlike open PFAs where such ownership relationship does not exist. The PFCs also have unique ownership type as well under the Nigerian CPS. As at 2017, all the four PFCs licensed to operate as custodians of CPS are fully owned by institutional investors (banks).

Literature has focused attention on effect of various ownership type on CG practises. For instance, Balagobei and Velnampy (2017) asserted that there was vital effect of ownership structure on corporate governance mechanisms among beverage and tobacco firms in Sri Lanka. Also, corporate ownership of Bangladeshi firms was found to have negative relationship on board independence largely due to family concentrated ownership (Hasan et al., 2016). They further reported significance difference among various ownership types (family, institutional and public) on board independence. Whereas employer managed pension funds have demonstrated poor corporate governance practice (Kowalewski, 2012), institutional owners have shown high preferences for CG through their intervention behind the scene (Bushee et al., 2014; McCahery et al., 2016). The evidences presented above provide arguments that ownership of the CPS operators may have impacts on their level of corporate practices. Therefore, this study hypothesized as follow:

H5: there is significant difference in practices of various mechanisms of corporate governance by CPS operators in Nigeria.

H6: there is significant interaction effect of various CG mechanisms with CPS operators type in Nigeria.

H7: there is significant effect of ownership of CPS operator type on CG practices in Nigeria.

MATERIALS AND METHOD

The population of the study covered all the 32 operators of CPS which consisted of 21 open PFAs, 7 closed PFAs and 4 PFCs as at the end of 2017. The units of analysis comprised 212 managers and assistant managers of CPS operators (PFAs and PFCs). The sample were drawn from PFAs and PFCs which are charged with the administration and custody of CPS fund respectively. With respect to measurement of corporate governance, studies have used various mechanisms of CG as proxies for measurement. While some studies have used single of CG mechanisms such as, board independence (Bhagat & Bolton, 2013; Chen & Jaggi, 2001; Malik & Makhdoom, 2016), audit committee characteristic (Gunes & Atilgan, 2016), CEO duality (Duru et al., 2016). Other have combined various mechanisms of CG (Bhagat, & Bolton, 2013; Sang & Il, 2004). This study therefore adapts measures of CG mechanisms of board independence, director independence, board disclosure and audit committee effectiveness developed

by Sang and Il (2004) in a CG study of five Asian countries.

The responses to the measurement item were Likert-scaled from between 1 indicating "strongly disagree" to 7 indicating "strongly agree". The instrument consists of 22 items covering the above corporate governance mechanisms. Six items measure board independence, five measure director independence, four measure board disclosure while seven measure audit committee effectiveness. Cronbach Alpha reported by the CG mechanisms are board independence (0.906), directors independence (0.838), board disclosure (0.806) and audit committee effectiveness (0.816). the items were tested for validity using factor analysis (Table 1). All items adequately loaded on the construct they measure, except one of the seven items that measure audit committee effectiveness (AUDCOM3) and was deleted from further

analyses. Kaiser Meyer-Olkin (KMO) and Bartlett test of sphericity were examined to ensure sampling adequacy and significance. KMO of all the CG mechanisms were above the KM) benchmark of 0.60 recommended and reported significant Bartlett of Sphericity (Pallant, 2013; Tabachnick & Fidell, 2013). The results of reliability and validity test is in consistent with study by Ibrahim and Zulkafli (2016) that adapted the same items in their study. The justification fot use of items to measure CG is in line with Malik and Makhdoom (2016). They suggested the need to go beyond secondary data to measure corporate governance mechanisms. They futher argued that using other than secondary data allowed researchers to go for other alternative data source such as item–response questions to elicit perception of relevant players on the extent corporate governance practices.

Table 1

Summary of factor analysis estimates

CG Mechanisms	Items	Loadings	KMO	Bartlett test of Sphericity		Eigen Value	% of Variance Explained
				Chi-Square Statistics	p-value		
Board independence			0.877	1052.550	0.000	4.179	69.653
	BODIND1	0.929					
	BODIND2	0.925					
	BODIND3	0.728					
	BODIND4	0.902					
	BODIND5	0.927					
	BODIND6	0.508					

Table 1 *(Continued)*

CG Mechanisms	Items	Loadings	KMO	Bartlett test of Sphericity		Eigen Value	% of Variance Explained
				Chi-Square Statistics	p-value		
Director independence			0.779	430.180	0.000	3.069	61.374
	DIRIND1	0.713					
	DIRIND2	0.829					
	DIRIND3	0.754					
	DIRIND4	0.847					
	DIRIND5	0.766					
Board disclosure			0.780	284.296	0.000	2.566	64.142
	BODDIS1	0.794					
	BODDIS2	0.842					
	BODDIS3	0.835					
	BODDIS4	0.726					
Audit committee effectiveness			0.782	393.545	0.000	3.049	50.049
	AUDIT1	0.634					
	AUDIT2	0.777					
	AUDIT4	0.654					
	AUDIT5	0.688					
	AUDIT6	0.731					
	AUDIT7	0.779					

Note: Extraction method: Principal component analysis

Scholars have emphasized that corporate boards play substantial roles in entrenching good GC while acting as the guardian of shareholders' interest in oversight of management (Dalton et al., 1998). Others (Amrah et al., 2015; Lefort & Urza, 2008) argued that board of directors and its committee were pivotal in internal governance of firm. Therefore, this study measures CG based on some vital characteristics of the board and its committees. In order to analyse data collected, one sample t-test was used to examine the practices of four corporate governance mechanisms (board independence, director independence, board disclosure and audit committee effectiveness) of operators of CPS. Further analyses were conducted to examine if difference exists in practice of corporate governance across the four mechanisms as well as among the various type of CPS operators based on ownership (open PFAs, Closed PFA and PFCs) using mixed ANOVA. The use of mixed ANOVA accommodates scores generated from repeatedly observed sampled cases for the four mechanisms of CG to be compared (Lindstrom & Bates, 1990). Mixed ANOVA

was also appropriate due to its merit to test difference among CPS operator type (open PFAs, closed PFAs & PFCs) and analyse interaction of the two factors (CG mechanisms and CPS operator type).

RESULTS AND DISCUSSION

A total of 212 managers participated in the survey out of which 155 and 42 were from open and closed PFAs respectively. The remaining 15 were from PFCs. The average tenure of holding managerial position by the respondents was 3.87 years with standard deviation of 2.15years. Table 2 reports the results of hypotheses (HI, H2, H3 and H4) in relation to the practices of the four mechanisms of CG tested with one-sampled t-test as follow: t (211) = 3.040, p < 0.003; t (211) = 15.513, p < 0.000; t (211) = 18.032, p < 0.000; and t(211) = 20.775, p < 0.000 respectively. The results show significant

practices of each of the four CG mechanisms which indicate their significant practices by CPS operators. Thus, hypotheses HI, H2, H3 and H4 were supported.

Subsequently, hypotheses (H5, H6 and H7) were tested using mixed ANOVA to examine the effect of three CPS operator types (open PFAs, closed PFAs and PFCs) on the practices of CG across the four CG dimensions (board independence, director independence, board disclosure and audit committee effectiveness). The results of mixed ANOVA were presented in Table 3 and Table 4. As a prelude to guide the use of appropriate estimates of mixed ANOVA, test of sphericity assumption was conducted across the repeated measures (CG mechanisms). Mauchly's test showed Chi-Square value of 68.069 and p < 0.000 for repeated scores across mechanisms of CG (within-subject

Table 2

One-sample t-tests results

Corporate Governance Mechanisms	Test Value = 5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
BODIND	3.040	211	0.003	0.234	0.083	0.387
DIRIND	15.513	211	0.000	0.905	0.790	1.020
BODDIS	18.032	211	0.000	1.074	0.957	1.191
AUDCOM	20.775	211	0.000	1.021	0.924	1.118

Note: computed using alpha= 0.05

BODIND=Board independence, DIRIND=Director independence, BODIND= Board disclosure, AUDCOM=Audit committee effectiveness

effects) violated the sphericity assumption indicating a siginigicant differences in variances of the CG mechnisms (Field, 2013). The violation indicates that the F-values of CG mechanisms for the main effect and its interaction effect with CPS operators type (between-group effect) need to be corrected using Greenhouse-Geisser correction.

Based on Greenhouse-Geisser correction, the results (F (2.842, 518.809) = 25.479, p < 0.000, eta^2 = 0.109) of Hypothesis H5 showed there was significant main effect difference among the practices of four CG mechanisms (Table 3). Pairwise comparisons revealed that average board independence practices (5.235) of CPS

operators was significantly lower compared to other CG mechanisms that reported average ranging from 5.905 to 6.074. Therefore, Hypothesis H5 was supported. For Hypothesis H6, the results (F (4.965, 518.809) = 1.585, p < 0.163, eta^2 = 0.015) showed there was no significant interaction effect of CG mechanisms and CPS operator type. Thus, Hypothesis H6 was not supported. Also, the results (F (1, 2) = 0.043, p < 0.958, eta^2 = 0.000) of Hypothesis H7 on the main effect comparing the practices of CG among the three CPS operator types was also found not to be significant. Therefore, Hypothesis H7 was not supported (Table 4).

Table 3

Tests of within-subject effects

Source		Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
CGMechanisms	Sphericity Assumed	50.196	3.000	16.732	25.479	0.000	0.109
	Greenhouse-Geisser	50.196	2.482	20.221	25.479	0.000	0.109
	Huynh-Feldt	50.196	2.539	19.773	25.479	0.000	0.109
	Lower-bound	50.196	1.000	50.196	25.479	0.000	0.109
CGMechanisms *CPSopertatortype	Sphericity Assumed	6.245	6.000	1.041	1.585	0.149	0.015
	Greenhouse-Geisser	6.245	4.965	1.258	1.585	0.163	0.015
	Huynh-Feldt	6.245	5.077	1.230	1.585	0.161	0.015
	Lower-bound	6.245	2.000	3.122	1.585	0.207	0.015
Error (CGMechanisms)	Sphericity Assumed	411.743	627.000	0.657			
	Greenhouse-Geisser	411.743	518.809	0.794			
	Huynh-Feldt	411.743	530.558	0.776			
	Lower-bound	411.743	209.000	1.970			

Note: computed using alpha= 0.05

Table 4
Tests of between-subject effects

Source	Sum of Squares	df	Mean square	F	Sig.	Partial Eta Squared
Intercept	12503.116	1	12503.116	9772.472	0.000	0.979
CPSopertatortype	0.111	2	0.055	0.043	0.958	0.000
Error	267.399	209	1.279			

Note: computed using alpha= 0.05

The findings from results (H1, H2, H3 and H4) showed adequate practices of CG among CPS operators in Nigeria. The findings of the first four hypotheses are in contrast with the poor level of CG reported in the Nigerian banking sector (Akinkoye & Olasanmi, 2014; Nwannebuike & Ike, 2014). The findings are also inconsistent with the weak practices of CG among pension fund in OECD (Kowalewski, 2012). With regards to H5 which states there is significant difference in practices of various mechanisms of corporate governance by CPS operators in Nigeria. The results show a significant difference with relatively low board independence practices compared to other mechanisms of CG under review. For H6 on interaction effect of type of CPS operators with CG mechanisms, the study reported no significant effect. The finding is contrary to that of Turley and Zaman (2007) that interactions of audit committee with internal controls (internal auditor and senior management) and external controls (external auditor) have effect on the potential achievement of audit committee effectiveness. As for H7 on the effect of ownership of different types of CPS operators on CG practices in Nigeria, there is no significant effect. This inconsistent with the finding of Balagobei and Velnampy (2017) that reported significant effect of ownership structure on corporate governance mechanisms among beverage and tobacco firms in Sri Lanka. The finding is also incongruent with study of Bangladeshi firms that found negative effect of ownership on board independence (Hasan et al., 2016).

CONCLUSIONS

The study examines practices of corporate governance among operators of CPS in Nigeria. Despite the preponderance of studies related to CG in banking and other sectors in Nigerian, there is relatively scarcity of attention paid to CG practices in the CPS industry. The paper empirically examines board independence, director independence, board disclosure and audit committee effectiveness of operators of CPS in Nigeria. The study fills the literature gap of presenting empirical evidence in relation to practices of CG of operators of CPS. The findings showed that there exist significant practices of CG mechanisms (board independence, director independence, board disclosure and audit

committee effectiveness mechanisms) among the CPS operators of CPS. More so, there is significant difference in practices of CG across the various mechanisms of CG. It was also found that CPS operators types (PFAs and PFCs) based on their ownership perspective do not differ with respect to practices of CG. The study also reported no interaction effects of CG mechanisms and type of CPS operators based on ownership.

The study makes significant contributions in a number of ways. Far more than other industries, the strategic significance of CG to the performance of CPS industry cannot be under-estimated. CPS has become a vital aspect of the Nigerian financial system. For instance, within barely over a decade of coming into effect, CPS fund has become a major source of finance for corporate entities and various tiers of government to maintain fiscal sustainability. Similarly, given that CG addresses conflicting interests of ownership and management of pension fund, examining the CG practices of CPS operators can provide guide policymakers and regulators to prevent weak implementation of CG. The finding will also forestall likely future crisis similar to ugly experience of the old defined benefit scheme in the CPS industry so as to safeguard the future income of retirees.

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SOCIAL SCIENCES & HUMANITIES

The Empowerment of Kudus Embroidery Creative Industries for Strengthening the Cultural Identity of Kudus Regency, Central Java, Indonesia

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ABSTRACT

This study explores the endeavors of the embroidery industry communities in Kudus Regency, Central Java, Indonesia, to endorse the existence of their craft industries and craft identities. The work ethics of Kudus embroidery artisans are unique. The significant marks of the uniqueness include: "maintaining the traditional embroidery technique, the traditional embroidery designs, and the community-based cooperative management." Based on this research, the researchers argue that the embroidery craft industries in Kudus have become an economic asset of Kudus Regency in the sector of creative industries as well as having served as a cultural identity, which is also very important to strengthen the Indonesian national identity.

Keywords: Kudus cultural identity, Kudus embroidery

INTRODUCTION

A nation's cultural identity is one of the elements of a nation's character and behavior within the framework of the nation's collective life based on its cultural values and reflecting some characteristics that can be viewed by other nations as the nation's identity. Cultural values existing in a collective experience or a nation's history can shape the pattern of the nation's

character which includes: nationalism, national culture, identity, and ethos (Kartodirdjo, 1993). These four character elements are intertwined,and each mutually reinforces the other.

Cultural identity is a cultural feature that distinguishes the culture of a region from other regions or a nation from other nations. It is a genuine culture that marks the existence of a community, a society, or a nation. Cultural identity includes a sense of belonging, symbols, languages, history, the consciousness as inhabitants of a particular region, arts (drama, music, architecture, fashion, songs), culinary, and press (Yuliati, 2017). Without such an identity, a nation will experience difficulties when it has to show itself in the international forums.

In intercultural communities, an identity is essential in order to demonstrate "self-esteem" and "self-worth" of a nation, enabling the nation to show its national pride and to stand in parallel with other nations. Cultural identity is also useful for strengthening the sense of nationalism. Therefore, the cultural identity that has been rooted in Indonesian regions should always be conserved, upkeep, and developed to strengthen the adoration for the nation and the country.

Consecutively since the 5th until the 20th centuries, there has been shipping and trade relationships as well as cultural contacts between local and foreign cultures (India, Arab, China, Europe and Japan) in the Indonesian archipelago. The primary purpose of these countries' arrival is to search for commodities that can be sold on the world market, e.g., spices, sugar, coffee, indigo, and batik cloth. In this trading and cultural relation, people in the archipelago – especially in the coastal areas – are capable of being open, adaptive, adoptive, and democratic. These particular behaviors of Indonesian people can contribute to forming the cultural manifestations, which are acculturative.

Acculturative culture creation also exists in Kudus Regency society in Central Java Province, Indonesia. People in Kudus are able to create creative economic activities, particularly in the form of embroidery craft industry. Embroidery can be defined as patterns or pictures that consist of stitches sewn directly onto cloth or the activity of decorating a piece of cloth with stitches sewn onto it. (http://dictionary.cambridge. org). The embroidery craft industry in Kudus Regency has been operating since the mid-16th century when there were trading and cultural relationships between the locals, Moslem, and Chinese traders. Since the end of the 19th century, there have been many Chinese traders who lived in Kudus doing business (Supratno, 2016). It was said that the merchants from Gujarat and China sold cloth or clothing with embroidered motifs. Their embroidery skills were then absorbed by the people of Kudus whereby they initially developed the crafts with the nuances of Kudus local culture. Kudus embroidery craft industries have resulted in potential local cultural products, not only as a cultural identity but also as local creative economic assets. The creative economy or creative industry is defined as an economic

activity based on the individual creativity, skills, and talents promoting the people's prosperity (Suyaman, 2015).

Kudus is famous for *icik* (handcrafted) embroidery products. Such embroidery is made neatly with motifs that are initially designed by the local community. Thus, it takes a considerable amount of time to produce the embroidery cloth. However, the Kudus embroidery products are currently dealing with a lot of competitors, especially those that attempt to make embroidery products with computer-assistance. Furthermore, the next generation of embroidery artisans in Kudus is increasingly scarce. This phenomenon is a threat to the existence of Kudus embroidery craft industries. Hence, it requires immediate empowerment and strengthening to overcome these threats.

Based on the brief explanations regarding the potential opportunities and threats possessed by the Kudus embroidery industry described above, it is vital to conduct a study to discover ways in which the creative industry of Kudus Regency can be empowered. Therefore, the research problems are stated as follows:

- What are the distinctive characteristics of embroidery craft in Kudus?
- How do the embroidery artisans in Kudus express their creativities through the embroidery business?
- How does the government support the development of embroidery industries in this Regency?

The discussion in this study is focused on two villages, Padurenan and Karangmalang. These two villages are chosen since they are able to develop their respective areas as an embroidery industry cluster (Padurenan) and as an embroidery industry center (Karangmalang).

MATERIALS AND METHOD

This research is analytical and descriptive in nature, which is grounded in primary and secondary data. The primary data were obtained from Kudus Regency Industry and Trade Office, Monographs of Villages, photographs, and documents from the stakeholders (especially the embroidery artisans). The secondary resources were collected from several books which were relevant to this research.

This research was also done by direct observation in the field of embroidery industries in Kudus Regency, particularly in Padurenan and Karangmalang Villages. These two villages are cluster and center of the embroidery craft industries in Kudus Regency, Central Java Province, Indonesia. The interesting problem to be researched was how can the embroidery artisans in these two villages kept in existence their creativities to produce local embroidery motifs and how did they manage their embroidery craft industries based on their local community management.

In order to obtain essential information from the embroidery artisans in the two mentioned villages, interview method was applied to some stakeholders. This interview was focused on the cultural system of

embroidery artisans' communities in the two villages to obtain the information about their motivation, work ethics, sense of belonging to their local cultures, and competences in creative embroidery industries. All of the data obtained from this research were verified, interpreted, and composed in analytical and synthetic writing on The Empowerment of Kudus Embroidery Creative Industries for Strengthening the Cultural Identity of Kudus Regency, Central Java Province, Indonesia.

RESULT AND DISCUSSION

Result

This research was done in two villages in Kudus Regency, Central Java, Indonesia, namely Padurenan and Karangmalang. Since the first decade of 21st century these two villages become the centers of embroidery creative industries in Kudus Regency.

The development of these centers are supported by the entrepreneurship characters of the people in Padurenan and Karangmalang villages and their creativities to seek their better life. The research's findings to demonstrate that the people in Padurenan and Karangmalang villages have competences in entrepreneurship and creative economy are as follows:

1. Most of the people in Padurenan works in the embroidery and garment, i.e., as many as 1,627 people (52.3%). This data shows that half of the working-age population in Padurenan village works in the embroidery craft industries. This condition is supported by the presence of 200 units of small and medium industries in embroidery and garment sectors and 78 units in jacket and uniform makers (see Table 2).

2. There is a Village Cooperative in Padurenan Village, which manages and supports the production process of embroidery craft industries. This village cooperative is managed by the embroidery artisans or supervised by embroidery artisans community based management.

3. The embroidery craft industries in Padurenan village are also supported by the existence of the other creative industries, which are interrelated and mutually supportive, especially garment, bags, and culinaries.

4. Most villagers in Karangmalang work in the industry sector, especially in the embroidery craft industry (see Table 6).

5. The owners of the embroidery craft industries in Karangmalang village established a village multi-business cooperative called Koperasi Serba Usaha (KSU) Teratai Jaya Abadi in 2016. Previously, this village only had a group of embroidery artisans (Kelompok Usaha Bordir) which was founded in 1990. The new cooperative action has become a forum for embroidery entrepreneurs in Karangmalang Village.

6. The embroidery artisans in Padurenan and Karangmalang Villages can preserve the local tradition embroidery motifs and method of production, especially

jasmine and "krancangan" motifs by using *icik* method (using manual embroidery machine).

Discussion

Embroidery Industry in Padurenan Village and Karangmalang Village.

Embroidery Industry Cluster in Padurenan Village

The Padurenan village is administratively associated under Gebog Sub-district, Kudus Regency, Central Java Province. The total area of this village is 163.116 hectare with borders as follows:

- North   : Daren village
- South   : Getasrabi village
- West   : Getasrabi village
- East   : Karangmalang village

The map of Padurenan Village is demonstrated in Figure 1.

Based on the monograph of Padurenan village in 2017, this village is populated by 4,716 people (Padurenan Village Office Gebog Sub-district Kudus Regency, 2017). with details as follows:

- Male   : 2,409 people
- Female : 2,307 people
- Age 0-15 years : 1,290 people
- Age 15-65 years : 3,264 people
- Age over 65 years : 130 people

This monographic data shows that the population majority in Padurenan village are in the productive age category. In addition, most of the villagers work in the embroidery industry sector. This condition is supported by the fact that the highest level of education which can be achieved by the people is averagely from primary school to higher education level. Generally, the primary to senior high schools graduates work in the embroidery industry sector, as this business can be done in their homes, where they are also accustomed to helping their parents work on the embroidery. The number of school and college students in Padurenan village is exhibited in Table 1.

Figure 1. Map of Padurenan Village Gebog sub-district Kudus Regency from Regional of Development and Planning Agency Kudus Regency (2017).

The population of Padurenan village comprises 3,107 people according to the labor force. The type of livelihood and number of the labor force are presented in Table 2.

From the data presented in Table 2, it can be seen that most of the people in Padurenan works in the embroidery and garment, i.e., as many as 1,627 people (52.3%). This data shows that half of the working-age population in Padurenan village works in the embroidery craft industries. This condition is supported by the presence of 200 units of small and medium industries in embroidery and garment sectors and 78 units in jacket and uniform makers.

The establishment of the embroidery and garment Industry cluster and "Koperasi Serba Usaha (KSU) Padurenan Jaya" is supported by the Government.

In addition to the existence of many small and medium scale embroidery industries in Padurenan village, there are also various home industries and small industries that support the existence of embroidery industry, e.g., garment, non-furniture woodwork, handicraft, culinary products (Industry and Trade Office of Kudus Regency, 2017). Therefore, Padurenan village is designated as a handicraft industry cluster, i.e., a group of business activities consisting of the core industries, related industries, and

Table 1

Level of education and number of school/college students in Padurenan Village in 2017

No	Education	Number of People
1.	Elementary School / equivalent	1,103
2.	Junior High School	810
3.	Senior High School	693
4.	Academy / D1-D3	131
5.	Undergraduate	253
6.	Graduate	4

Note. From Padurenan Village Office Gebog Sub-district Kudus Regency (2017).

Table 2

Types of jobs in Padurenan Village in 2010

No.	Type of Job/Livelihood	Number of people
1.	Agricultural laborer	220
2.	Cigarette laborer	225
3.	Construction laborer	303
4.	Embroidery and garment laborer	1,627
5.	Traders	165
6.	Civil Servant / soldier / police officer	40

Table 2 *(Continued)*

No.	Type of Job/Livelihood	Number of people
7.	Embroidery and garment artisans (SMEs)	200
8.	Jacket and uniform maker (SMEs)	78
9.	Others	198

Note. From https://kecgebog.blogspot.com/p/analisa-desa-produktif.html

supporting industries which are interrelated and mutually supportive (Adewicak, 2012).

The existence of mutually-supportive handicraft industries in Padurenan village has encouraged the Central Java Provincial Government together with Bank of Indonesia, Local Government of Kudus Regency, Center for the Increase of Labor Productivity - Indonesian Ministry of Manpower, Department of Manpower of Transmigration & Population of Central Java Province, and Central Java Bank to launch a program called "Productive Village Development Program of Embroidery and Convection Cluster in Padurenan Village, Kudus through the Diamond Cluster Approach". This program was inaugurated on August 5th, 2009, marked by the signing of Memorandum of Understanding (MOU) No. 11/37/DKBU/BPBU/SM, 563/6298/, B173/lattas-BBPP/VII/09, 4525/HT.01.02/2009. The program was aimed to develop Padurenan village as a tourism cluster that had high productivity and competitiveness in the field of industries, which then would be become a driving force for the economic growth of the surrounding villages.

In line with the government's program, a number of embroidery and garment entrepreneurs in Padurenan village have also established a village multi-business cooperative named "Koperasi Serba Usaha (KSU) Padurenan Jaya." This cooperative village acts as cluster management with the deed of establishment number: 503/208/BH/21/2009. KSU Pedurenan Jaya is located in Padurenan village RT 01, RW 01, Jalan Kyai Hasyim, Gang 01, Gebog Sub-district, Kudus Regency, Central Java, 59354. It provides facilities for embroidery and convection artisans in Padurenan and surrounding villages.

The members of KSU Padurenan Jaya comprises the embroidery and garment artisans who market their products to the broader range of traditional markets in Indonesia, including Central Java, East Java, Bali, West Nusa Tenggara, and Kalimantan. The establishment of the cooperative is aimed to develop the potential of Padurenan village as a cluster of small and medium industries that produce embroidery and garment products, as well as bags and culinary products. Figure 2 is the picture of Padurenan Village Cooperative KSU Padurenan Jaya.

Figure 3 below is one corner of KSU Padurenan Jaya, which displays and sells embroidery materials for the members of Padurenan Village Cooperative.

In 2010 Padurenan village has 200 small and medium craft industries which are distributed in several hamlets (Table 3).

The names of embroidery craft industries in Padurenan village are presented as follows (Table 4).

Figure 2. Village cooperative, KSU Padurenan Jaya

Figure 3. Supplies of embroidery threads and tools in the village cooperative, KSU Padurenan Jaya

Table 3

Name of hamlets and type of products in Padurenan Village in 2010

No	Name	Type of Products	No. of Workers
1.	Salak	Embroidery and garment	37
2.	Krajan	Embroidery, garment, bags, tofu,tempeh, *screen* printing, *pindangpresto* (softened fish)	106
3.	Jerabang	Embroidery, garment	23
4.	Jetis	Embroidery, garment, *pindangpresto* (softened fish)	19
5.	Randukuning	Embroidery, garment, *pindangpresto* (softened fish)	15

Note. From Gebog Sub-district Office Kudus Regency. (2010b).

Table 4

Names of embroidery craft industries and their addresses in Padurenan Village

No.	Name of Handicraft Industry	Address
1.	Fida Jaya Bordir	Padurenan village RT 03, RW 09
2	Nawal Embroidery	Padurenan village RT 03, RW 06
3	Bordir Amiroh Wati	Padurenan village RT 01, RW 01
4	Bordir Arif Ariyanto	Padurenan village RT 03, RW 09
5	Bordir Noor Faizah	Padurenan village RT 01, RW 01

Table 4 *(Continued)*

No.	Name of Handicraft Industry	Address
6	Bordir Farochnah	Padurenan village RT 01, RW 01
7	Bordir H. Much. Ansori	Padurenan village RT 01, RW 01
8	Bordir Hj. Khotik	Padurenan village RT 01, RW 01
9	Bordir Hj. Sri Murniah	Padurenan village RT 01, RW 01
10	Bordir Hj. Sutarmi	Padurenan village RT 01, RW 01
11	Bordir Imronah	Padurenan village RT 01, RW 01
12	Bordir Muzarofah	Padurenan village RT 01, RW 01
13	Bordir Nusroh	Padurenan village RT 01, RW 01
14	Bordir Richanah	Padurenan village RT 01, RW 01
15	Bordir Sulfah	Padurenan village RT 01, RW 01
16	Bordir Sunaechah	Padurenan village RT 01, RW 01
17	Bordir Supaat	Padurenan village RT 01, RW 01
18	Bordir Uswatun Chasanah	Padurenan village RT 01, RW 01
19	Bordir Zaitun	Padurenan village RT 01, RW 01
20	Bordir Hj. Chifdhiani	Padurenan village RT 01, RW 01
21	Bordir Ahmad Nor	Padurenan village RT 01, RW 03
22	Bordir Sutami	Padurenan village RT 01, RW 01
23	Bordir siti Fatonah	Padurenan village RT 01, RW 01
24	Bordir Ahmad Duri	Padurenan village RT 02, RW 04
25	Bordir RifatTamzis	Padurenan village RT 02, RW 04
26	Bordir Suwarno	Padurenan village RT 02, RW 04
27	Bordir N. Chasanah	Padurenan village RT 03, RW 03
28	BordirSolichan	Padurenan village RT 03, RW 03
29	Bordir H. Abdul Basyir	Padurenan village RT 03, RW 03
30	Bordir IhsanMahbub	Padurenan village RT 03, RW 03
31	Bordir NahfidFahmi	Padurenan village RT 03, RW 03
32	Bordir Rosyad	Padurenan village RT 03, RW 03
33	Bordir Solikhul Hadi	Padurenan village RT 03, RW 03
34	Bordir UlilAbror	Padurenan village RT 03, RW 03
35	Bordir Zumairoh	Padurenan village RT 03, RW 03
36	Bordir BarokahQori Fashion	Padurenan village RT 03, RW 02
37	Bordir AMirowati	Padurenan village RT 03, RW 02
38	Bordir Almira	Padurenan village RT 03, RW 02

Note. Processed from Industry and Trade Office of Kudus Regency (2017)

The embroidery and convection products are marketed not only in the city of Kudus, but also in other areas, e.g., Semarang, Solo, Jogjakarta, East Java, Mataram, and Bali. Several embroidery products from Padurenan village can be seen in the following Figures. The local tradition of embroidery motif is presented in Figure 4 and 5. Figure 6 is an embroidery production house in Padurenan Village.

Figure 4. An embroidery product with jasmine motif in Padurenan Village

Caption: A product by "Amirowati" embroidery craft industry.

Figure 6. One of the embroidery craft industry, named "Almira" in Padurenan village

Caption: Researcher's photograph.

Figure 5. An embroidery product with jasmine and Krancangan Motifs

Caption: Using *Icik* (Manual) machine, a product by "Almira" embroidery craft industry.

Embroidery Industry Center in Karangmalang Village

Karangmalang village is located in Gebog District, Kudus Regency. Gebog District has the following borders: Jepara Regency in the north, Dawe District and Bae District in the east, Kaliwungu District in the south, and Jepara Regency in the west. This tropical sub-district is situated at an altitude of 155 meters above sea level and has a moderate temperature.

The area of Karangmalang village has the following administrative borders as follows (Statistical Office of Kudus Regency, 2017):

- North : Besito village
- South : Klumpit village, Gribig village, and Peganjaran village

- East   : Peganjaran village and Besito village
- West   : Klumpit village and Padurenan village

The map of Karangmalang Village is presented in Figure 7.

The total area of Karangmalang village is 2622.303 hectare which comprises areas for rice fields, farms, animal husbandry, handicraft industry, small to medium industry, and service and trade. Although the village has fields and farms, many of its residents seek additional income by becoming artisans, embroidery assistants, and trading workers. The village has a population of 9.622 people in which most of them belong to the productive age (15-

65 years old). The most recent condition of the village population by age can be seen in Table 5.

According to Table 5, it can be seen that approximately 50% of the Karangmalang population belongs to the productive-age category. Meanwhile, the list of people's livelihoods in Karangmalang village in 2016 is presented in Table 6. From the data presented in Table 6, it can be seen that most villagers in Karangmalang work in the industry sector, especially in the embroidery craft industry.

Embroidery industries in Karangmalang village initially started as home industries. In this village, these craft industries have been growing since 1982 when the government gave special impetus to the activities of

Figure 7. Map of Karangmalang Village, Gebog District, Kudus Regency from Google Map Data 2019

Table 5

Total population in Karangmalang village by age in 2016

Population Age		
0 -15 Years	15-65 Years	>65 Years
1992 people	5808 people	821 people

Note. From Karangmalang Village Office Gebog Sub-district Kudus Regency (2016).

Table 6

Type of livelihoods of the people of Karangmalang Village in 2016

Type of Job/ Livelihood	Number of People
Civil Servant	161
Soldier/Police Officer	13
Private Person / Industry	2062
Trader	68
Farmer	595
Construction laborer	651
Farm laborer	170
Retired person	41
Fisherman	2
Breeders	15
Service	5
Embroidery and garment artisans	30
Artist	2
TOTAL PEOPLE WORKING	3815

Note. From Karangmalang Village Office Gebog Sub-district Kudus Regency (2016).

small embroidery industries. In general, the embroidery craft industries in this village are run by housewives who have the abilities and skills to manage the industry since they inherit the abilities from their mothers who have also managed the embroidery craft industries.

These craft industries are operated at home, hence, so they can still manage their duty as housewives. They are very familiar with the embroidery craft for they have learned this craft since childhood from their parents who used to work as embroidery workers in Janggalan and Purwosari villages. In the early 1980s, the embroidery industries in these two villages receded since the workers from Karangmalang and Padurenan sought to

establish embroidery craft industries in their villages (Hj. Siti Khalimah, personal communication, September 30, 2017).

The presence of many embroidery artisans in Karangmalang marks this village as the center of embroidery craft industries in Kudus Regency. According to Siti Khalimah, an embroidery craftsman in Karangmalang, the first embroidery industries in Kudus Regency was developed in the villages of Purwosari and Janggalan. The workers were from outside these two villages; in which some were originated from Karangmalang village. The owners of embroidery industries often praise the embroidery artisans from Karangmalang who worked in Janggalan due to their neat and smooth embroidery products.

Since a lot of Karangmalang villagers worked in embroidery craft industries in Janggalan village, they have learnt many things about its industrial management. Therefore, they developed embroidery craft industries in their village. However, in the end, Janggalan and Purwosari villages – which have succeeded once as the Kudus embroidery industry center – experienced decline and bankruptcy as many employees that mostly from outside the two villages chose to resign.

The consumers often seek for embroidery products which have smooth features, up-to-date motifs, and affordable prices. The embroidery artisans have three embroidery techniques, namely *icik, juki*, and computer-assisted. The *icik* technique is an embroidery method using a manual sewing machine. The *juki* technique is an embroidery method using a dynamo-driven embroidery machine. Meanwhile, the computer-assisted technique is an embroidery method using a computer-operated machine. The artisans in Karangmalang village still preserve the *icik* method since this method is able to produce smooth, neat embroidery products, and the threads are not easily broken (Hj. Siti Khalimah, personal communication, September 30, 2017).

The owners of the embroidery craft industries in Karangmalang village established a village multi-business cooperative called Koperasi Serba Usaha (KSU) Teratai Jaya Abadi in 2016. Previously, this village only had a group of embroidery artisans (Kelompok Usaha Bordir) which was founded in 1990. The new cooperative action has become a forum for embroidery entrepreneurs in Karangmalang village with the following committees:

- Chairman : Hj. Siti Khalimah
- Secretary : EnyZunita
- Treasurer : Suaidah
- Work Officer : Siti Mufarikhah

(Hj. Siti Khalimah, personal communication, September 30, 2017).

Table 7 provides information on the names of embroidery craft industries in Karangmalang village, Kudus Regency, which is incorporated in the KSU Teratai Jaya Abadi. The management and activities ran by KSU Teratai Jaya Abadi have not been as optimal as those run by KSU Padurenan Jaya, for it has just been established and has not had planned activities and sufficient assets.

In addition to the embroidery crafts industries data in Karangmalang Village presented in Table 7, there are also several embroidery industries categorized as the home industry (employing approximately one to five labors). Below are the owners of the embroidery craft industries categorized as the home industries (with a maximum amount of 5 workers) in Karangmalang village:

a. Suparti
b. Kustiyah
c. Karsini
d. Karjinah
e. Maria Ulfah
f. Yuli Astuti
g. Hj. Jasminah
h. Umi

i. Supiah

j. Supriyanti

k. Sulistiyani

l. Eka Dian Safitri

m. Nailul Farih

(Hj. Siti Khalimah, personal communication, September 30, 2017).

The following figures represent the activities and embroidery products produced in Karangmalang village (Figure 8 to 10).

The embroidery artisans in Karangmalang village still maintain the embroidery production using the *icik* (manual machine) and manually use their hands when making motifs. They will use a dynamo machine (locally called *juki* machine) and the computer if they receive a large number of orders. The advantages of the *icik* method are that it is able to produce smooth, neat products and the threads are not easily broken. The juki machine and the computer can not produce such qualities since, in these two techniques, the patterns have already been programmed, and the threads are connected. Hence, if any part of the threads breaks, the connection will be easily broken as well.

Table 7

Name and address of embroidery craft industries in Karangmalang Village, Categorized as medium-scale industry (with a workforce of 20-99 people)

No	Name of Industry	Address
1.	Jasmine Embroidery	Karangmalang RT 05, RW 03
2.	Alima Embroidery	Karangmalang RT 02, RW 03
3.	YulinasBordir	Karangmalang RT 02, RW 03
4.	Bordir Tumiran	Karangmalang RT 01, RW 01
5.	Bordir H. Sumono	Karangmalang RT 02, RW 02
6.	BordirJamaah	Karangmalang RT 02, RW 02
7.	Bordir Haliyudi	Karangmalang RT 03, RW 04
8.	Bordir Sri Rejeki	Karangmalang RT 04, RW 02
9.	Bordir Dahlia	Karangmalang RT 04, RW 02
10.	Bordir Suparto	Karangmalang RT 05, RW 02
11.	Valthan Jaya	Karangmalang RT 04, RW 06
12.	Ra'fa Collection	Karangmalang RT 04, RW 02
13.	Cameo	Karangmalang RT 04, RW 08
14.	BordirYulinas	Karangmalang RT 04, RW 09
15.	Bordir Nusa Indah	Karangmalang RT 03, RW 02

Note. From Industry and Trade Office of Kudus Regency (2017)

Figure 8. Embroidery production using the computer system in embroidery craft industry, named "Sri Rejeki," Karangmalang Village

Caption: Picture made by the researcher.

Figure 9. An embroidery product, made using the Icik technique (manual machine) in an embroidery craft industry, named "Sri Rejeki" in Karangmalang Village

Caption: Photograph taken by the researcher.

Figure 10. The owner of embroidery craft industry "Dahlia" in Karangmalang Village working on an embroidery motif "Krancangan"

Caption: Photograph taken by the researcher.

CONCLUSIONS

Based on the discussion described above, this study draws several conclusions as follows:

1. The embroidery craft industries in the Regency of Kudus serve as an economic and cultural asset and one of the sources of income for the Kudus people, especially in Padurenan and Karangmalang village. In the economic field, the embroidery craft industries in both villages can generate jobs for hundreds or even thousands of people. In the embroidery production, the artisans have a sense of belongings to their local cultural identities, such as maintaining the *icik* method as well as the jasmine and *krancangan* motifs. The creativities of the artisans also have penetrated into the field of management. They manage to set up two government-aided cooperative activities which facilitate the needs of the embroidery artisans regarding capital, materials, and tools.

2. The embroidery craft industries can be categorized as the creative industries since they are developed according to the ideas and creativities without the need of large capitals. In addition, the tenacity

and persistence of the artisans have also created a medium-scale craft industry in their respective areas. This positive economic development has been going on for the last few decades to the present times.

3. Due to the creative competence in maintaining such a cultural identity, Kudus Regency Government and other stakeholders have supported the villagers by issuing a permit to establish two villages' cooperatives, KSU Padurenan Jaya in Padurenan village and KSU Teratai Jaya Abadi in Karangmalang village, which are expected to encourage and provide facilities for the progress of the embroidery craft industries. The government also facilitated banking loan for the cooperatives (through Bank Indonesia).

4. An ideas-based creative industry can generate a community-based management system and unique embroidery products with a local nuance, making others able to see the embroidery products as a cultural identity.

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The New Order Play: *Wayang* as a Medium for Development Messages, 1969–84

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ABSTRACT

This article discusses the relationship between the state and the performing arts in the transmission of political messages. During the New Order period in Indonesia, the traditional shadow puppet theater genre known as *wayang* played a significant role as a medium of communication between the government and society. We specifically claim that *wayang,* especially *wayang kulit,* were used by the government to carry messages of social and economic development during this period. These messages were incorporated into plays or scenes when it was possible without diminishing the standard of *wayang* performance. In contrast to previous studies that have discussed the role of *wayang* from a philosophical and semiotic perspective, this study will focus on the history of *wayang kulit* as a means of spreading messages of development in Java during the New Order era. This study finds that the relations between the society, the *dalang*, and the government generate the *wayang* art as a medium of propaganda, especially the economic development agenda in the New Order period. The data in this article were obtained through literature studies and from several documents of the period between 1969 and 1984.

Keywords: Art during the New Order era, cultural history, Javanese, wayang art

INTRODUCTION

The New Order led by President Soeharto was known as the era of development. It was marked by government policies that were drastically different from those of the Old Order era, specifically because of their focus on economic development. The New Order government tried to purely and consistently reorganize and improve the life of the nation

based on the goal of implementing Pancasila (the official philosophical foundation of Indonesian state, comprises five principles) and the 1945 Constitution. According to Soeharto, the establishment of the New Order had no other purpose except to rebuild people's lives and the structure of the state and the nation. The policies were aimed at economic development, and emphasized, for example, the development of the agricultural sector during a series of five-year plans. They aimed to increase agricultural production to meet the demand for food, expand employment, and improve the income and living conditions of farmers (Anonym. 1978). Development in the social sector, including the *Keluarga Berencana* (Family Planning) program, was also intended by the New Order government for effective economic development.

To successfully carry out these development programs, it was essential for the government to convey information to village communities. Thus, the government needed a familiar medium that could be used as a channel for distribution. For this reason, traditional arts such as *ludruk, ketoprak*, and *wayang* were used as tools to spread the government's messages. Based on Hadi and Kasuma's (2012) research, *wayang* art was used more often than the other two traditional arts as a medium for delivering messages from the New Order government. *Wayang* puppet shows use traditional Javanese aesthetic concepts, which are symbolic, contemplative, and philosophical. Besides being the most popular art form on Java, *wayang* was chosen because it attracted the most attention from village communities, especially farmers, the majority of whom were still very traditional in their way of life and thinking. *Wayang* performances, which usually last for approximately eight hours, are considered as quite an effective means of communication because they include many aspects such as sound effects, drama, music, dance, which engage many senses.

The theater where *a wayang* show is held is typically filled with not only spectators but also with vendors so that it looks like a night market. When the *dalang* (puppeteer) starts telling stories or performing plays, reciprocity occurs between the *dalang* and the community, as the community also learns from the *dalang* in addition to being entertained. This aspect of *wayang* was evident when Ki Nartosabdo performed the play *Pandawa Main Dadu* at the State Palace on Saturday, April 12, 1969, especially during the *goro-goro* scene (typically an opening scene in *wayang* performance, where wisdom messages are conveyed symbolically by *punakawan* or humorous figure). The New Order government was trying to find personnel who could function as agents of change, as a force to expand understanding and encourage "development" ("Membuka hutan mertani", 1969).

The *dalang's* role is that of a mediator between the play and the community, thus the *dalang* was very important in conveying messages from the government during the New Order era. The *dalang* performed every play and character with good improvisation to achieve transmitting these messages of development (Walujo, 1994). Additionally,

wayang shows incorporate traditional Javanese aesthetic concepts as mentioned above. Although print and electronic media were more frequently used in the New Order government, traditional media such as *wayang* had a greater impact, especially among people in rural areas (Hadi & Kasuma, 2012).

MATERIAL AND METHODS

Several studies such as those of Gronendael and Victoria (1985), Walujo (1994), and Darmoko (2017) had written about *wayang* during the New Order era. Yet these previous studies did not discuss the delivery of messages or counseling from the government, and how the messages were delivered to the *wayang* show audience. Previous studies have focused on the creation of new plays, which occurred mostly toward the end of the New Order government era. Additionally, the role of *wayang* in the promotion of development by the New Order has been examined only in *wayang* characters or semiotic elements in the *wayang* characters.

The present research fills this gap by emphasizing how the New Order government saw art, especially *wayang*, as an extension tool to promote its programs. In this case, plays or scenes in *wayang* could be used to enable the viewers to receive government messages. To this day, the government and its authorities use *wayang* art as a means of gathering the masses. Performances, which are usually held overnight as they last approximately eight hours, not only contain teachings about life,

but also serve as a means of communication between the government authorities and the community.

This article discusses the factors behind the selection of *wayang* art as one of the tools for spreading messages of development, and how the New Order government implemented *wayang* art as a communications medium, which, according to our literature review, has not yet been sufficiently examined. This research used a historical method that consisted of four stages, namely heuristics, criticism, interpretation, and historiography. The authors had used historical sources, namely contemporary records and national archives, to support our research, as well as secondary sources in the form of books, journals, and interviews from *dalang* who performed during the New Order period. Additional data for this paper came from contemporary newspapers such as *Kompas* and *Kedaulatan Rakyat*, and *Tempo* magazine. This article is expected to enrich the historiography of the New Order, especially on how the government viewed and utilized art pragmatically to achieve government goals.

RESULTS AND DISCUSSION

Wayang Kulit Art in Javanese Society

Indonesians have been familiar with *wayang* art for centuries, since before any foreign civilization influenced Indonesia, and even since before Hindu culture entered Indonesia. Long ago, *wayang* performances were very simple, consisting only of images that were described with the spoken word.

They began as Javanese religious ceremonies rooted in animistic beliefs and dynamism. Later, *wayang* performances began to get more complicated in the days of Javanese Hinduism.

Wayang kulit is one form of performance that is very popular and is favored by various layers of society in Java, especially in the regions of Central Java and East Java. Due to its popularity, *wayang kulit* is the only type of puppet show that has survived in Java to the present day. The word "*wayang*" (meaning puppet) comes from the Javanese "*wewayangan*," which means shadow. It is said that *wayang* or *wewayangan* was so called because, in the old days, the audience stood in front of a screen called *kelir* while the *dalang* operated the *wayang* from the other side of the screen, which was lit by a lamp so that the *wayang* would cast a shadow onto the screen. The audience did not see the puppeteer, but only the shadow of the puppet, making it appear as if the shadow on the screen were a living human.

A *wayang kulit* is a two-dimensional puppet made of leather. Walujo (1995) had described the *wayang kulit* as a puppet doll made of animal skin - such as cow skin or buffalo - which had been flattened, cut, shaped, painted, and decorated with many colors to make the different characters more easily distinguishable.

Based on the source of the story, the types of puppets in Java include *wayang kulit purwa*, which originates from the stories of *Ramayana* and *Mahabarata*, *wayang madya* from *Serat Pustaka Raja Madya, wayang gedhog* from *Serat Panji*, *wayang klitik* from *Serat Damarwulan* (Mertosedono, 1986), *wayang golek* from *Serak Menak*, and *wayang beber* from *Serat Panji*. Other types of puppets that emerged in the twentieth century include, *wayang kancil* (stories about animals or stories from *Serat Kancil Kridamartana)*, *wayang dupara* (stories of *babad*), *wayang suluh* (stories of the struggle to expel the Dutch colonial power), *wahyu* puppets from the *Serat Perjanjian Lama*, *wayang sadar* (stories from the *Wali Sanga)*, and *wayang buda* (stories from *Sutasoma)*. The types of puppets that still exist today include *wayang kulit purwa*, while others are said to be quite rare or even extinct nowadays (Soetarno et al., 2007).

The core of Javanese culture, though not its entirety, can be traced from *wayang*. *Wayang*, which was originally an oral storytelling method, is now a performance art. Like art in general, it has multiple functions such as conveying cultural messages directly or covertly and instilling and reinforcing certain cultural values. In disseminating knowledge, *wayang* can be a very reliable communication medium in a society that still relies on oral knowledge transmission and other unwritten traditions (Retno et al., 2017). Furthermore, Javanese culture, as the most populous subculture in Indonesia, has a considerable influence on the rest of Indonesian culture (Sardjono, 1995).

As mentioned previously, the literal meaning of *wayang* is "shadow," but with the passage of time, the meaning of *wayang* has changed. At present, *wayang* can mean

stage shows or performances; it can also refer to actors and actresses (Guritno, 1988). Above all, the primary function of the *wayang* puppet theater is entertainment. It has been significant in the development of Javanese culture and its values, both philosophical and moral (Korsovitis, 2001).

The most popular form of *wayang* art is the *wayang kulit Purwa*. In essence, *wayang purwa* is described as symbolizing human life on earth. Puppet shows of various forms and types, regardless of when they were developed, are always referred to as *wayang purwa* shows. Of the many kinds of *wayang* theater performed in the archipelago - except in West Java - *wayang purwa* are consistently the most popular compared with other types of shows or puppets. The typical *wayang kulit purwa* play is full of life lessons and values, as they are intended to build up the character of the Javanese to help them live as quality human beings in accordance with Javanese culture.

In the course of its distribution, *wayang*, which was originally an oral tradition, was then developed into a written tradition in the form of literary work. After this development, the progress of the art form can be traced through examining the contents of the various written stories. Even when the stories are recorded in writing, there are often differences in the characteristics associated with characters, or inserted stories. *Wayang* thus reflects the path of the dualistic mind of the Javanese, who tend to divide things into two groups based on how they are opposite or contradictory, though, in reality, they may be similar (Sumaryoto, 1990).

It cannot be denied that the inventor and creator of *wayang kulit* was Javanese. Puppet art has become so embedded in the lives of Javanese people that it is now highly respected by every Javanese individual and its lessons are implemented in their lives. People learn the importance of values through *wayang* and are educated so that they can live well with the guidance of religious teachings. Since Indonesians now expect puppet shows to play this role, the more powerful a play's impact to the community because of its messages and values, the longer that play will be popular and entrenched in Indonesian society, especially among the Javanese people.

Wayang unites Javanese society as a whole in two ways. Horizontally in that, it is found in all geographic areas in Java, and vertically since it is enjoyed by all social groups in Javanese society (Koentjaraningrat, 1984). In *wayang kulit* - the most popular *wayang* in Java - the role of the puppeteer is central. It is the puppeteer who moves the puppet characters into "life," by improvising according to the puppeteer's ideas and concerns. The position of the puppets in Javanese culture is very central because *wayang* is at the core of Javanese culture. *Wayang* plays a role in Javanese culture, so the puppets serve as a reference for philosophy, orientation, behavior, and expectations of the Javanese people. The essence of Javanese culture is a person who has a *jiwa-jawi* (Javanese soul), in the sense that a person is considered Javanese if he applies his Javanese principles in his daily life (Achmad, 2013).

The stories in the puppet shows reflect the daily conditions and cultural orientation of the community at each moment in time. Therefore, it is not surprising that the transformation of *wayang* values and norms into Javanese culture takes place very intensively. Puppet theater culture is one of the elements that shape the Javanese personality. The *wayang* tradition is not only a means of preserving the inheritance of Javanese cultural values and norms but also has become mythology that serves as a source of inspiration for the dynamics of Javanese culture. On a broader scale, *wayang* mythology has been a tradition and culture that underlies and plays a major role in the form and character of Javanese culture (Gauthama et al., 2003).

Delivering the Message of Development Through *Wayang* Art

In 1965, the New Order regime was born from a social and political coalition that opposed President Sukarno, the PKI (*Partai Komunis Indonesia* or the Communist Party of Indonesia) and left-wing groups in Indonesia during the previous years. Although many groups such as intellectuals, businessmen and political groups who were anti-communist were involved, the military leadership was the centre of the coalition. According to Aspinall & Fealy (2010), the first task of the New Order regime was to eradicate communist groups (the killings of approximately 500,000 persons in 1965-1966) and to establish a new administration with economic and political stability as its basis.

Prior to the New Order era, the world of *wayang* was marked by a competition between political parties seeking influence in society. Between 1960–1965, *pakeliran* (the Javanese term for performances or shadow puppet shows) in the villages were lively and profitable. In the harvest moon, puppet shows would always enliven the commemoration of national holidays and other important events. *Wayang* art is one type of folk art that was very popular with the public.

The political situation in the early 1960s was characterized by inter-party competition. Before 1965, political parties used the relationship between the community and local arts in their efforts to build support and consensus for their programs. The puppeteers were divided into three major groups called NASAKOM (Nationalism, Religion, and Communism). With the puppeteers divided along party lines, w*ayang* shows were no longer merely rituals and sources of entertainment but were rather, used by the government both covertly and blatantly as a means of spreading propaganda on behalf of each political party. Among the major parties that existed at the time, the Indonesian Communist Party aided a great deal of attention to the potential of the *dalang* in mobilizing the people for their party's purposes.

According to Soetarno et al. (2007), after the events of 1965, art activities throughout Indonesia stalled for about half a year. Some puppeteers who had been members of certain parties were killed or imprisoned, while others who were suspected of having

been involved with the Communist Party movement were prohibited from playing for a certain time (Kuwato, 2001). As a result of these events, in the next few years, the world of puppetry became lonely and stagnant. This freezing of the puppeteers' creativity, especially among the progressors of the *keraton*, was resisted by some puppeteers, especially Ki Nartosabdo, who developed a new form of caressing with fresh nuances, hilarious conversations, and interludes with various creations (Soetarno et al., 2007).

A year after the events of 1965, as many as 60 puppeteers gathered in Surakarta, invited by Soeharto. They listened to F. Soetrisno, the head of the Central Java Cultural Affairs Inspectorate; deliver a lecture titled "*Orde Baru dan Seni Pendalangan*" (The New Order and The Art of *Dalang*). Soetrisno stated that artists must be careful because of their responsibility to society and must ensure that they were not lax in paying attention to social problems (Gronendael & Victoria, 1985). In realizing the programs from the beginning of the New Order government, Soeharto approached the *dalang* in a planned and slow manner.

Soeharto's approach to the *dalang* was implemented even before he was serving as President. This was in line with Soeharto's background as a Javanese man who adhered to the teachings of *alon-alon asal kelakon* (Javanese proverb, means 'slow but sure" as a literal translation). He considered that the role of art and culture was important in fostering a healthy society and that art must be based on Pancasila. The New Order would later fight to influence all fields, including culture and art (Soeharto, 1967).

Entering the New Order era, President Soeharto used Javanese culture as a reference in the implementation of leadership management given to the wider community. Soeharto's policy toward the growth of culture during his reign was undeniably an implementation of the factors of interest to be achieved. On the one hand, Soeharto used culture as a vehicle to strengthen his power; on the other hand, he strangled culture by prohibiting and limiting spaces for cultural expression.

Soeharto, as the center of the New Order, realized that traditional *wayang* art could be used to communicate his ideas to the community. Soeharto requested that all *dalang* to make *wayang* plays that could be used as two-way communication for the development and application of Pancasila in everyday life. This was conveyed by Soeharto after *Pekan Wayang Nasional II* (the Second National *Wayang* Week) in late March 1974 and was delivered through a speech without script. ("Harapan kepala negara", 1974). Two important aspects of *wayang kulit*, history and religion, were seen as particularly useful to Soeharto because they could influence people's thinking. History essentially connects the collective lineage of Javanese people who live in the world today to the ancestors who appear in the *wayang kulit*, in stories that are understood as myths. Myths that are linked with history strengthen people's belief in the relevance of *wayang* to their lives (Darmoko, 2017).

These aspects are not the only reasons why Soeharto chose *wayang* as his trumpet to deliver his programs to the public.

Soeharto's passion towards the art of *wayang* is ingrained since childhood. He acknowledged that the roots of the village and the environment in which he lived were always in the midst of *wayang*. In other words, the philosophy of *wayang* is embedded in him (Soeharto, 1989). He was also driven by the fact that around 80% of Indonesia's population at that time lived and worked in rural areas. Such communities were generally too poor to have newspapers, radios, or televisions. Only 20% lived in urban areas with access to these media. In other words, rural communities largely depended on traditional arts such as *wayang kulit* as the basis of their media and information.

Even though radio and television already existed in several villages, the delivery of information to rural communities with low levels of education had to be done slowly. Usually, the people responsible for providing this information were the village heads or the *dalang*. Although newspapers also existed, people still depended on *wayang* as a source of information from the outside world because they were entertaining and useful (Walujo, 1995). On the one hand, the *dalang* also did not mind conveying messages from the urban centers to the people in the countryside because the *dalang* themselves were also given a lot of assistance and attention by the government ("Sekitar pekan wajang Indonesia", 1969).

Apart from Javanese people, *wayang* art also affected many people living outside Java. *Wayang* arts are spread not only in Java, but also to people in major islands in Indonesia. Many of them are mainly young people who perceived *wayang* not merely as entertainment, but there are lessons that can be obtained. Some of them knew *wayang* after visiting Java and introduced them to their hometown. ("Suara-suara anak muda sana sini", 1974). Some people from Manado, Kalimantan, and Sulawesi also knew a lot about *wayang* because of the widespread performances that were held since the beginning of the New Order government ("Harapan kepala negara", 1974). Reflecting on numerous people outside Java who knew and understood about *wayang*, Soeharto did not hesitate to choose *wayang* as a medium of information for the community.

In December 1966, shortly after the bloody coup of 1965 terminated Indonesia's move toward communism, the government held a meeting between the *dalang* and high-ranking officials in the government. The meeting discussed the position of the *dalang* in the community, especially in normalizing the post-1965 situation. (Gronendael & Victoria, 1985) To effectively utilize *wayang* art, Soeharto made use of the great *dalang* because they were already considered community leaders, and it was easy to gather masses of people who were willing to listen to them. The task of the *dalang* became obvious during a meeting in Jakarta on April 10–14, 1969, which was attended by 59 *dalangs* from various regions in Indonesia (Bali, East Java, Central Java, Yogyakarta, West Java, Jakarta, Lampung, and Medan). President Soeharto also took part in a meeting with the Minister of Information and the Minister of Education and Culture. He asked the *dalang* to stimulate the

public's awareness of their responsibilities as citizens. Soeharto explained that the *dalang* must protect the community to carry out their duties in development. According to Soeharto, the *dalang* function to propagate government messages to the public by using *wayang* stories. (Schechner, 1990).

In October of 1969, the *dalang* held a meeting and agreed on several points. Among them are: 1) fulfilling the function as artist and teacher in *wayang* arts, 2) respecting and maintaining the integrity of the culture in *wayang* arts, 3) devoting all their strengths, together with the whole nation, developing the country, under the auspices of government programs, and 4) unite in cooperation. (Gronendael & Victoria, 1985) At the same time, masterminds are in an institution sponsored by the government and under military supervision. In July 1969, the government established Ganasidi (*Lembaga Pembina Seni Pedalangan Indonesia* / Institute for the Development of Indonesian *Dalang* Arts) in Semarang, Central Java. In 1971, the government established Pepadi (*Persatuan Pedalangan Indonesia /* Indonesian *Dalang* Association). The two organizations shaded by Golkar (state-sponsored political party), the work programs of these organizations included holding *wayang* shows and carrying out *wayang* festivals held every five years (Pausacker, 2004).

In late 1960s, Bappenas (Badan Perencanaan Pembangunan Nasional / the National Development Planning Council) was dominated by a new generation of Western-educated economists and technocrats led by Professor Widjojo Nitisastro. The council proposed and implemented a sequence of five-year plans. The initial plan is REPELITA I (The First Five-Year Development Plan), which implemented in 1969–1973. The plan focused on infrastructure and production of staple foods. ("The State and Economic Development", 1993). The main emphasis of REPELITA I was regarding the economic sector, especially in the agricultural sector where most of the Indonesian population worked. Extensive attention was also given to attempts in suppressing the number of births, with the view to prevent the ineffectiveness of economic growth caused by uncontrolled population growth. Such a plan could not succeed unless the people, especially villagers, were willing to participate in the plan.

The government focused on establishing the basic institutions that were needed for economic development. Because most Indonesians were rural dwellers, the focus of the strategy was primarily on promoting the rural economy and specifically achieving rice self-sufficiency. Agriculture, including irrigation, received one-third of the development budget during the REPELITA I period. This period was a trial for the design and implementation of many future development programs (Husken et al., 1997).

In line with the implementation of REPELITA, which began on April 1, 1969, the *dalang* were used by the government to disseminate development programs through

pakeliran, to inspire the community through awareness so that they would participate in development programs. *Wayang* at that time was indeed an entertainment that was in great demand in all circles. Any show that was performed, whether in a city or village, was packed with spectators and vendors so that the theater looked like an impromptu night market. When the *dalang* had started the play, there was reciprocity between the *dalang* and the community, by which, in addition to being entertained, the audience also learned from the *dalang*.

Most farmers and rural communities, especially in Java, were still very traditional in their way of life and thinking. The government needed their cooperation, and one of the easiest ways to sway them was through the actions of *dalang* who served as community leaders. As a Javanese man who had lived among such people, Soeharto understood how *wayang* could be a suitable spearhead of communication on behalf of the programs he was promoting in the community, especially in the villages. As explained above, the task of the *dalang* was clear by April 1969. At that time, Soeharto explained at length how the Five-Year Development Plan would have to work. He explained that the *dalang* would have to help convince the masses to take up their tasks.

Soeharto continued making his point regarding the five-year program previously presented at a meeting on April 10–14, 1969, especially regarding the delivery of messages in the agricultural sector. The goal was to increase the availability of food and to work diligently for farming communities, then to deliver messages first on social topics, and later on the main priorities related to population control. The tasks of the *dalang* and the role of *wayang* in promoting these programs took place during the New Order government. The main concern during REPELITA I (1969–1974) to REPELITA III (1979–1984), was development in the economic, agrarian, and social sectors.

After introducing REPELITA to the *dalang*, the President then described several plans and a timeframe for the future. The President highlighted important points that were directly related to the community, such as clothing and food, primarily in the agricultural development and industrial development sectors. At this point, the President asked the *dalang* to help him recruit the masses and inform them of their duties. It was hoped that they could devote their energy toward helping REPELITA succeed and preparing for the future. Soeharto's believed that this would allow the puppeteers to convey information to the public by not departing from existing standards (Gronendael & Victoria, 1985).

After the meeting in April, the government, together with *Ganasidi* (*Lembaga Pembina Seni Perdalangan Indonesia*) held the first *Pekan Wayang Nasional I* (National Puppet Week) in Jakarta at the end of July 1969. The aim was to create a space to bring *dalang* together and a means of channeling aspirations between the government and the community through the puppeteers ("Sekitar pekan wajang Indonesia", 1969) After the government

proved its seriousness through *Pekan Wayang Nasional I*, the answers of the *dalang* then came out in October of the same year. They agreed and promised to hold fast to the art of puppetry, and to help the government carry out its development programs (Gronendael & Victoria, 1985).

With the *dalang* staying true to the traditions of *wayang* puppetry and providing information through *wayang* plays, the *dalang* and the people were expected to avoid negative incitement and any potential failure of REPELITA I. Through *wayang*, Soeharto ensured that REPELITA I and REPELITA II were two brothers who would work together to give birth to the next REPELITA. Upon returning to their respective regions, the *dalang* were expected to learn about the development on both local and national levels. Daily life must also be stressed with regard to the philosophy of Pancasila through *wayang* ("Suara-suara anak muda sana sini", 1974).

For them to provide guidance to the community, the *dalang* was required to master many subjects to become *mumpuni* (qualified), in Javanese terms. A *dalang* had to be a person of quality beyond other members of the community, and had to be able to provide lessons; thus, he had to study long and hard to prepare for this role. The *dalang* had to function as an artist, an entertainer, a teacher, and as a speaker ("Dalang Laris", 1982). The additional functions of a *dalang* included those of a communicator, instructor, trainer, educator, and member of the clergy, who was always obliged to invite the community to do well

according to the teachings of their respective religions (Sujamto, 1992).

In President Soeharto's speech that opened the third National Puppet Week which was held on August 1-4, 1978 (Soeharto, 1978), he advised the *dalang* to become the medium of information:

> " *... The art of dalang is not a simple thing. Because wayang stories do not only contain literary values but also philosophical values. Therefore, an artist mastermind is essentially a communicator who delivers certain messages through puppetry ... so in fact he can take part to direct the development of our nation, especially the huge number of wayang lovers. As a citizen of a developing country, it is appropriate if a dalang can slip a development message to his audience ... The message of development can be conveyed, while the integrity of the puppet art is not disturbed.*"

In providing pro-development or counseling messages, the *dalang* used *lakon wahyu* more often than the other types of plays. According to the puppeteer Ki Sukatno, this type of play is the most flexible, which makes it useful for conveying messages. Therefore, it is commonly used as a medium for campaigns and other information efforts. *Lakon wahyu* was highly favored by the Indonesian society, and its flexibility meant that it could be staged at any number of events such as campaigns or celebrations. In addition, the plays

performed sometimes depended on requests from the audience. In addition to using *lakon wahyu*, many *dalang* also used war plays and slapstick shows because these were liked by the people ("Memasyarakatkan wayang kulit Purwa gaya Jawa", 1977).

Government messages conveyed by *ki dalang* were often presented in the form of a dialog, song, or comedy routine through a *goro-goro* scene (commonly read *gara-gara*) or a first-track scene. Many scenes in *wayang* plays told about the destruction caused when a natural disaster hit a country. However, in every episode or play of a *wayang* performance, the characters successfully overcame whatever problem was presented. The *dalang* who performed these shows later recounted that, after the end of a show, the *punakawan* would appear with a happy expression and a humorous attitude to tell jokes. This was symbolic of the belief that, after any chaos or rioting, the small people rather than the *ndoro* were the first party to benefit.

The *goro-goro* scene was considered by the *dalang* as the scene in which they were most free to talk about anything they chose, or to offer information and social criticism. In addition to this, government messages conveyed through *goro-goro* scenes should not damage the beauty of the performance or to depart from tradition. The first *Jejer,* which was also used by the *dalang* to convey government messages, is the first scene in a *wayang* performance and is also referred to as the opening; in it, the *dalang* begins by describing the situation of the country where the story will take place.

One such scene, for example, consists of a dialog between a king and his ministers who were trying to determine how they would address a problem. However, in this introductory scene, the puppeteer was not as free to deliver illuminating messages as in the *goro-goro* scene.

Opportunities such as the *goro-goro* and *punakawan* plays were used to convey messages about familiar situations that occurred in everyday life. One message, for example, was concerned about the condition of the neighborhood of the RT (*Rukun Tetangga* / Neighborhood Association) after it had rained: muddy and full of garbage, with clogged drains. According to the puppeteer Ki Anom Suroto ("Penanggungan para dalang", 1981), difficult messages were usually handed down to the *dalang* by the officials, who would ask the *dalang* to incorporate these messages into the main story of the play, as this was considered to make the message "more authoritative." Yet behind it all was the ability of the puppeteers themselves to work the puppets, and even when they were not specifically tasked with a message, they often inserted development-related messages promoting such programs as P4 (Upgrading Course on the Directives for the Realization and Implementation of Pancasila, family planning, and the election itself ("Penanggungan para dalang", 1981).

Walujo (2000) provided us with one example in which a dialog or slapstick routine between *punakawan* in a *goro-goro* scene which conveyed a development-related message:

Petruk: Bagong's trademark is that, if he is not called by the sound of the gamelan, he does not want to come. Especially seeing the temple lights already lit with kerosene. Already … Let me call with the *gending dolanan*, maybe Gareng and Bagong will match the sound now. At this time the atmosphere of our country is under construction. Not only are the cities being built, but even the villages are not missing out. Even though the country has developed, if it is not also intentionally clean, of course the atmosphere is not beautiful. Therefore, cleanliness is very necessary. For example, in cities, people throw garbage and litter in a ditch, in a river. But in the rainy season, the garbage can cause clogged drains that can caus flooding. Even though the village also does this, poor hygiene results in poor quality of health. Therefore, there is cleanliness of the city and also the cleanliness of the village. Remember, keep a clean *gending* village.

Bagong: Every Petruk appears to be always grumbling. Indeed, in reality, cleanliness is the foundation of health. In order not to disturb the mind, let's work together with the neighbors, so there will be no dispute later.

These Dagelan Petruk and Bagong plays contain development-related messages about village cleanliness and mutual cooperation. *Ki dalang* was trying to convey development messages about cleanliness in a language that would be easily understood by the

audience. The delivery of this message would usually be supported by punakawan gestures, which would make the audience laugh, so that the messages would not be boring.

Such insertions could be done *medhang miring* (smoothly) into a standard scene, or delivered through *nyampar pakoleh*, i.e., unofficial scenes such as *Limbuk-Cangik* scenes or *perang ampyak* that would be added to a show. Dialog in unofficial scenes was usually inserted in the form of a short message with the aim of informing the audience briefly rather than explaining an issue in detail. One example is in the following scene:

Cangik: Human life is completely opposite, boy.

Limbuk: What?

Cangik: Wealth so much, no children. I have nothing, every month I keep bothering to the point that I never perform. Because I have more children.

Limbuk: It's natural. You don't use calculations yourself, teachings that have been disseminated for the welfare of the new family. Planning family development, that is, Family Planning, must be carried out, not only understood.

Cangik: Yes, already. I'm 70 years old, what do I want? But the arena for giving the power is sometimes you still want to give birth again. Even though your father has me "*streng*."

Limbuk: What horse is in the *streng*?

The message conveyed in this piece about the Family Planning program was inserted into an unofficial scene in a *cangik* and *limbuk* play, as implied by *Ki dalang*.

CONCLUSION

The use of the *wayang* theater genre as a means of distributing messages about development programs cannot be separated from the fact that the island of Java has the largest population of any of the Indonesian islands. *Wayang* holds a central position in Javanese society and is regularly used as a guide for human life and activity. The New Order government considered *wayang* as a potentially effective tool for conveying information to the public, especially in villages. The tradition of *wayang*, especially the shadow puppets used in Java, is considered to play a major role in preserving and transmitting Javanese culture. The stories in *wayang* reflect the lives and everyday conditions of the Javanese people.

The modern use of *wayang* is inseparable from its long history. As a form of performance, it is very popular and is favored by people in all levels of the society in Indonesia. *Wayang* can also be used pragmatically as a tool to achieve government goals and interests. It is no wonder that Soeharto, who was Javanese himself, saw *wayang* as something that could attract the masses and serve as an effective means of disseminating information about development programs during the New Order.

Before the New Order era arrived, *wayang* art had long been used as a propaganda tool. At the beginning of the New Order era, *wayang* performers were charged with a specific task under the supervision of the government and especially under the Ministry of Information. In keeping with the ongoing Five-Year Development Plan, the main concerns of this plan were the economic, food security, and social sectors. *Wayang* was able to attract people, especially those in villages with limited access to other media, to find out directly about the programs recommended by the government. Using introductory and *goro-goro* scenes, the *dalang* willingly helped the government in this way.

This study has attempted to examine the extent to which state relations affect art and to which performers can be political messengers. The relations between the society, the *dalang*, and the government, can explain the importance of *wayang* art as a medium of propaganda in the New Order era. This research also confirms that the New Order government is filled with Javanese culture, and the New Order government perpetuated the culture through *wayang* arts. The relationship about *wayang* and its impact on society as a government instrument is still a major issue worthy of further exploration.

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Towards an Ethical Representation of Others: Camilla Gibbs' *Sweetness in the Belly*

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ABSTRACT

The issue of ethics in representation of others is a new direction in studies about representations. Although all claims to the authenticity of representations have lost their validity, especially after the poststructuralist intervention, it is still theoretically deemed possible to think of representations of others which show some measures of ethicality. The present article argues that Camilla Gibb's novel, *Sweetness in the Belly*, in which the Canadian non-Muslim Gibb represents the Muslim people of Ethiopia is one such representation. The article, mainly drawing on theories of representation, maintains that the novel's conditions of production and reception make it an example of a representation of others that strives toward ethicality. It is then suggested that although Gibb's text does not totally escape the embodiment of some colonial discourses, it can still, to a great extent, be considered an ethical representation of others due to some evidence, including the professed intention of the author, some narrative strategies in the text, the author's awareness of discourses of power, implied in the novel, and finally the reception of the novel by the readers and critics, which further manifests its success in combating the stereotypical images of its objects of representation, the Muslim people of Harar.

Keywords: Authenticity, colonial discourses, ethics, hybridity, realist fiction, representation of others, *Sweetness in the Belly*

INTRODUCTION

Representation in general and representations of others in particular have always been problematic subjects. In confronting any representation, whether fictional or nonfictional, one can always wonder how authentic it is or how much truth it holds. In spite of the fact that poststructuralists have

rightly warned us against essentializing truth and searching for absolute truth, we can still wish to have some representations which are closer to reality than others. As Livingstone put it, "we can surely say that some representations, like some maps, are more or less adequate, more or less authentic, than others" (Livingstone, 1998, p. 18). This desire to come across such representations is almost frustrated when we notice that many critics, as it will be further discussed later, argue for the impossibility of authentic representations. However, it is noteworthy that some writers who have attempted representations of others, to varying degrees, have at least passed the test of ethicality of their representations, even if the authenticity of their works have been challenged. Ethics, which according to Peter Singer in *Encyclopedia Britannica,* is concerned with "what is morally good or bad, right or wrong" (Singer, 2018, Ethics article, para. 1), has a direct relation to truthfulness, no matter how relative it might be, as in being ethical, one feels it a moral obligation to be as authentic as one can. In other words, a less discussed side of any representation is the ethical aspect of it, which even complicates the issue of authenticity in representation as it raises the question as to how much effort the writer has put into offering a representation which can be considered a moral rendering of some reality in the outside world. In this paper, I intend to argue that Camilla Gibb's realist novel, *Sweetness in the Belly* (Gibb, 2006), is an example of the representations of others which manifest the writer's endeavor to be as ethical and resultantly

as authentic as possible. In other words, we can still pinpoint some representations which are better, and Camilla Gibb's novel is an example of such cases of better representation of others. In fact, Camilla Gibb, in her realist fictional work, offers a case of the representation of others which is not completely authentic, similar to many representations; nevertheless, it shows a great measure of being ethical, and, as a result, becomes one of those better representations which Livingstone expects. In what follows, after some theoretical deliberations, it is argued why Gibb's work can be considered a case of an ethical representation of others—an ethical representation which is not thoroughly authentic or positive.

MATERIALS AND METHODS

This research aims to make a case for the ethicality of representation of others in *Sweetness in the Belly*. Therefore, as an important requirement, first some literature in relation to the concepts of representation and authenticity of representations, especially the representation of others, is reviewed. Then, the notion of ethicality in relation to representations is probed into and some factors which can be considered as contributing to having ethical representations are discussed. As a final step, through a close reading of Gibb's novel and a survey of its circumstances of creation and reception and against this theoretical background, it is argued that Gibb's novel can, to a great extent, be described as a text which offers an ethical representation of others.

Representation

Mitchell asserted that "representation is an extremely elastic notion which extends all the way from a stone representing a man to a novel representing a day in the life of several Dubliners" (Mitchell, 1995, p. 13). Stuart Hall, a prominent scholar of cultural studies, defined representation as "an essential part of the process by which meaning is produced and exchanged between members of a culture. It *does involve* the use of language, of signs and images which stand for or represent things" (Hall, 1997, p. 15, emphasis in original). Stressing throughout that meaning is produced through representation, Hall (1997, p. 24); referred to three main approaches to representation of meaning through language: the reflexive approach in which language was believed "to *reflect* the true meaning as it already exists in the world" the intentional approach which focused on the speaker or the author and held that "it is the speaker, the author, who imposes his or her unique meaning on the world through language" (Hall, 1997, p. 25); and the constructionist approach according to which "neither things in themselves nor the individual users of language can fix meaning in language. Things don't *mean*: we *construct* meaning, using representational systems—concepts and signs" (Hall, 1997, p. 25, emphasis in original).

In the discursive approach to representation, the other variant of the constructionist approach, influenced by Michele Foucault, meaning is "constructed within discourse" (Hall, 1997, p. 44).When it comes to representation of people, we can think of three forms of representations: our representation of people from a different social location to our own, our representation of people from the same social location as ours, and our representation of self. By social location, following Mohanty (1984), I mean the cultural, ethnic, class, racial and religious backgrounds of people as it will be explained, the connection between the source of a representation and the truth or falsehood of that representation is not strong and, indeed, there are no representations which are unproblematic.

Representing or speaking for people from different social locations to our own can be problematic because of the role of social locations in determining our knowledge of the world and our experiences (Mohanty, 1984). People from different social locations, as also argued by the postpositivists, can have different knowledge about the world and different interpretations of their experiences. Therefore, representations of people which are based on universalist assumptions or on our own experiences affected by our particular social locations are not necessarily true. However, these arguments do not mean that if one is from a certain culture, one can represent the people of the same culture with no problem. People with similar social locations do not necessarily have the same experiences or knowledge of the world as each other. Not only are there many sub-cultures in all cultures but there are individual differences between people within any culture (Narayan, 2000). In other

words, people with similar social locations can have different conceptualization of reality as realities are mediated by discourses. Even self-representations cannot give a true picture of the self as there are many mediatory forces, discourses and ideologies that affect the way we might represent ourselves, and that we may not be aware of (Alcoff, 1991).[1]

[1]Based on the above discussion, we might come to the view that we perhaps need to be more cautious when talking about the authenticity of representations, especially the authenticity of the accounts of 'native informants'.[2] Granting authenticity to the accounts of some people from a culture means disregarding the perspectives of others from the same culture (Kaplan, 1996, p. 187) and disregarding the mediatory discourses and ideologies affecting that representation. In other words, non-natives who represent us should not be our only suspects.

It seems that representation becomes a less problematic field if we focus on the discourses constituting representations rather than their truth or authenticity based on their sources and the knowledge of the sources of 'reality' (Shohat & Stam, 1994, p. 215). Although we need to acknowledge that there are few representations that are wholly fabricated and have no basis in some external reality, we also learn through especially postpositivist theories that realities are mediated by discourses and ideologies. In other words, examining the discourse or ideology embodied in a particular representation and then analysing/criticizing that discourse is much safer than examining the truth or authenticity of a representation. Examining the discourses entails analysing the power relations implicated in that discourse, the predominance of the discourse and the effects of that discourse on the represented. In fact, the effects of representation need to be considered as even more important than the source, the truth or the authenticity of it. Linda Alcoff also argues that the central point in representation is not the source of representation, but the effect of representation (Alcoff, 1991, p. 28). As she put it, "source is relevant only to the extent that it has an impact on effect" (Alcoff, 1991, p. 29). Instead of focusing on the source of the view we should see what the effects of the view are "on material and discursive practices through which it traverses and the particular configuration of power relations emergent from these" (Alcoff, 1991, p. 28-29). If representations, for example, keep on stereotyping and dehumanizing the subjects of representation, then we need to question them.

If we focus on discourses, then, we can perhaps argue that anyone can represent anyone else's and her own identity and experience. We need, of course, to be careful not to take any representation, of self and other, as pure truths about the subjects of

[1] a brilliant discussion of the problems of self-representation and of speaking for others, see Alcoff (1991).
[2] The term, 'native informant', was first used by Gayatri Chakravorty Spivak in her book *A Critique of Postcolonial reason: Toward a history of the vanishing present* (1999).

representations, as all representations are complicated processes involving selections and omissions of different 'realities', selections and omissions which are based on power relations, discourses and ideologies.

The representation of identity and experiences is apparently never free of problems. However, this does not mean that representations need to be abandoned. As Spivak (1990, p. 63) commented, "as long as one remains aware that it is a problematic field, there is some hope". Linda Alcoff also argued that if the person who represented was conscious of "the particular power relations and discursive effects involved", representations become less dangerous acts (Alcoff, 1991, p. 24).

Ethical Representations

Now that the ever present problem of representation, and in particular, authenticity in representation, has been discussed, we can move to a less problematic side of representation which is the ethicality of it. It seems that if having an authentic representation is almost an unachievable goal, having an ethical representation is a more plausible goal to strive for. Now the question is how we can measure or verify this adherence to ethics. In this article, the researcher has posited three factors for evaluating the ethicality of a representation: the intention of the writer, the conditions of the production of the text and the conditions of reception of the text. In what follows, these issues with regard to *Sweetness in the Belly* have been scrutinized and investigated.

Collins English Dictionary thus defines ethics: "the philosophical study of the moral value of human conduct and of the rules and principles that ought to govern it" (Brookes & O'Neill, 2017). Drawing on this and similar definitions, three factors contributing to an ethical representation are examined. As to the first factor, the relationship between ethics and the intention of the writer, it is noteworthy to say that being ethical is in direct relation to morality, and being moral, arguably, as some critics such as Elizabeth Anscombe have maintained, is an act of intentionality (Anscombe, 1981). Based on this premise, judging the ethicality of representation very much has to do with judging the attempts of the writer, within his/her means, to act morally and ethically while writing. The next two factors in relation to the ethicality of representations have been borrowed from Shady E. Cosgrove (2009), who, in his analysis of fictional representations, mentioned two equally important considerations for an ethical representation: the way the representation was produced and the way it affected the objects of representation as well as the readers. In relation to the first consideration, the conditions of production, especially in the case of realist fiction, it can be mentioned that the notion of accuracy is of utmost importance. A fictional representation which has any claim on realism should present information which is based on some measurable truth in the real world. For instance, a realist story about France should not introduce German as the main language of French people. This point, of course,

can be extended to more subtle issues in relation to the subject of representation. As to the second consideration, which is the issue of the conditions of reception, the main concerns are how the ones who are represented are affected by this representation and what conceptions about the represented ones are created in the minds of the addressees. In this regard, we can refer to Pat Sikes and Ivor Goodson (2001, p. 90) who, in relation to historical representations stated, the "key ethical consideration is how the research affects the people whose experiences, perceptions, behaviours, attitudes, or whatever, are the focus of the study". Alcoff's (1991, p. 26), statement, when she says that "one must look at where the speech goes and what it does there", also rightly emphasizes the fact that representations can have positive or adverse effects on their audience. This point of theirs is very much applicable to realist fictional representations as well. I short, an ethical representation, as argued in this article, can be described as one which shows the sense of responsibility of its author, both in its process of production and in its process of reception, and, at the same time, its author has the intention of being fair in his or her representation at any cost. An ethical representation shows the conscious awareness of its creator about the whole process of representation: before, during and after. In the above discussion about the authenticity of representations, the significance of the writers and readers' awareness of discourses of power was

stressed. Here, it can be further argued that if sincere attempt at morality is combined with the awareness of dominant discourses and power relations, there is even greater possibility that the outcome is a more ethical representation.

RESULTS AND DISCUSSIONS

Ethical Representation and *Sweetness in the Belly*

In what follows, I will argue that *Sweetness in the belly* is eligible for being considered an ethical case of representation of others as it shows the above- discussed qualities.

Here a short synopsis of the novel is provided. *Sweetness in the Belly* is the story of Lilly, a woman who had lived her life in Morocco, Ethiopia and Britain. When she was a child, her English father and Irish mother left her to the care of Great Abdal, a Sufi spiritual leader in Morocco and went on a trip from which they never came back. The orphaned Lilly had to leave Morocco after a few years due to political unrest and went to Harar in Ethiopia. In Harar, she adapted to the way of life of the Muslim people there and became the local Quran teacher. There, she fell in love with Aziz Abdelnasser, a medical doctor, who had modern views about the practice of Islam. The political turmoil, this time in Harar, caused Aziz to send Lilly to London though he himself stayed in Harar. In London Lilly lived as a refugee with other refugees from Africa, and worked as a nurse, all the while waiting for Aziz. After 17 years of waiting, she came to know that Aziz had died in a battle. The

broken Lilly went through a long period of recovery until she managed to return to normal life and even to think of love again.

The first claim of this paper is about the intention of Gibb, the Canadian non-Muslim author, to be ethical, moral and fair in her representation of others, the Muslim people of Ethiopia. As it will be discussed throughout this article, Gibb has consciously used some narrative strategies which contribute to the fairness and ethicality of the representations of others she offers in this novel. Still, an even more significant evidence about Gibb's intention to be ethical is her direct assertion as to why she started writing this novel. After she received her PhD in anthropology from Oxford University with a thesis on the subject of Harari people and culture, she felt that she had not done the justice to these people and their lives through her PhD thesis. In this regard, she said, "Part of what depressed me about my thesis was that I felt all the humanity had been expunged in the name of bigger theoretical statements. All the colour and texture and flavour of the place was missing. As were the people and their stories, the things that moved me while I lived there for a year with a local family" (Moore, 2005, para. 6). Thus, she herself asserted that an important motivation for her to start writing this novel was doing justice to some people through her writing or being ethical in her representation of them.

Here the discussion about the ethicality of this novel proceeds with the issue of reception of this work and then it moves on to the process of production of this novel.

Still, as it will be contended, the arguments about the conditions of reception and production cannot be neatly separated from each other. As to the point of the context of the reception of this work as well as the effect of her representation on the objects of representation, the Muslim people of Harar, it can be said that, as many reviews of the novel testify, this novel, unlike many dominant representations of Islam in the West, gives a more complex and less vilified representation of Islam and Muslims of Ethiopia. Particularly, her representation is against the current representations of Islam in the West, which malign Islam and emphasize the point of imposition of Islam and Islamic rules on women. This novel, conversely, focuses on the willingness of the Muslim woman protagonist of the story, Lilly, to embrace this religion, affirms her agency, depicts how her religion contributes to her reaching "psychic health" (Ameri, 2018, p. 7) and finally shows some people who live harmonious, organized and peaceful lives mostly due to their religion, Islam. The way some reviewers have described the novel in relation to its representation of Islam and Muslims, indicates that they have noticed a different representation of Islam being articulated by a Western writer. This novel has been called "an exquisite homage to Islam" (Evaristo, 2006), as a novel that "captures the intricate beauty of Islam through the eyes of a true pilgrim" (Leask, 2006, p. 166), and "a poem to belief" (Kirkus Reviews, 2005). It has also been said that the text "transcends the boundaries that are defined by the

propaganda-makers that pit Islam and the West against one another" (Stone, 2005, par. 9). It has been further stated that "through the white figure of Lilly, Gibb deculturalizes Islam and reveals the vibrant possibilities it affords—a fact often forgotten in today's political landscape" (Vasanthakumar, 2005, para. 7). As the quotations testify, various critics agree that the Western Gibb has offered a comparatively positive representation of Islam in *Sweetness in the Belly*. Such a representation can be considered ethical because it does not denigrate the religion and lifestyle of a people, and, as a result, definitely does not contribute to the creation of negative images of them; rather, it challenges the stereotypical renditions of their lives. Therefore, it is very close to truth to say that this novel is a case of representation of others with possibly positive effects on the lives of these others. Such an unlikely representation, which is against the current, might run the risk of not becoming the best-seller as this novel, which is published in the West, does not satisfy the expectations of its predominantly Western readers, who are used to negative and stereotypical images of Muslims and their creed, especially as popularized by Western media. Then, it can be further claimed that a representation's being against the popular current, in spite of the costs, has an important mark of ethicality, and this novel emphatically has this quality.

Interestingly, this text shows awareness of other diminishing representations about Africans and Muslims; in other words, the text itself draws the readers' attention

to the fact that there have been degrading representations such as Richard Burton's book, which have humiliated Ethiopians. In the novel, there are direct quotations from Richard Burton's book, *First Footsteps in East Africa; or, An exploration of Harar* (1856). As an example, on page 215 of the novel we read, "Burton called the place 'a paradise inhabited by asses.' He denounced the people as 'religious fanatics,' 'bigoted,' 'barbarous,' 'coarse and debauched,' 'disfigured by disease,' with ugly voices: 'the men's loud and rude,' 'the women's harsh and screaming'" (Gibb, 2006, p. 213). Lilly was shocked by these descriptions, and when she read about Burton's boasting about "being the one to break the guardian spell said to protect the city and its people" (Gibb, 2006, p. 213) and also about Burton's seeking "to tear away the shroud of Islam and render the Harari people naked" (Gibb, 2006, p. 213), she reacted by saying that "But he didn't break the guardian spell.... Islam was within and all around us" (Gibb, 2006, p. 213). In other words, the novel itself draws our attention to the misrepresentations, and, assigning to Lilly the role of an insider, shows her as criticizing the negative representations for their not being true. The novel pinpoints the distress of Harai people because of this misrepresentations by letting Nouria, the Harari woman, said to Lilly, "Maybe one day you will write another farenji [foreign] book and tell the truth," (Gibb, 2006, p. 213). *Sweetness in the Belly* is that 'farenji' book which offers a representation which is very close to the truth of what the author has experienced about the life of the Muslim

people of Harar, a representation which offers the beauties as well, embodying a discourse with uplifting effects on the lives of Muslim Ethiopians. As discussed earlier, in representations, the discourses embodied are of utmost importance and should be the center of any critic's attention.

In relation to the subject of discourses, it is important to note that the writer of this novel, as a PhD holder in anthropology is expectedly well-versed in the theories of Humanities, including the concepts about power and discourses and othering. Gibb's highlighting of the case of Richard Burton's text indicates Gibb's underlining the issue of representation and discourses and the opportunities and threats that they provide, the points which as an academician she knows and she shares through her work with the readers. In this regard Hannah McGregor stated, "Gibb does not unproblematically produce a consumable version of Harari culture for the sake of a white readership; instead she uses fiction as a medium through which to theorize cultural otherness and problems of representation" (McGregor, 2009, p. 101). In Gibbs's work, academia and the world of fiction mingle, and the result becomes an even more ethical representation which bears the fruits of the thoughts of many scholars in Humanities throughout the ages. In other words, Gibb's moral attempt to represent is an informed attempt of an academician, and it gives more weight to the ethicality of her work.

When we focus more precisely on the condition of production of this novel, there are important issues which point toward the ethicality of representation in the novel. First, there is strong claim to the accuracy of information about Ethiopia and Muslim people of Harar provided in this novel. Camilla Gibb, as mentioned before, wrote this novel after she completed her PhD in social anthropology in Oxford University, for which she needed to do some field work. She, therefore, spent a year among the people of Ethiopia, living with Harari people in their houses. As explained before, Gibb herself believed that her novel complemented her PhD thesis as the PhD thesis could not do justice to the experiences that she had in Ethiopia. In other words, this novel is partly the result of the extensive research of a scholar through library work and field work. As Lisa Grekul pointed out, "Gibb's extensive, first-hand research and scholarly essays on Ethiopia" are points that cannot be missed in appraising this novel (Grekul, 2010, p. 1). Cosgrove (2009, p. 135), as referred to earlier, considered research an essential feature of an accurate and ethical representation, no matter whether it was fiction or nonfiction. The circumstances of creation of Camilla Gibb's novel, as discussed, compellingly suggest that this criteria has been taken into consideration.

Another reason why this novel can be considered an ethical representation is that, in the novel, beauties and possible flaws of Harari culture were depicted alongside each other, a point which we could relate to the issue of accuracy of information. In other words, unlike many colonial and oriental texts which draw on the "exotic appeal of cultural difference" (Whitlock, 2007, p. 55)

and "turn the literatures/cultures of non-Western world into saleable exotic objects" (Huggan, 2001, p. 10), no romanticizing or exoticizing of this culture happened. The text graphically described circumcision of young girls and segregation between sexes, and shows Lilly's horror at such sights. The result of presenting Harar and its people in this light is that a complex and nuanced picture of the lives of Harari Muslims is produced which is neither absolutely good nor absolutely bad. Still, stylistically speaking, the positive attributes and descriptions outnumber the negative ones, so much so that the overall impression can be a more positive one. McGregor in this regard also emphasized the point that the text resisted the commodification of others through representing Lilly as a hybrid character. An important case in making her the hybrid character was her being raised and educated by both Mohammad Bruce, the European scholar and Sheikh Jami, the Muslim sufi. While she was immersed in Sufi practices of Harar, Mohammad Bruce "supplemented" her "diet of Islam with doses of other realities" (Gibb, 2006, p. 248). In relation to Lilly's hybridity and the issue of commodification of others, McGregor stated, the text "resists the dangers of the commodification and exoticization of otherness by theorizing the subject's negotiation of hybridity, the relationship between diaspora and homeland, and even the anthropological methodologies in which Gibb was trained" (2009, p. 112-113). Lilly in Hommi Bhabha's words, was "the *in-between* space—that carries the burden of

the meaning of culture" (2004, p. 56). Lilly as an in-between character was constantly negotiating the boundaries of identity and the notions of self and other:

> My white face and white uniform give me the appearance of authority in this new world, though my experiences, as my neighbours quickly come to discover, are rooted in the old. I'm a white Muslim woman raised in Africa, now employed by the National Health Service. I exist somewhere between what they know and what they fear, somewhere between the past and future, which is not quite the present. I can translate the forms for them before kneeling down and putting my forehead to the same ground (Gibb, 2006, p. 9).

Therefore, the static orientalist image of the inferior or exotic East is challenged or destabilized partly because as the focalizer of the novel, Lilly, occupies the liminal position of an Easterner and Westerner at the same time.

Against the type of representation of others that this novel has and in a way as a challenge to its being an ethical representation, Lisa Grekul raised the point that Gibb's work shows the signs of colonial discourse. As she says, Gibb "ultimately, albeit subtly, reinforces the very values which she explicitly eschews" (Grekul, 2010, p. 2). Grekul further adds that "Reinforcing the binaries it seeks to dismantle (self/other, colonizer/colonized, white/black), the novel illustrates the

deeply-entrenched nature of colonial discourses" (Grekul, 2010, p. 2). She rightly argued that Lily was the privileged character in the novel, and in many cases, she was positioned as the superior one to the Africans. She was the educated, versatile person in all situations and, many times, she was the morally superior one as well, and it was eventually in London, The Western metropolis, where she found her peace of mind, found her roots and settled down. Grekul finally concluded:

> While there is no question that *Sweetness in the Belly* attempts to challenge colonial discourses of "race" and identity, the novel ultimately illustrates that these discourses are too deeply-entrenched to be easily and effectively deconstructed, especially in the context of a realist narrative: in the end, whiteness remains, as it must, a category of superiority and privilege. (Grekul, 2010, p. 20)

In response to Grekul's point, some arguments can be raised. Indeed, we cannot deny the embeddedness of some discourses in the minds of the Western writer and also the readers of this novel who might be of different backgrounds, and the colonial discourse of the superiority of the 'whites' is one of them. However, it is also true that in spite of Lilly and others' awareness of her whiteness, as already discussed, through her representation as the in-between, hybrid character, the distinctions are blurred and her whiteness is also challenged. Therefore,

the very colonial discourse of the superiority of the white ones loses its strength and the hybrid "transnational" character of Lilly (Santesso, 2013, p. 135) gains the reader's sympathy not because of having the European root but because of having roots in different cultures of East and West with all their complexities and nuances. Moreover, as discussed earlier, it can be argued that there is enough evidence of the conscious use of different strategies in the novel by the author to convince us that deliberate defiance of oriental discourses is at work in the novel. Gibb seems to have won a measure of success in her fight against the undeniably embedded colonial discourses in her and her readers. The evidence of this success is all the reviews and feedbacks that she has received, and it seems that in these reviews, the explicit discourse of validity of the lifestyle of Muslim Harari people rather than the implicit colonial discourse of the superiority of whites has been noticed more.

CONCLUSION

Representations of people's lives and cultures, in fictional and nonfictional forms, have always been made throughout history and the controversies about their validities have also been going on incessantly. The present article attempted to maintain that in spite of the problems of representation, of authentic representations and especially of authentic representation of others, suggested by the scholars in the field, there still exist some texts which we can call more or less ethical representations of others, and then it was claimed that Camilla Gibb's *Sweetness*

in the Belly can be considered an example of such texts. As it was argued throughout the article, this claim is based on a number of elements in the contexts of production and reception of the novel; however, it is not far from truth to say that Camilla Gibb's professed intention as well as her academic background in humanities have had the greatest roles in this regard. Gibb, impressed by the culture of Harari Muslims, intentionally endeavored to redress the insensitive negative representations of these people through creating a more nuanced and more balanced representation, a point stated and implied in the paratexts and text of the novel. Moreover, her novel betrays the knowledge of a scholar in theories of humanities which critically look at equity issues in human societies, including theories in relation to race studies, hybrid identities and discourses of superiority and inferiority, and this knowledge and the extensive field research she has made are aptly applied to the creation of a fiction which is fair and ethical in the representation of others. The reception of the novel, as explained in the article, further suggests that the novel has contributed to the combatting of the reductionist images of some people who have a long history of being stereotyped; in other words, the aura of the ethicality of the novel has had real repercussions in the real word. It is still emphasized that an ethical representation, for the reasons already discussed, is not necessarily a completely truthful or positive representation, and *Sweetness in the Belly*, likewise, is neither all too positive nor thoroughly authentic. All in all, Gibb's *Sweetness in the Belly* can be given the credit for approaching the ideal of being an ethical representation of others and needs to be appreciated for that.

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SOCIAL SCIENCES & HUMANITIES

A Contrastive Analysis of Imperative Sentences in English and Javanese Language

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ABSTRACT

This study aims to identify the similarities and differences between the functions of imperative sentences of English and Javanese languages. The contrastive analysis used as the research method to compare the two different languages. Based on the analysis, in the English imperative sentence, there are seven functions which are a command, prohibition, invitation, request, advice, suggestion, and compulsion. While, in the Javanese imperative sentence, it has nine functions, which are a command, prohibition, invitation, request, advice, suggestion, compulsion, *panantang*, and *pangece*.

Keywords: Contrastive analysis, English imperatives, Javanese imperatives

INTRODUCTION

The word of contrastive derives from the word "contrast," which has the meaning to compare two things in order to find the difference clearly (Hornby, 2015). Then, the word of analysis is the identification or separation into parts with comment and judgment of the result of performance. As explained by Lado (as cited in Pranowo, 1996), contrastive analysis is a means of comparing two different languages synchronically to find similarities and differences. He also explained that contrastive analysis was considered as the comparison of the structure of language

to define the point that differed them and the differences of the source of difficulty in achieving the target of language (Lado, 1962). While Subyakto and Nababan (1993) said that using a contrastive analysis of two different languages, it could help the educator to identify the expectation, prediction and explained the interference. Numerous research used this technique organization as a way of classifying data (Wilkinson, 2000). In short, contrastive analysis is a study of comparing the two languages and as a term used in linguistics to find the difference between the units. It also as a means to differentiate the meaning of language in a sentence.

A sentence is described as a group of meaningful words that can make complete sense or feel as its units. Jackson (2002) defined a sentence as a grammatical structure combines with some clauses and had the subject and verb. It can contain an object, complement, and adverbial: usually written with a capital letter at the first word, and final full stop or other marks. In a particular sense, a sentence can be defined as a written by an initial capital and is ended by terminators such as period, exclamatory, or question mark. Frank (1972) defined a sentence as a full of prediction comprising a subject and a predicate with a predetermined verb. In short, a sentence is a group of words that apply the grammatical rule with at least has a subject and a predicate.

The classification of sentences based on its functions can be classified into four types; they are a declarative sentence (statements), interrogative sentence (questions),

exclamatory sentence (exclamations), and imperative sentence (command, requests). Frank (1972) classified a sentence according to the function into four categories, which were exclamatory, declarative, interrogative, and imperative. An **exclamatory** sentence is used for expressing someone's feeling or emotion. It starts with the exclamatory words or phrase, and ends with exclamatory mark. For example, "What a wonderful woman she is!" A **declarative** sentence shares an idea in order to convey information or make statements of an assertion, either by expressing pitch or starting a fact in speech. It is ended by the period while in written shape extensively utilized more regularly than the alternative ones. For example, "Tony plays the piano." For asking a question, we use an **interrogative** sentence, and we have to put a question mark at the end of the sentence. The verb used in an interrogative sentence always rises before the subject. For example, "Is that your pencil?" For saying a command or request, we use an **imperative** sentence to the listener or addressee. We use a period or exclamatory mark to issue orders or directives. The subject is not specified, and it can express the verb or predicate. For example, "Close the window!"

According to Hornby (2015), English Imperatives is a sentence that comprises of commands, requests, or prohibitions. It is addressed or spoken by the speaker to the addressee or listener to do something. English Imperatives has a different rule between the speaker and the addressee or listener. The speaker has the authority to

give a command to the addressee or listener to do something. Therefore, the addressee or listener should give a response to the speaker commands, requests, or prohibitions. In an imperative sentence, the "You" subject is understood. It has the meaning that the speaker gives a command to the listener or addressee, and she/he understood what the speaker said, even without using "You" as the subject. In here, the imperative sentence usually ends with a period, but it may also end with an exclamation point (!) to emphasize the strength of a command. Also, a question mark (?) would be used when a person can choose whether or not to do it because it is more polite.

As a language, English and Javanese have some similarities besides the differences. One of them is in imperative sentence or *ukara pakon* in the Javanese language. An imperative sentence is used when the speaker has the power or authority to give a command to the listener to do something. Within the English imperative sentence, the subject is not existent; however, the predicate is spoken. Meanwhile, in the Javanese imperative, sometimes the subject is stated or said by the speaker. In English culture, the levels of speech are not different. However, the different manners of speaking may vary based on the relationship between the speaker and the listener or addressee.

In the Javanese language, speaking with older people are different from the children or the same ages. This rule is called "*Unggah-ungguhing basa*." According to Setiyanto (2010), "*Unggah-ugguhing basa*" or the rules of language are divided into three types of main levels. They are *krama, madya*, and *ngoko* or high, middle, and low level. *Krama* and *ngoko* are the most commonly used in speaking. Each level in the Javanese language has its characters in terms of a set of vocabulary. Someone who has a high status will speak to someone who has low status by using *ngoko*, while the other will use karma as the more formal. Then for the necessary level of *ngoko* sometimes is used between friends with equal's level of status.

This study aimed at identifying the similarities and differences of the English and Javanese imperative sentence by using a contrastive analysis related to their functions. This study only emphases on the imperative sentences of English and Javanese that have the functions to give a command, prohibition, invitation, request, advice, suggestion, and compulsion. Then, the analysis of contrasting both of the languages can be a feasible manner to resolve the problem of interventions or interferences between the English and Javanese. This study can also help the readers to understand easily related to the functions of imperative sentences in English and Javanese.

MATERIALS AND METHODS

The sets of data used in this research were the imperative sentences that are stated or said in English and Javanese language. A documentary analysis of related articles, books, theses, journals, and internet sources was conducted as well as observation methods for data collection.

Then a contrastive analysis method was used to compare the English and Javanese language by identifying the similarities and differences between the imperative sentences of both languages related to their functions, respectively.

RESULTS AND DISCUSSIONS

The Contrastive Analysis of the Functions of English and Javanese Imperative Sentences

The imperative sentence as **command** asks the listener or addressee to do what the speaker says. The imperative sentences both in English and Javanese language are commonly used as a command. The imperative sentence as prohibition in English and Javanese has a similar meaning. The imperative sentence as **prohibition** means that the speaker gives a prohibition to the listener to do something. In the imperative as an **invitation**, it could be identified that the speaker gives the command to the addressee by using the imperative sentence to invite. It means that the speaker asks or wants the listener or addressee to follow his/her wants or needs. The imperative sentence as a **request** in English and Javanese language

has a more polite sense of meaning when the speaker gives the command to the listener or addressee. In the imperative sentence as **advice**, the speaker gives or offers the message or idea to the listener or addressee to do something better or avoid something worse. In terms of **suggestion**, it seems that the imperative sentence used as the command, but the listener is asked to do or not to do what the speaker's said together. Meaning that the speaker gives the suggestion to the listener or addressee to do or not to do something collectively. The imperative sentence as **compulsion** in English and Javanese language has a similar function. The listener or addressee has to do what the speaker says. There will be a sanction or punishment if the listener or addressee does not obey it. It happens in English and Javanese language. Even the imperative sentence as compulsion has a similar meaning to the command, but a compulsion imperative has more stress to the listener or addressee to do what the speaker says. The example of sentences English and Javanese Language related to their functions mentioned above are listed in Table 1 below:

Table 1

Example of imperatives sentences for several functions

Functions	English	Javanese
As command	Take my pencil! Go first! Turn off the lamp! Type down on your laptop!	Jupukna pensilku! Mangkata dhisik! Patenana lampu kui! Ketikna ning laptopmu!

Table 1 *(Continued)*

Functions	English	Javanese
As prohibition	Don't smoke in the room! The students are not allowed to smoke! Don't be noisy, Dad is sleeping! Children must not watch a horror movie!	*Aja udud ing jero ruangan!* *Bocah sekolah ora kena ngrokok!* *Ampun rame nggih, bapak nembe sare! (karma)* *Bocah cilik ora keno nonton film horor!*
As invitation	Come to my office this afternoon! Come to my office, won't you? Come to my brother's party tomorrow! Would you like to come to my brother's party?	*Kowe mengko awan dolana ning kantorku yo!* *Dolan neng kantorku, yo?* Sesok teko ning acara pesta masku! *Kowe teko neng pesta adiku yo?*
As request	Could you pass the sugar, please? Please, get the chalk in the teacher room! Will you come to my office this afternoon? Would you come to my wedding party this afternoon, won't you?	*Tulung jipuke gula yo?* Tulung, pundhutke kapur ing ruangan guru! Mbok kowe mengko awan dolan menyang kantorku! (ngoko) Sampeyan mangkeh sonten dateng wonten syukuran nikahanipun kula, nggih! (krama)
As advice	Be serious! Don't be a lazy person! Take medicine and you'll get well soon!!	Sing tenanan! Aja dadi wong males! Ombenen obate ben lek mari!
As suggestion	Let's read this novel! Let's take a break! Let's have meals together! Let's not go to that place again! Let's not be lazy!	*Ayo ndang diwaca novel iki!* *Leren dhisik saiki, yo!* *Ayo padha mangan bareng!* *Aja lungo ngono maneh!* Ayo aja padha males-malesan!
As compulsion	You must bring many vegetables! You must come here! You must study hard now!	*Kowe kudu gawa sayuran sing akeh!* *Kowe kudu teko rene!* *Kowe kudu sinau sing sregep saiki!*
As "*panantang*" in Javanese language	Put off that sign if you don't want to be hit! If you're brave, come here! You may hit fast in case you want to be wounded!	*Cabuten tanda kuwi yen kowe ora kepengen diantemi wong!* *Yen kowe wani mrenea!* *Gagean balangen yen kowe arep jalok benjot!*

Table 1 *(Continued)*

Functions	English	Javanese
As "*pangece*" in Javanese language	Just put all the snacks, don't give it to your brother, you're younger than him!	*Jupuken kabeh jajanan kuwi, kakangmu ora usah dingengehi, wong isih cilik wae!*
	Just play with your friends on the field, don't study hard, your mark will be all five!	Dolana terus karo konco-koncomu nang lapangan, ora usah sinau, bijine kowe ben lima kabeh!

The imperative function as "*panantang*" is only in the Javanese language. It has the meaning that the speaker asks or gives the addressee a challenge or encounter to do something that the listener or addressee is not afforded to do it. Besides the "*panantang*" functions above, the Javanese imperative sentence has the additional meaning as *pangece*. It has the meaning that the speaker mocks or ridicules the listener or addressee by giving a command to do something. In other phrases, they are in the opposite condition to the fact or reality, as stated by Antunsuhono (as cited in Kurniawati, 2013).

CONCLUSIONS

Based on the contrastive analysis used for the imperative sentences of English and Javanese language related to their functions, it can be inferred that the English have only seven functions which are a command, prohibition, invitation, request, advice, suggestion, and compulsion. While, the Javanese imperative sentence has nine functions, which are a command, prohibition, invitation, request, advice, suggestion, compulsion, *panantang*, and *pangece*.

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SOCIAL SCIENCES & HUMANITIES

Case study

The Importance of Internal Waters Delimitation to Secure State Sovereignty: A Case of Archipelagic State of Indonesia

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ABSTRACT

Internal water is a concept of maritime zone priory recognized at the early development of sovereign territories at sea. The concept of sovereignty in internal waters is similar to the concept of sovereignty on the land that archipelagic states have full sovereignty over their archipelagic waters. There are no other states' rights in such water zone. Unlike the case with other sovereignties, such as archipelagic waters (even though it is equally sovereign in these waters), other states have rights such as the right of innocent passage, the right to lay submarine cables, traditional fishing right and other noted rights. For such mandated reasons, it is essential for an archipelagic state such as Indonesia, which has 17,508 islands, to quickly assign internal waters delimitation in all islands to control of violation such as smuggling, trafficking, illegal fishing, so forth. Delimitation is important considering the position of internal waters within the archipelagic waters area, thus it requires the delimitation of internal waters to separate internal waters from archipelagic waters. This is important with regard to prevent overlapping and violation of the archipelagic state's full sovereignty in its inland waters.

Keywords: Delimitation, internal water, LOSC 1982, sea, sovereignty

INTRODUCTION

As a result of the consensus, the United Nations Conference Law of the Sea / UNCLOS 1982 (Buzan, 1981) has formulated new concepts in international maritime law including the concept of territorial sovereignty at sea, the concept of the archipelagic state, and the sea dispute settlement mechanism. However, the most

important matter in The Law of The Sea Convention (LOSC) 1982 is the recognition of the concept of an archipelagic state as a new concept in the history of international maritime law. An archipelagic state has sovereignty over territorial sea, archipelagic waters, and internal waters covering seafloor, sea space, and the air above (LOSC 1982, Article 49). Meanwhile, the domain sovereign of the archipelagic state consists of three maritime zones, as follows:

1. Internal waters: Waters on the land side of the territorial sea baseline are part of the inland waters of the State (LOSC, 1982, Article 8 (1)).

2. Archipelagic waters: Waters enclosed by the baseline of the archipelago, drawn in accordance with article 47, are referred to as archipelagic waters regardless of the depth or distance from shore (LOSC, 1982, Article 49(1)).

3. Territorial Sea: The territorial sea width to a limit not exceeding 12 nautical miles, measured from the baseline (LOSC, 1982, Article 3).

The determination of the three regimes of sovereignty zones is inseparable from the mechanism of drawing the baseline that has been set forth in article 47 of LOSC 1982 on the archipelagic straight line. This archipelagic straight line is illustrated by connecting the outermost points of the islands and the outermost dry reef of the archipelago, provided that within such baseline are included the main islands and a region where the ratio between the waters and the land area, including atolls, is

between one to one and nine to one (LOSC, 1982, Article 47 (1)). Therefore, through such formulated method, the archipelagic baseline will form a circle that connects each point in each outer island (see Figure 1).

The archipelagic baseline shall directly close the waters inward as the archipelagic waters and/or internal waters and outward as far as 12 miles as the territorial sea as stated in the LOSC, 1982, Article 3. This is where the privileges as states exist: with the determination of the archipelagic straight line, all territorial waters located among the islands shall be called archipelagic waters, and in its archipelagic waters, an archipelagic state is concerned to draw the closing lines for the purposes of determining the boundary of inland waters as stated in the LOSC, 1982, Article 50.

With regard to this issue, the current problem is that Indonesia has not established the delimitation of its internal waters in every existing island in the territorial waters of the Indonesian archipelago. However, Indonesia has legally regulated the inland waters in Law No. 6 of 1996 on Indonesian waters governing the determination of inland waters. This is particularly important given that the position of internal waters within Indonesian archipelagic waters is limited by the obligation to accommodate other states' right of innocent passage (Agoes, 2004), their right to lay submarine cables, traditional fishing rights, and other rights such as ships and air craft enjoy the right of archipelagic sea lane passage (LOSC 1982, art. 53(2). This is not applicable in the inland waters, which is an integral part of the coastal state hence the coastal state allowed
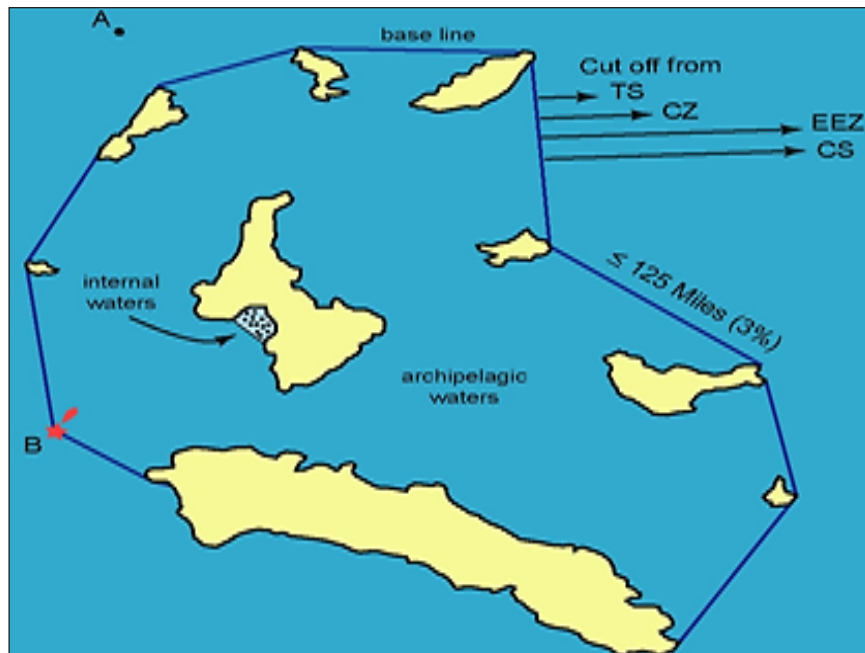
Figure 1. Archipelagic baseline (Advisory Board on Law of the Sea, 2006)

to enjoy full and absolute sovereignty (Buntoro, 2012; Churchill & Lowe, 1988; Hillier, 1998).

As an archipelago, Indonesia has many island and sea routes that can be visited by ships, thus it can open a gap for violation. Based on data's of National Anti-Narcotics Agency (2018) [Badan Narkotika Nasional (BNN)] 90% of narcotics smuggling comes from the sea. In general, based on data from Indonesia Customs, there are 400 ports that are prone to smuggling (Hasyim, 2017). In 2017-2018, Ministry of Marine and Fisheries has captured 633 of illegal fishing vessels. (Ministry of Marine and Fisheries, 2018).

From such observations, the current paper draws attention to address the importance of determining the internal delimitation in Indonesia to prevent other states' abuse of rights, especially when conducting the right of innocent passage and traditional fishing rights along the archipelagic waters that have been recognized by LOSC 1982. The current study is also concerned to limit the internal waters concept of water after LOSC 1982.

The objective of this study is to examine the importance of inland waters delimitation in safeguarding the sovereignty of Indonesia's marine territory from abuse and violation of the right of state users while in the archipelagic waters.

MATERIALS AND METHODS

This research examined data from secondary resources specifically books, journals and legislation documents to understand the concept and the importance of internal waters for archipelagic state.

RESULTS AND DISCUSSIONS

Delimitation in International Law

According to the Oxford English Dictionary, the word delimitation is derived from the Latin "delimitate," where "de" means down, completely and "limiter" (derived from "limes": limit or boundary). Furthermore in the mid-19th century in French language, it is known as "delimiter," and in English, "delimit" is defined as the limits or boundaries. Maritime boundary determination is aimed at determining the boundaries of two opposite or contiguous states (Churchill & Lowe, 1998). However, in the further development of maritime law, delimitation is not only employed to determine maritime zones (which are under state jurisdiction) but also to determine the rights and interests of the coastal state to fisheries, natural resources, minerals, hydrocarbons, navigation, and others (Division for Ocean Affairs and the Law of the Sea Office of Legal Affairs [DOALOS], 2001).

Although in principle the concept of delimitation is the division of maritime zones associated with the boundaries of two states or interests with ZEE and the continental shelf (Dundua, 2007), this does not indicate that the limits/delimitations are not applicable to internal waters zones. Article 50 of LOSC 1982 states that within its archipelagic waters, the archipelagic state shall draw the closing lines for the purposes of determining the internal waters boundaries, in accordance with the provisions of articles 9, 10, and 11 of the LOSC 1982.

Internal water is all waters on the land side of the territorial sea baseline if use normal base line, but another ways internal water can also established when a river flows directly into the sea, the baseline is a straight line across the mouth of the river between the points on the low water line of both riversides (Article 9 of LOSC 1982), the bays the coasts of which belong to a single state (Article 10 of LOSC 1982), and the installation of the outermost permanent port which is an integral part of the port system shall be regarded as a part of the coast (Article 10 of LOSC 1982).

In general, based on the above explanation, broadly, the concept of delimitation is not only limited to the "limit" between states, but it can also be defined as the closing line as applicable for the mouth of rivers, bays, and ports that may separate the inland waters and the archipelagic waters (Agoes, 2004). Each zone of this water has its own legal regime. In this case, it is lawful if Indonesia establishes internal waters delimitation to reinforce the boundary among the archipelagic waters.

As a territorial water area on the land side or inner side of a baseline (LOSC, 1982, Article 8), internal waters are the waters among the grounds from the baseline where the territorial sea is measured. For the states with an archipelagic geographical form, the withdrawal of the closing line of internal waters can be conducted within the archipelagic waters area. This is because the baseline used by the archipelagic state is the archipelagic straight line, thus all marine areas within the baseline shall be regarded

as archipelagic waters and internal waters are bound by archipelagic waters (Tanaka, 2012). By law, these internal waters do not only include rivers downstream, bays and ports as described above but also all inner waters closed by the straight line.

Legal Basis for Determination of Internal Waters

In general, the legal basis allowing an archipelagic state (such as Indonesia) to establish internal waters is stipulated in article 50 LOSC 1982. Recognition the international law to distinguish bodies of water properly classified as internal waters from adjacent territorial, gained momentum following the anglo-Norweygian Fisheries case (Rothwell & Stephen, 2010). Meanwhile, according to national law, Indonesia has regulated internal waters in Law No. 6 of 1996 on Indonesian Waters in Article 7 which states:

(1) In archipelagic waters, for the purpose of the determination of internal waters boundary, the Government of Indonesia shall draw closing lines at the mouth of any river, estuary, bay, seafarer, and port.
(2) Internal waters consist of:

a. Internal seas (laut pedalaman); and

b. Internal waters (perairan darat).

(3) Internal seas as referred to in paragraph (2) letter a is a part of sea located on the land side of the closing line, on the sea side of the low water line.

(4) Internal water as referred to in paragraph (2) letter b is all waters located on the land side of a low water line, except at the mouth of rivers. Internal waters are all waters located on the land side of the river mouth closing line.

Furthermore, the regulation shall be regulated in Government Regulation No. 38 of 2002 on Geographic Coordinates List of the Points of Indonesian Archipelagic Baseline (Government Regulation No. 38 of 2002), namely in article 6:

(1) On a bay-shaped shore indentation, *the baseline for measuring the width of the territorial sea is the Bay Closing Line.*

(2) The Bay Closing Line as referred to in paragraph (1) as a straight line drawn between the outermost points of the most prominent Low Water Line and across the mouth of bay.

(3) The Bay Closing Line as referred to in paragraph (1) shall only be withdrawn if the bay area is as large as or larger than that of semi-circle whose diameter is a closing line drawn across the mouth of the bay.

(4) If there are islands at the bay that make up more than one bay mouth, then the maximum total length of the Bay Closing Line from the bay mouths is 24 (twenty four) nautical miles.

(5) The waters located on the inner side of Bay Closing Line as referred to in paragraph (1) are the Territorial Sea.

Article 7 Government Regulation No. 38 of 2002, states:

(1) In the Estuary of a river or canal, the baseline for measuring the width of the Territorial Sea is the Straight Line as the closing of the river mouth or the canal.

(2) The straight line as referred to in paragraph (1) shall be drawn between the outermost points of the prominent and opposite Low Water Line.

(3) In the case of the straight line referred to in paragraph (1) is not applicable because of the existence of the estuary at the river mouth. As the Estuary closing line, straight lines are used to connect between points of the estuary with the outermost points on the Low Water Line of the edge or river mouth.

(4) Waters located on the inner side of the closing line as referred to in paragraphs (1) and (3) are Internal Waters, and waters located on the outer side of the closing line are the Territorial Sea.

And article 8 Government Regulation No. 38 of 2002, states:

(1) In the port area, the baseline for measuring the width of the Territorial Sea are straight lines as the closing of port area, which include the outermost permanent building which is an integral part of the port system as part of the coast.

(2) The straight line referred to in paragraph (1) shall be drawn between the outermost points on the coastal Low Water Line and the outermost points of the outermost permanent building which is an integral part of the port system.

(3) Waters located on the inner side of the closing lines of the port area as referred to in paragraph (1) are the Inland Waters, and waters located on the outer side of the closing line are the Territorial Sea.

These two provisions of national legislation have also been regulated in Division for Ocean Affairs and the Law of the Sea Office of Legal Affairs (DOALOS) thus the international world be made aware towards the practice of Indonesian national law regarding the determination of internal waters.

International law provides the state with the auhority to legislate, regulate the use of its inland waters, and decide who may cross and out as well as things that can be carried out when entering the internal waters (Chen, 2000). Based on its early history, the state's full power in its internal waters is due to the geographical conditions of the internal waters adjacent to the territorial waters of a state's land (Tanaka, 2012).

Legal Status of Internal Waters

Each state can enjoy its full sovereignty throughout the internal waters. In Article 2 (1) of LOSC explains that the sovereignty of coastal State extends beyond its land territory and internal waters and, in the case of an archipelagic State, its archipelagic waters, to the adjacent belt of sea, described

as the Territorial Sea. (Tanaka, 2012). Unlike the territorial sea, the right of innocent passage does not apply in internal waters. The exception to such cited rule is that when the internal waters are closed on the basis of the latest rule on the determination of the straight line, the right of innocent passage still exists in the internal waters in accordance with article 5 (2) of the Geneva Convention on the Territorial Sea and the Countinous Zone/TSC and article 8 of LOSC (Tanaka, 2012). The law regime of internal waters has not much discussed in the LOSC, the basic concept of sovereignty of inland waters is just as the same as the concept of sovereignty on land. This is because the inland waters are those strongly affected by the geographical condition of the land.

Coastal State Jurisdiction on Foreign Ships in Internal Waters

In modern legal practice, user states have the right to access ports located in inland waters or to enter inland waters due to certain conditions that permit ships and their voyages. When a foreign ship enters the port and internal waters of a coastal state, the sovereignty of the coastal state over its internal waters is correspondingly qualified (Sohn, 2014).

Any vessels entering the port and internal waters are subject to the sovereignty of the coastal state (Churchill & Lowe, 1988). The law applicable in inland waters has the same legal regime as the land (with regard to the jurisdiction of the national law of an archipelagic state may apply),

and every vessel entering the inland waters shall comply with the national law of coastal states (Churchill & Lowe, 1988). The subjects of law enforcement in these internal waters or ports may be criminal acts, civility and other rules established by the port state. For minor criminal offenses relating to disciplinary issues on ships, the coastal state may not seek to apply its criminal laws. However, if a criminal act on a vessel affects the interests of the coastal state, then the law will be enforced (Rothwell & Stephen, 2010).

Matters relating to civility and administration are dealt with depending on the type of violation committed. If the case relates to the perpetrator on the ship, the "internal economy" problem of the ship, and the people above it, then the laws of the flag states or the laws of the ship captain or the local consul in the area may apply. When the assistance of the coastal state is requested, the coastal state is limited to providing assistance and not to enforce the law, and law enforcement shall be returned to the flag state of the ship (Churchill & Lowe, 1988).

One particular limitation is the enforcement of provisions on foreign ships that passing from the territorial sea to internal waters, such as ships in port. The difficulty is the application of laws that are relevant to the coastal state itself, such as matters relating to design, construction, crew, and foreign ship equipment problems. It would be better if the coastal state has adopted such standards, which will include IMO instrument, such as SOLAS. This instrument can prevent and regulate in both waters, namely in the territorial sea

and waters, which leads to more stringent application of provisions to ships in inland waters. Particular requirement is important for the prevention, reduction, and control of marine environment pollution as a condition for the entry of foreign ships into ports or inland waters as well as to provide appropriate notice in accordance with the terms and conditions of IMO (Rothwell & Stephen, 2010).

Right of Access to a Port. Although there is no right of innocent passage granted to foreign vessels in internal water territories, and foreign vessels are not allowed to enjoy a general right to ports in all states, customary international law regulates a special regime known as the right of access to a states' ports (Chen, 2000). As in the 1986 case of Nicaragua, International Court of Justice (ICJ) also referred to certain rights relating to the freedom of communications and trade, where the ICJ has decided to recognize the foreign vessels to enjoy "right of access" to the ports (Rothewell & Stephens, 2010; Sohn, 2014). Based on the case of Saudi – Aramco discussed above, this has drawn broad attention that although there is a right of ports access to foreign vessels, international law guarantees the sovereignty and rights of the coastal states to close the access to its port area, whether it is for vital interests, security, or for any other specific reasons (Sohn, 2014).

Ships under Difficult Conditions and Needing Help. Under conditions that endanger the safety of ships and sea voyages, ships may enter the inland waters. According to Lord Stowell in as cited in Tanaka's (2012) book, based on the Eleanor case, there are four conditions for ships under difficult conditions or in need of help may enter the inland waters:

1. Distress shall be urgent and something of grave necessity.

2. There must be at least a moral necessity.

3. It must not be a distress which he has created himself.

4. The distress must be proven by the claimant in a clear and satisfactory manner.

Therefore, due to humanitarian and security reasons, foreign vessels under difficult conditions and need assistance, according to customary international law, they have the right to enter inland waters or transit at the nearest port (Tanaka, 2012). However, coastal states may also reject or take certain actions such as legal action, prohibition of entry, or keeping troubled ships away from the inland waters and the surrounding waters if it turns out that the conditions endangering the ships may cause pollution and environmental destruction in which its effects may harm the subjected coastal state. Recalling Chapter XII of LOSC on the protection and preservation of the marine environment, the precautionary and prudential principle is the main matter that shall be carried out to prevent pollution and destruction due to human activities at sea.

Indonesia's Internal Waters

Indonesian internal waters are currently within the territory of archipelagic waters, arising from the withdrawal of the archipelagic straight line. Although Indonesia already has written rules on internal waters, the implementation in the field regarding boundaries/delimitation of archipelagic waters has not been performed. In fact, not all local governments are aware of the delimitation of internal waters on the coast or every island in the region. Particularly for Indonesia, the determination of archipelagic waters delimitation is very important considering that territories of these waters are intertwined with archipelagic waters that in fact they are the same as the territorial sea and that there are rights of other states as well as international rights for certain accesses, such as:

1. Traditional fishing rights and the right to lay submarine cables (LOSC, article 51)

2. The right of innocent passage (LOSC, Article 52)

3. The right of Archipelagic Sea Lane Passage (LOSC, Article 53)

4. And other rights under bilateral agreements such as the 1982 agreement between Indonesia and Malaysia.

The concept of traditional fishing rights recognized by international law makes the territorial waters of Indonesian archipelago a place for traditional fishermen from several countries to fish. However, the concern is that the fishing activity should not enter the territorial waters of Indonesia. If the Indonesian government does not establish the delimitation of the internal waters area for 17,508 islands (Law No. 6 of 1996), then the legal force to prevent illegal fishing, smuggling, and so forth as long as it is near the coastal areas of Indonesia will be difficult to obtain. Sometimes, the absence of regulation and the determination of boundaries/delimitation can be excuses for violators to harm Indonesia. Similar with submarine cables, the existence of internal waters delimitation improves the Indonesian government's law enforcement in the internal waters.

Currently, Indonesia has established three archipelagic sea lanes (Maritime Safety Committee (MSC) 69, Annex 9) connecting the oceans in Northern Indonesia and Southern Indonesia, and as a result, the number of passing vessels will be higher and the potential for violations of internal waters zone will be greater. In addition, the effect of the absence of the establishment of the East-West sea lanes and vice versa has allowed some states to use the right of archipelagic sea lane passage based on their voyage manuals (Puspitawati, 2004) which could trouble Indonesia if there are foreign ships passing and approaching the internal waters while the government has not provided rules and closed every baseline of its waters.

The legal rules of internal waters in Indonesia still have a special practice in that the government only discusses the inland waters entering the port and customs domains. In fact, the inland waters include

the bay and the mouth of river. With Indonesia's large number of islands, the closing of inland waters to all islands is a must. This must be conducted as efforts to prevent various cases of crimes in the sea such as smuggling, illegal trade, or illegal fishing include marine pollution cause of right archipelagic sea lane passage or the impact of installing submarine cabling to marine ecology.

The large number of islands in Indonesia makes it very difficult to maintain and secure all of its waters. To prevent violations, all islands, especially islands located around international and border shipping lines, must immediately limit land waters. This is important to prevent violations of the law around the island's sea route in the future. After Indonesia sets inland waterways, violations committed in secrecy by state users will be punished more easily by the law.

CONCLUSION

There is now considerable evidence that Chapter IV of LOSC has recognized the sovereignty of the archipelagic state, Indonesia in this regard can draw attention the archipelagic straight line. Through such baseline, the Indonesian sea will consist of several zones of waters, archipelagic waters, the territorial sea, and internal waters.

Sovereignty in the sea does not mean that the archipelagic state has full rights to its marine territory but there are international rights. In the archipelagic and territorial waters zones, the archipelagic state has an obligation to guarantee international rights

for voyage, traditional fishing, or submarine cabling. It is only in the internal waters that the archipelagic state has full sovereignty over the sea. Since inland waters are within the archipelagic waters area, the possibility of violations committed by state user is becoming greater, such as secretly entering the inland waters in secrecy, smuggling, fish theft, trafficking and the like. Therefore, by way of conclusion, the Indonesian government should conduct internal waters delimitation and communicate the obstacles to all local governments and communities in order to prevent the violations of maritime law in Indonesia's inland waters.

ACKNOWLEDGEMENT

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A Path Model of Mental Health Service Utilization among Asian Immigrant Workers after Asean Community's Policy

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ABSTRACT

The changing of Asian immigrant workers, such as, Burmese, Lao, and Cambodian who are hard working in Thailand, is rapid. It leads to poor mental health which increases a need for public health administration because accessing mental health information after ASEAN community's policy is difficulties and burden. The objective of this study was to analyze a path model of mental health service utilization among Asian immigrant workers after ASEAN community's policy. This methodology was used by a cross-sectional survey with Asian immigrant workers such as, Burmese, Lao, and Cambodian in 2017. Instruments used general characteristics, public health administration, the need for mental health care, and mental health status related into mental health service utilization. A path model for mental health service utilization among Asian immigrant workers were analyzed by using path model. Results from this study showed that every causal factor had a direct effect on mental health service utilization. But public health administration among this groups following the ASEAN community policy had the most direct effect on mental health service utilization. Its standardized regression weight of 0.479 (p-value < 0.01). R square of mental health service utilization was 0.308. This study displayed that public health administration was the most important factor associated with mental

health service utilization among Asian immigrant workers following the ASEAN community policy. This recommendation should be using qualitative methods for the next study among Asian immigrant workers.

INTRODUCTION

The migration of national and international population leads into the development of economies and societies in the world (Kaewanuchit & Sawangdee, 2016). In the present, migration was rapid process when Thailand formed the Asian Economic Community (AEC) society in 2015. Kaewanuchit and Sawangdee, (2016) found that job conditions and the distance travelled had a direct effect on mental health among Thai immigrant workers in Pranakron Si Ayutthaya Province, Thailand (Kaewanuchit & Sawangdee, 2016). This research indicates that an important factor on mental health is job conditions (Kaewanuchit & Sawangdee, 2016). The Bureau of registration administration of Thailand reported that the total population of Thailand on February 2016 was 65,931,550 people (The Bureau of registration administration, Ministry of the Interior, Thailand, 2017). The international population increased both 2015 and 2016 which was 1.26 % of the population in Thailand (Ministry of the Interior, Thailand, 2016). Moreover, data from the International Organization

for Migration in 2014 found that Burmese, Lao, and Cambodian who worked in Thailand, only 39.13% had work permits (International Organization for Migration, 2014). Burmese, Lao, and Cambodians who work in low skilled jobs and legally register based on a Memorandum of Understanding (MOU) signed in 2003 (Hernandex-Quevedo & Jimmenez-Rubio, 2009; ILO, 2013). Mostly, Asian immigrant workers mainly work in the service sector, agricultural sector, construction, fisheries, and domestic service in Thailand (Kulkolkarn, 2017).

A rapid changing of Asian migrant workers (e.g. Burmese, Lao, and Cambodian) in Thailand leads to poor mental health (e.g. occupational stress) (Department of Mental Health, Thailand, 2016). The Commonwealth Association for Public Administration and Management (CAPAM) reported that a new structure of public health administration associated with demand and technology driven which focused on the macro structural factor of public health administration. For example, the mental health care system, mental health service management and contexts of emigration and reception (Bustamante et al., 2012). A new Obama care system managed only immigrant workers under The Affordable Care Act with co-payments for health policy in United State of America. While as, the Ministry of Public Health of Thailand attempted to force Burmese, Lao, and Cambodians who are migrant workers, to buy health insurance (The Bureau of registration administration, Ministry of the Interior, Thailand, 2017). Mental health service management is related

to convenience within emigration in Cuban (Portes & Rumbaut, 2001). The using of the mental health service among Cuban immigrant workers in Cuba before they were transferred to the mental health transfer system in Florida (Portes & Rumbaut, 2001). For example, government policy is to take care of health issues among new migrant workers and to tackle social exclusion and discrimination, to work within worker countries including passive acceptance active encouragement and adapt attitudes among workers ((Portes & Rumbaut, 2001).

The public health system in Thailand providing care for the mental health among Asian immigrant workers is based on the mental health care system under the ASEAN community's policy. Its report describes about mental health care among Burmese to use as guidelines to develop mental health of refugees (Kittirattanapaiboon, 2013).

The ASEAN community policy and the Sustainable Development Goals contain a health target set by World Health Organization (WHO) and the UN (WHO, 2016). The ASEAN community policy is associated with the ASEAN political and security community (APSC), and the ASEAN economic community (AEC), ASEAN social and cultural community (ASCC) (The ASEAN Occupational Safety and Health Network, 2015).

Previous research found that for mental health care and mental health service utilization among Asian migrant workers studies only the need for general health care, self-related health and indicators of physician (Gilay et al., 2012). Theses

also stressed on the predictive value of self-assessed general, mental health on functional decline in elderly (Lee, 2002), based on self and physician rated general health both symptoms and diseases among women (Mellner & Lundberg, 2003). Some studies found that the discordance both physicians and patient self-related health (DeSalvo & Muntaner, 2011). It is similar to the health status and health care utilization patterns of foreigners in Spain (Hernandex-Quevedo & Jimmenez-Rubio, 2009).

Thus, it is important and necessary to study a path model of factors (e.g. public health administration, the need for mental health care, and mental health status) related to mental health service utilization among Asian immigrant workers after ASEAN community's policy.

The operational definitions of this study consist of (i) public health administration is the macro structural factors of public health administration with mental health care system and utilization, mental health service management, the context of emigration and reception, (ii) ASEAN community policy is policy to access in health care system and the health promotion, and mental health care among Asian immigrant workers, especially, Burmese, Cambodians, and Lao, (iii) need for mental health care is immigrant-specific mental health needs and conditions in Asian immigrant workers including health insurance under the government, employment condition leading to poor mental health, the difference of language, social discrimination, mental health services from country of origin, health expenditure,

and health information, (iv) mental health status is unhappiness, stress, anxiety, social impairment by using GHQ, and (v) mental health service utilization is factsheets mobile phone, websites, web boards, and email to contact with physician.

Hypothesis for this study is that the increment of public health administration, the strength of ASEAN community policy, the increased need for mental health care, and abnormal mental health status, have all led to incremental mental health service utilization among Asian immigrant workers after ASEAN community's policy.

METHOD

Research Setting and Participants

This cross-sectional study was a survey of 400 Asian immigrant workers who were 20-59 years old. The participants who were working from different locations in Bangkok, Nakhon Pathom, Phranakhon Si Ayutthaya, and Nonthaburi provinces in Thailand. Those workers screened participants for the following inclusion criteria: self-identified as Asian immigrant workers who could speak the Thai language for communication. In contradiction, the excluded criteria was the other workers who worked and lived in the other provinces.

Research Sampling Method and the Sample Size

A quota sampling method was nonprobability sampling to select Asian immigrant workers. The sample size was calculated using the M-plus guideline. It considered no less than 10-20 times the five variables used for identification by path model. These variables were public health administration, need for mental health service, mental health status, ASEAN community's policy, and mental health service utilization. This calculation showed that the sample sizes should be 300 participants. In this study, the total sample size was 400 participants to decrease proportional errors.

Instruments

The measurement for research instruments formed from 42 questions which had four parts. It were considered: (i) general characteristic, (ii) public health administration, the need for mental health care, and mental health status associated with mental health service utilization, (iii) Thai General Health Questionnaire (Thai-GHQ), and (iv) mental health service utilization.

Firstly, questions for individual characteristics added race, sex, education, marital status, work employment, and job characteristic.

Secondly, six items form the applied questionnaire for public health administration measures; based on public health perspectives, were evaluated. These items asked the participants of the mental health system and services, the public mental health administration of Thailand, social exclusion and social exploitation from the mental health administration. The items were replied using a 4-point Likert scale from "none" (1) to "most" (4). Cronbach's alpha coefficient of public health

administration among Asian immigrant workers was 0.80. In addition, the seven applied questions for need for mental health care measures were assessed. The selected items described about their health insurance card from the Thai government, work employment effects on their mental health, and social exclusion & social exploitation among the Asian immigrant workers from the Thai employers. Besides, other considerations were different language affects the need for mental health care, the lack of mental health services from countries of origin who they lived, lack of information about mental health care, and the high costs of mental health care. Cronbach's alpha coefficient in the need for mental health care variable was 0.79. All items in the scale used the 4-point scale format as well as need for mental health care measures.

Thirdly, the mental health status measure was measured (Nilchaikovit et al., 1996) by using items modified from the 12-items Thai version of the General Health Questionnaire (GHQ) by Goldberg and Williams (1988) which had been used as the screening instrument about common mental disorders and as a more general measure of psychiatric well-being in the group of Thai community settings. The Thai GHQ-12 version had good reliability and validity, with the range of Cronbach's alpha coefficients at 0.95, and the range of sensitivity and specificity at 85.3% and 89.7% respectively. The Thai GHQ-12 questions were (1) ability to concentrate, (2) loss of sleep due to worry, (3) playing a useful part, (4) being capable of making

decisions, (5) being constantly under strain, (6) inability to overcome difficulties, (7) ability to enjoy day-to-day activities, (8) ability to face problems, (9) feeling unhappy and depressed, (10) losing confidence, (11) thinking of self as worthless, and (12) feeling reasonable happy. It is observed that it relates to somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression. The scale of this measurement used a binary score to obtain the psychiatric prevalence rate and the Likert's scale [24] for performing the data analysis used in this study. The total scores are more than two indicating an abnormal mental health status. The total of summing the items of Thai-GHQ was calculated ($\alpha=0.95$) among Asian immigrant workers following ASEAN community policy. Content validity by five specialist public health professors was passed. While as, the construct validity was validated by the Carver method [25]. The Index of Item-Objective Congruence (IOC) of the content and construct validity were 0.85 and 0.82, respectively. Reliability was approved by using Cronbach's alpha coefficient [26] from the SPSS program version 20. Its questionnaire's reliability was 0.90.

At the end of point, applied five items of part four for the mental health service utilization was from. For instance, the use of the government mental health service, telephone use during the consulting about mental health problem with the government service, the emails using to explain about government mental health services, the websites or web boards using to consult

about mental health problems with mental health services utilization of government and to obtain physician appointments to check, consult to treat mental health problem within the past year. The response options ranged from "none" (1) to "most" (4) which was a Likert-scale. The Cronbach's alpha coefficient for the variable of mental health service utilization among Asian immigrant workers was 0.89.

Data Collection

Before the data collection was collected by the researchers and assistant researchers, this study which was a part of "a causal model of public health administration, need for mental health care, and mental health status associated with mental health service utilization among Asian immigrant workers after ASEAN community's policy", was accepted by the Human Ethics Committees from Mahidol University, Nakhon Pathum province, Thailand. Its code was COA. No. 2017/06-127 and the Thai Clinical Trials Registry code was TCTR20170713001. Self-administered surveys were conducted in parks, roadsides, factories, gas stations, food center which were public places and in the participants' homes. Then, both researchers and assistant researchers gave a detailed to participants. If they had difficulties understanding the questions, the researchers and assistant researchers provided further descriptions. All participants took about 30 minutes to complete the questionnaire. Finally, all of the completed questionnaires from the participants were put in a sealed box container and envelope.

Data Analysis

All the statistical analyses for the quota sampling design of this study adjusted. The summarized sample for a path model was analyzed by using path model for the continuous variables. This study presented maximum likelihood estimates, a path model of variance, analysis of the R square, and measurement of the goodness of fit of the path model using M-plus version 5.2 and p-values of less than 0.01, and 0.05 statistically significant considered. The rule of this path model by M-plus program was fitted for a population of over 250 people and it was observed that variables of less than 12 were approved, with a chi-square $\neq 0$ as well as degree of freedom, and with a p-value > 0.05, a Comparative Fit Index (CFI) > 0.95, and finally a Root Mean Square Error of Approximation (RMSEA) < 0.07, with a Standardized Root-Mean-Square Residual (SRMR) < 0.05 (Hair et al., 2009).

RESULTS

Participant general characteristics are presented (Table 1). Overall test of the model fit of the path model was acceptable (Table 2). In this path model among Asian immigrant workers following ASEAN community's policy, the addition of various factors increased the explanation of the variance in mental health service utilization by 30.8% (p-value < 0.01) (Table 2). This diagram presented a mediating effect on the path factors in the relationship between the public health administrations, the need

for mental health care, and mental health status associated with mental health service utilization (Table 3 and Figure 1).

Table 1

General characteristic data among Asian immigrant workers after ASEAN community's policy (N= 400)

General geographic data	The most percentage of data
Race : Lao	50.0
Sex : Male	55.0
Education : Secondary school	60.4
Marital status : Marriage	66.7
Age (year old) : 20-29	43.3
Occupational employment : Employee	56.3
Job characteristic : Car cleaner	20.0

Table 2

Overall test of model fit for causal model (N= 400)

Criteria	Value
Chi-Square	0.110
Degrees of freedom	1
P-value	0.75
CFI	1.000
TLI	1.000
RMSEA	0
SRMR	0.003
R-square (ASEAN community's policy)	0.430**
R-square (Mental health service utilization)	0.308**

Note: ** p-value < 0.01

Table 3

Direct, indirect, and total effect of path model

Variable	Mental	Health	Service Utilization	ASEAN	Community's	Policy
	DE	IE	TE	DE	IE	TE
Public health administration	0.479**	-	0.479**	-	-	-
Need for mental health service	0.274**	-	0.274**	0.213**	-	0.213**

Table 3 *(Continued)*

Variable	Mental	Health	Service Utilization	ASEAN	Community's	Policy
	DE	IE	TE	DE	IE	TE
Mental health status	0.313**	-	0.313**	0.211**	-	0.211**
ASEAN community's policy	0.050**	-	0.050**	-	-	-

Note: ** p-value < 0.01

Notes: ** p-value < 0.01
⎯⎯⎯⎯▶ = Direct effect   - - - - - -▶ = Indirect effect
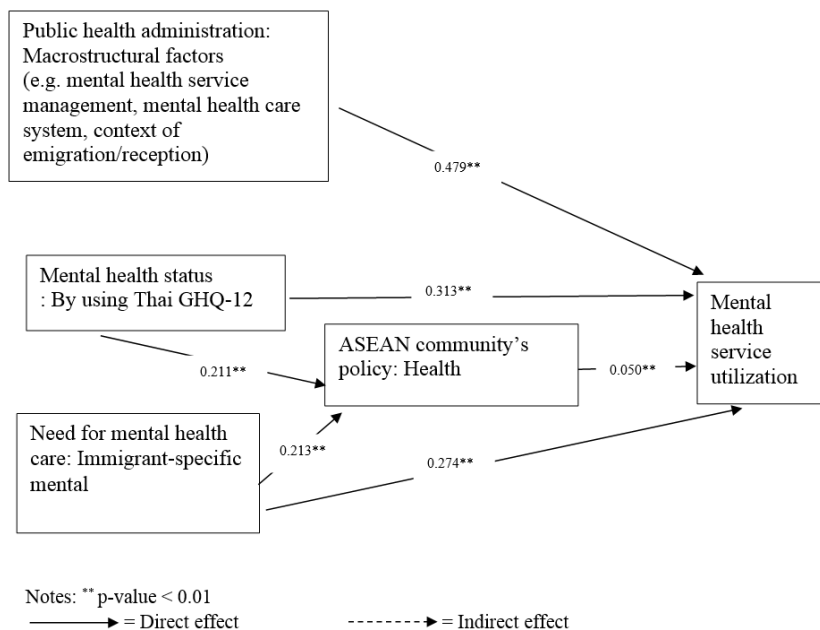
Figure 1. A path model of mental health service utilization among Asian immigrant workers after ASEAN community's policy

DISCUSSION

A highlight of this empirical study is the first outstanding empirical study finding for Thailand because it displays to associate with risk factors of mental health, public health administration and mental health service utilization among Asian immigrant workers after the opening of ASEAN's policy which have an effect on native people; especially, Thai people, Thai society and The ASEAN Occupational Safety and Health Network (The ASEAN Occupational Safety and Health Network, 2015). A good public health administration of Thailand from Thai

government should good management to mental health system in order to enhance the availability of mental health services utilization and to reduce the abnormal mental health status (Ministry of Public Health in Thailand, 2016) by following the suggestion to the WHO Commission on Social Determinants of Health Employment Conditions Network (EMCONET) study, with a glossary on employment relations (Benach et al., 2010).

Moreover, public health administration should be related to the mental health care system, mental health service management, the context of emigration, and reception among ASEAN people groups. Some researchers report that mental health service management is a good convenience within the context of emigration as in Cuban immigrant workers (Portes & Rumbaut, 2001) who used the mental health service utility in the community health system in Cuba before they were transferred to this service in Florida who was then transferred into the mental health system (Kittirattanapaiboon, 2013). It is an advantage among immigrant workers. In contradiction, African, Asian, and Latin America immigrant workers who have never done a universal health care system exhibited negative trends for this health and mental health service (Sanz et al., 2011). However, the public health administration of Thailand for the health system among Asian immigrant workers prepared the mental health care system by following the ASEAN community's policy (Department of Mental Health, Thailand, 2016; Kittirattanapaiboon,

2013). It displayed mental health care among the Burmese using guideline to develop mental health work and to report on the mental health among refugees (Department of Mental Health, Thailand, 2016; Kittirattanapaiboon, 2013). Empirical results from this study present that public health administration factors were the most consistently associated factors with mental health service utilization variable. It can be observed that the public health administration has an important path model with mental health service utilization variable. In addition, mental health status, and the need for mental health care are the second, and third path relationships associated with mental health service utilization among Asian immigrant workers after opening of ASEAN community' s policy. That is to say, it can also be indicated that both mental health status and the need for mental health care variables had both direct and indirect effects on the mental health service variable. Moreover, it can be seen that both directly affect the ASEAN community's policy. It should be studied in the next time.

However, other studies such as Latino (Hsieh et al., 2016), Cambodian, Iranian, Iraqi people, Vietnamese, African, Eastern European (Saechao et al., 2012), and Thai people have also studied on immigrant workers. For example, Latina hotel housekeepers who were immigrant workers and exposed to dirt, dust and social exclusion, and period limitations when for working in hotels affected to occupational stress (Hsieh et al., 2016). They needed

to use the health service in hospital, but they could not use it because of a lack of accessibility to health care system (Hsieh et al., 2016). In addition, economics, social discrimination, language differences, poor employment conditions, lack of mental health services in country of origin, cost, and a lack of information had an effect on need for mental health care and mental health service utilization of them (Saechao et al., 2012; Yang & Hwang, 2016). By contradiction, Thai Immigrant Employees in Bangkok studied about the variables (e.g. working conditions, workloads, job securities and wages) associated with occupational stress (Kaewanuchit, 2017). Thus, study about the associations between public health administration, the need for mental health care, and mental health status related to mental health service utilization among Asian immigrant workers following the ASEAN community's policy remains research limitation. This study builds upon this research and supports the importance of path model which is causal model for understanding and improving public health administration based on the occupational health among Asian immigrant workers who works in Thailand. This is among the first attempts to include measures from each variable of the path model in one synthesis.

In addition, Gatchel and Schultz (2012) maintained that the public health perspective was based on psychosocial occupational health hazards related to public health administration. Normally, the public health system does not pay sufficient attention to psychosocial occupational health hazards

such as poor/ abnormal mental health status, occupational stress, and public health administration focused on the mental health management among immigrant workers.

In this study, authors found that there were several limitations. Firstly, the races among participants of this study were Burmese, Lao, and Cambodian. Several language differences became to be limitation, except, Lao people who used the Thai language making it easier for them to understand questionnaire. However, the communication difficulties with the other races in this study did not make it easy to reply some questions because they are Asian temporary immigrant workers and non-skill about the other languages. Secondly, the main limitation of this study is that it collected data only on Asian immigrant workers (e.g. Burmese, Lao, and Cambodian) because of budget limitations from Thai government. Thus, it also did not study all of the other immigrant workers when it should have added them. At the last limitation of this study is that its methodology only used the path model, which was a quantitative analysis, to create an understanding of the real causes. However, it should also use SEM analysis in the future. A suggestion in this study is that it should have used qualitative methods too. Good examples of qualitative methods are in-depth interviews, focus groups, and observation.

The enhance points of this study are that this path model explained 30.8 % of the variance in mental health service utilization. It implied that the model fit

of the path model was acceptable. It can lead towards some guidelines so as to the development of mental health policy and public health administration among ASEAN immigrant workers. Although, this study has a strong sample design, sample size, a high participation rate, an extensive collection of information, and the use of existing mental health service utilization measures. The recommendation of this study in the next time should expand the factors including the need for mental health care with over time, race, economics, social exclusion and social discrimination among Asian immigrant workers. In addition, it should also use some qualitative methods; such as, focus group, and discussion subsequent study among Asian immigrant workers who are from developing countries. Moreover, practical recommendations to the researchers/ policy makers engaged in policy of mental health service utilization and public health administration among immigrant employees in ASEAN associated with merit and ethic.

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Case Study

The Sunni-Shia Conflict in Madura Indonesia: Judging Individual Faith as Blasphemy

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ABSTRACT

This research was driven by the fact that Shia presence and its involvement in sectarianism conflict in Indonesia had received little research attention. The research examines the ways in which this conflict is conceptualized within court decisions. The aim of this paper is to analyze the motives and the impact of the sectarian conflict in Madura 2011-2012, which was caused by allegations of religious wrongdoings. Although it can be interpreted that individual and group beliefs, along with their religious denominations are private rights, in Indonesian law, different religious denominations can be brought before the law and found to be committing serious offenses. This may arouse suspicion, inter-group tension, persecution, and social violence. In this socio-legal case study, data were collected using interviews and documentation. Analyzing the trial process of the case allows us to conclude that the Public Court announced Shia teachings as the source of conflict. The court found the perpetrators guilty of blasphemy for teaching a doctrine which is different from the common Sunni belief. The conclusion is that the state is still weak in safeguarding and protecting the basic rights of religious minorities.

ARTICLE INFO

Keywords: Blasphemy law, court verdict, individual faith, Sunni-Shia conflict

INTRODUCTION

Indonesia has experienced a fundamental

transition to democracy since the fall of Suharto in 1998 (Abuza, 2006). Initially, the euphoria of democracy grew in fear of bringing Indonesia down to a deeper economic and political crisis, accompanied by widespread social and religious conflicts (Künkler & Stepan, 2013). As stated by Wimmer (2003) and Brown and Diprose (2007), harmony between groups is not solely resulting directly from democracy. In view of extensive democratization, Indonesia is still experiencing high levels of violence and has been facing accusations of religious discrimination. During the early years of democratization, tensions along ethnic-religious lines may be heightened and may lead to communal violence. The security responsibilities during violence which is often triggered by and characterized as religious in nature, has been ostensibly transferred from the police and army to various civilian militias (Abuza, 2006; Barron & Sharpe, 2008; Collins, 2002; Davidson, 2005; Hasan, 2002). Islam in Indonesia has always been defined by tolerance, moderation, and pluralism (Abuza, 2006). However, there has been a dramatic increase in violence and discrimination against minority sects within Islam, which have left thousands dead (Varshney et al., 2008). Since 2006, Indonesia, as the world's most populous Muslim country, has reported high incidences of communal conflict annually (Künkler & Stepan, 2013). In February 2011, a group of 200 Sunnis devastated a Shia boarding school in Bangil Pasuruan, East Java and injured nine pupils.

Religious diversity is legally supported in Indonesia, but religious minorities are not convinced about their constitutional rights (Abdullah, 2003). The frequency of violence against religious minorities is implicitly driven by actors who continually echo hate speech and criticism of religious pluralism practices (Sakai & Isbah, 2014). This antagonistic attitude is largely in the Sunni denominations, which have diametrically opposed the Shiite teachings. This attitude, which was not explicitly demonstrated during the New Order (1966-1998) in power because of fears of the repression of the authorities, spread widely after the reform was opened (Barton, 2011; Crouch, 2011; Hefner, 2013; Regus, 2015). The violence justification of the perpetrators on this minority is very simple, that anyone who is deemed to have committed a crime in the six official religions of Indonesia is already blaspheming religion or committing religious deviance (Crouch, 2012). The simplicity of meaning and unclear purpose of the law on religious insults in Indonesia had made many victims prosecuted for the blasphemy (Crouch, 2012; Keane, 2009). Different from other religious studies, the construction of the concept of religious deviance and blasphemy is less clear, and is considered less necessary by contemporary philosophers (Tomes, 2010). Sunni-Shia conflicts, which usually emerge in the Middle East, have cultural, political, and ideological motifs.

Collier and Hoeffler's (2005) theory reveals that generally, in addition to the

period of peace, the possibility of conflict can be reduced along with improving the quality of life through development and economic growth. However, the reasons behind the Middle East conflicts may or may not apply in other Islamic countries (Collier & Hoeffler, 2005; Sørli et al., 2005). Lai (2006) stated that intra-Islamic differences, as well as the effects of domestic politics and religion were significant factors that cause conflict. Violence and tension related to inter-community problems in Indonesia have become a special focus among academics (Bertrand, 2004; Wilson, 2008; Barron et al., 2009; Tadjoeddin et al., 2001; Wilson, 2005). However, comparing to Ahmadiya (Burhani, 2014; Hicks, 2014), Shia-related developments and conflict in Indonesia, especially the assault on and the expulsion of a Shia community in Sampang, one of the districts on Madura Island, had received little research attention (Schäfer, 2015). Conflict does not happen in a single point in time. The Sampang trial process shows us how offended feelings can reflect a different way of thinking, and which can be considered as blasphemy. In line with Hasan's (2014) argument, heresy, blasphemy and apostasy cases in Indonesia are merely approached from a legal point of view. The frequency of cases of religious blasphemy makes Indonesia follow Pakistan's rigid footsteps with the possibility of capital punishment in implementing blasphemy law (Bayuni, 2011; Hassan, 2007). The government understands that heretical groups should be brought back to Sunni Islam as a means to end the conflict between the two denominations (Hasyim, 2011). The major challenges for a government are to manage religious diversity on the one side and to provide safety for religious minorities in the other. The aim of this paper is to analyze the motives and the impact of Sampang conflict from a legal point of view, notably regarding blasphemy law. By considering the research of Ginges and Atran (2009) on non-instrumental reasoning over sacred values, the trial process in the Sampang case allows us to predict the contexts in which people will be relatively rigid or flexible in their judgments and decisions over sacred values (Ginges & Atran, 2009).

This paper is important as it shows the contradiction in the face of Islam in Indonesia comprehensively. On the one hand, Islam in Indonesia is described as moderate and tolerant, while on the other hand, intolerance and violence against minority groups continue to occur. The objective of this paper is to describe the motives of the Sunni-Shia conflict in Sampang, Madura and the way in which the court sentences can interpret individual faith as blasphemy.

METHODS

In this socio-legal case study, the main data are the verdict of the Public Court in the case of blasphemy that was carried out by Tajul Muluk (Shia leader) and data sourced from the leader of the Shia community. This research is complemented by data sources in the form of the relevant local and international journals, including the

Journal of East Asian Studies, *Philosophy & Social Criticism*, *Asian Journal of Social Sciences*, *Harvard International Review*, *Jurnal Kawistara*, *Asian Survey*, *Conn. Int'l L*, and *The Review of Faith and International Affairs* published from 1994 to 2013. The data also came from *Kontras* (a non-government organization in Indonesia), reports and mass media reports from sources such as *The Jakarta Post*, www.antarajatim.com, and www.news.detik.com. Data was collected by document study techniques and unstructured interviews.

This research uses a qualitative research design to expose the Sunni-Shia conflict holistically in its real context. Data analysis is carried out through qualitative, descriptive, and interpretive methods. The data analysis process starts by reviewing all the data (results from court decision and interviews), reducing the data, and exposing the data, which is then interpreted. Finally, conclusions are drawn based on these interpretations.

Understanding the Conflict

Muslims in Madura are dominated by the Sunni-NU community that is known for moderate thoughts and non-violent habits. Although they are characterized as Sunni in tradition for generations, Fox (2004) stated that Indonesian Muslims had also been open to Shia religious ideas. Indonesia has long been known as a multicultural country, which makes tolerance and kinship between differences inherently in its culture (Crouch, 2011). Sunni is the predominant branch of Islam, with only around one

million Indonesians being Shia (Buehler, 2009; Formichi, 2014; Harun et al., 2011). Varshney et al. (2008) and Formichi (2014) estimated approximately 2.5 to 5 million Shia followers in Indonesia.

There is no official record regarding the first proliferated teachings of Shia in Madura. Sampang encountered Shia around the 1980s (Kontras Surabaya, 2012). Firstly, a *kiai* (Islamic cleric) named Ma'mun who lives in Nangkernang, Karanggayam, Sampang heard about the Iran revolution from his friend who lives there. After listening to a lot of stories about the Iranian revolution, Ma'mun was very inspired by the movement and admired Ayatollah Khomeini as the leader of that movement (Kazimi, 2006). The success of the Iran Islamic Revolution in toppling down the Pahlevi Monarchy in Iran encouraged Ma'mun to seriously study about Shia teachings although he realized that it would be hard to justify Shia leanings in Madura (Kontras Surabaya, 2012). Ma'mun did not openly claim himself as a Shia believer. His interest in the faith led him into sending his children,—Iklil al-Milal (42 years), Tajul Muluk (40 years), Roisul Hukama (36 years), and Umm Hanik—to learn Shia teachings in 1983 at YAPI (Yayasan Pesantren Islam/ Islamic Boarding School Foundation) in Bangil Pasuruan, East Java. It has been publicly known that YAPI is a *pesantren* (Islamic boarding school) spreading Shia values (Zulkifli, 2009). In 1991, Ma'mun's children returned to Sampang. Among his children, Tajul Muluk (henceforth referred to as TM) was the only child who continued

his education at the Sunni Islamic school of Muhammad Sayyid Alwi al-Maliki in Saudi Arabia in 1993 (Kontras Surabaya, 2012). TM's education then was discontinued due to financial problems. However, TM remained in Arab Saudi as a worker who returned to Indonesia in 1999. Hence, YAPI seemed to have a remarkable influence in shaping Shia mindset in TM compared with his participation in the school of Alwi al-Maliki. Following his return, TM settled in his birthplace, the village of Karanggayam, Nangkernang Sampang. His presence was welcomed by the family and the surrounding society. A number of villagers who were also pupils of his father gave him land to set up a boarding school. In early 2004, the villagers who learned the Koran with TM, and Ma'mun helped him establish his residence which was also used as an Islamic boarding school. Eventually, a mosque and several classrooms for religious study activities were built as well. TM, together with his father distinguished his teaching approach, and made Shiahis focus. This small boarding school was later named Misbahul Huda, and its teachers consisted of TM and his fellow YAPI alumni (Kontras Surabaya, 2012). Moreover, TM was an active member in the Association of Shia Ahlul Bait Indonesia (IJABI/ Ikatan Jamaah Ahlulbait Indonesia). These facts were the main reasons of Sunni objections, which were mainly expressed by Karrar Shinhaji who is a relative of TM. The conflict started from the issue concerning the spread of this deviant faith of Islam disseminated by TM to the inhabitants of Karanggayam village.

As it is the case in many Muslim countries, the term deviant is simply defined as conducting activities that 'deviate' from the teachings of Indonesia's six state-sponsored religions (Crouch, 2011). The violence over Shia followers in Karanggayam and Blu'ruan village in Sampang regency occurred on December 29, 2011, and peaked on Aug. 27, 2012, when dozens of homes belonging to Shia followers led by TM were set alight and gutted by a mob (Kontras Surabaya, 2012). Furthermore, the TM Islamic boarding school was burned down. His followers were expelled into Sidoarjo regency (Boediwardhana, 2014). TM himself was sentenced to two years in prison due to a violation of the Article on religious blasphemy. These events were not originally and purely a conflict between Shia and Sunni. It all started with family problems that had gone too complicated. After the followers of both sides intervened, the family conflict grew wider ("Menteri Agama", 2012). The real Sunni-Shia conflict issues emerged later ("Kapolres Sampang", 2011).

Acts allegedly carried out by TM are principally related to Shia theology which was vulgarly exposed by using harsh language and in challenging other groups or sects. According to the indictment, the Shia theological values taught by TM concerns the *tahrif al-Qur'an* (distortion of Koran) and in the interpretations on the arrival of Imam al-Mahdi (The Messiah). In addition, TM was accused of the following actions (Tim ABI, 2012); (i) reading the two sentences of Shahada (confession of

Islamic faith) acknowledging Imam Ali ibn Abi Thalib, (ii) Uttering "kafir" (infidel) on Prophet Muhammad, his Companions, in-laws as well as wives, (iii) declaring *taqiyyah,* on the Sunni Muslim, and (iv) believing in the pillars of Islam and faith which are different from what the majority of Muslims (Sunnis) believe in. The pillars of faith in Sunni Islam are 5 (five), namely: (i) Tauhidullah/ ma'rifatullah (the one supreme God), (ii) Al-nubuwwah (prophethood), (iii) Al-imamat (leadership), (iv) Al-'adl (justice of God), and (v) Al-ma'ad (the day of judgment).

According to Shia doctrine, there are ten pillars of Islam, which are (i) Praying, (ii) Fasting, (iii) Zakat, (iv) *Khumus* (pay one fifth of the owned property), (v) *Hajj* (pilgrimage to the Holy lands of Mecca and Madina), (vi) *Amar ma'ruf nahi munkar* (commanding goodness and forbidding evil deeds), (vii) *Jihad* for the sake of God with their wealth, body and souls, (viii) Al-wilayah (abiding by the Islamic scholars and keeping away from (al-bara'ah) the enemies of imam and the Prophets, followers and lovers of the companions of Prophet Muhammad (referred to is the *Ahl al-Sunnah wa al-Jamaah* [Sunni]), (ix) *Al-fidha* (liberation), or freeing oneself from all wealth, body and lives for sake of obeying religious leaders, (which allows the followers to commit suicide for the sake of obedience to the leader, and (x) *Al-raji'ah*, the Shia *Imamiyah* believes that all human beings who have died will be revived by Imam Mahdhi before the Doomsday. Imam Mahdhi will prosecute revenge for the

companions of Prophet Muhammad and his followers that are Sunni. It also states that all people will die and wait for Doomsday.

Those Shia teachings were presented by TM at his residence in front of students and the people around his residence and mosques in that district. If they did not follow, or left after following Shia, they were judged as *murtad* (apostate), traitors and devils. The society around TM became restless due to the reaction that surrounded his doctrine as well as the pressure from scholars, the *ulama* and community leaders. As a result, there was a dispute or conflict between the teachings presented by TM with the teachings of Sunni Islam (*Ahl al-Sunnah wa al-Jamaah*), which were generally embraced by the society in Sampang. In the court, the attorneys concluded that the teachings spread by TM was a form of blasphemy and violation against Islam. This fact appropriates with Jones' (1980) argument that the most plausible defense of a blasphemy law is that it is necessary to protect religious believers from disrespectful behavior which offends their feelings.

RESULTS

This section explains the motives of conflict and the decision of the public court regarding the case of TM.

The Motives of Conflict

The background of this Sunni-Shia issue in Sampang can be grouped into two. First, the group who believed that the events of Sampang were caused by family problems while the other states that the conflict

happened because of Shia preachers' provocation that stated that the Qur'an as fake revelation and mocked the friends and wives of the Prophet. It fueled the anger of the people of Madura who were known as highly religious and considered Sunni fanatics (Kontras Surabaya, 2012). According to the Sampang Police Chief, Agus Santosa, the expulsion of Shia by the Sunni community was caused by *kiai* influences within the family. TM (Shia) and Roisul Hukama (Sunni) are brothers who are both religious leaders. They have followers, and students in the Islamic boarding schools (pesantren). The cause of public unrest is family conflict rather than conflict of faith. Early chronology of the problem was different. TM and Roisul Hukama are both alumni of the YAPI Pesantren. If this conflict is categorized as Shia matter, the two brothers are actually Shia cadres. In the midst of the people who did not agree with TM Shia teaching, suddenly there was a problem between TM and Roisul Hukama (henceforth referred to as Rois). The dispute was triggered by TM's decision that had matched one of the students in the *pesantren* (called Santri)— with his neighbor, Halima (aged 16), without the consent of Rois. Halima herself was a female student who studied in Rois's pesantren. For this reason, Rois felt disrespected (Kontras Surabaya, 2012). Later it was revealed that Rois's anger was not merely because of disrespect, but because of jealousy: Rois actually had planned to marry Halima (Kontras Surabaya 2012). Subsequently, Rois declared himself out of Shia, and then, he enthusiastically

opposed Shia teachings and provoked people to expel TM along with his students from Karanggayam village.

The root of the problem itself is considered a long process. On February 20, 2006, more than 50 scholars in Madura issued a statement that the Shia doctrine spread by TM in Madura was classified as Shia Ghulat (exaggerator)—the deviant faith of Shia based on the Sunni perspective. The typical Shia teachings that hurt the Sunni Muslims are doctrines critical of Prophet Muhammad and his noble companions (Husaini, 2012). In the case of the Shia conflict in Sampang, the State had been accused of failing to protect its citizens in the face of religious intolerance and violence (Hamayotsu, 2013). The rights of religious and ethnic minorities are routinely trampled. The dispute of Shia in Sampang has been a concern of many people, nationally and internationally. This is actually reasonable, considering that this Shia case is a matter of freedom of religion which is part of human rights. Human rights matters can easily be used as an entry point to criticize state policies that are considered less protective of the human rights of Shia followers.

In the case of TM, the court accused him of religious blasphemy as in Article 156 (a) of *Kitab Undang-undang Hukum Pidana* (KUHP/ Indonesia's Criminal Code). The Article forbids anyone from deliberately and publicly expressing feelings of hostility, hatred, or contempt against religions with the purpose of preventing others from adhering to any religion. It forbids anyone from disgracing a religion. The penalty

for violating Article 156(a) is a maximum of five years of imprisonment. Moreover, Indonesia's laws and policies, at both national and local levels, have produced many instances where members of one religion have persecuted the members of other religions or of other sects. TM—leader of the Shia community in Sampang—was brought to the Public Court of Sampang based on Indictment letter No. Reg. Case: PDM-34/SMPG/04/2012 dated 12 April 2012, with two counts.

First, TM was charged with hostile acts, abuse and in instigating religious violence in Indonesia. The intention of the sentence is that the other person does not adhere to any religion. The act was carried out between 2003 and December 29, 2011, and deliberately conducted in public. TM's act is stated in Article 156a of the National Criminal Code (Mahkamah Agung, 2012). Second, TM was also charged for forcing "other people to do, not to do, or allow, or do something unpleasant or with the threat of violence", which occurred between 2003 and 2012. This rule is regulated in Article 335 paragraph 1 of the KUHP.

This indictment is supported and strengthened by witnesses presented by prosecutors. The witnesses consisted of 10 people, plus 5 expert witnesses. Most witnesses did not follow the Shia order. One witness named Rois is the younger brother of TM. Rois knew about the teachings of Shia propagated by TM himself as he heard, saw, and studied their books. TM's case was led by judge Purnomo Amin Tjahjo accompanied by two judges, Sudira and

Syihabuddin. The judges decided that TM was guilty of committing the criminal act of 'essential desecration of Islam'. Judges convicted the defendant for two years imprisonment. Such decisions were based on the consideration of witness testimony and evidence presented by the Public Prosecutor and law counselor of TM.

The Verdict of Public Court

The main consideration of the judge's decision was that TM deliberately and publically expressed feelings or conducted actions that essentially mocked and abused a religion followed officially in Indonesia. In addition, he deliberately expressed feelings or conducted actions with the intention of making others not adhere to a religion. Those four criminal acts were actually alternative criminal acts, the evidence of one of which had been fulfilled (Mahkamah Agung, 2012). However, TM's accusations are open to different interpretations. Related to the definition of "deliberate", the judges stated that the law from KUHP did not explain the sense of purpose. According to the theory of law, defining certain actions as a deliberate act or not can be recognized based on three theories. First, the act is known and desired (combined theoretical knowledge and the will). The act is categorized as a deliberate act if the act is known and desired by the perpetrator; that is, the perpetrator knew that a certain act, if it were done, would lead to consequences that are prohibited by criminal law and expected the consequences of the actions. Second, the desired action (theory of the will), in which the deliberate actions

are said to be desired (to be done) by the perpetrator. It does not actually question whether or not the offender knows that certain actions performed will lead to a result which is prohibited. Third, the act is known (theory of knowledge). The theory states that a particular act is considered intentional if it is intentional and known by the perpetrator. The perpetrator knows that the act is prohibited by criminal law, and if done, will have consequences (Mudzakkir, 2004).

In determining the element of intent, the judges believed that the theory of knowledge most appropriately applied for Indonesia, was a minimum standard in the practice of law. For the moral juridical aspect, the theory of knowledge was more justifiable and practically easier to be implemented. By using the theory of knowledge, deliberateness in crimes against public order offense lies in the knowledge of the perpetrators of the action and its consequence that the perpetrator knew that the act, if done, would disturb public order or religious peace. In order to prove the deliberateness, it is sufficiently proven that the level of knowledge is according to the standards of common society (Mahkamah Agung, 2012). Regarding the words "in front of the public", the judges believed that the explanation of Article 1 of Law no. 1/ PNPS of 1965 states that the words had been used generically in the draft of Criminal Law (Criminal Code). In the Criminal Code, there is no clear definition of "public", but according to the doctrine of "public", it can be interpreted as "that which can be viewed

by the public". Thus, an act carried out in public should not be done in a public place. It is, therefore, actually sufficient if there is a possibility for others to see the preaching.

It was revealed before the judges that in the years between 2004 and 2011, TM preached his teachings to the people around him. The teachings contradicted the beliefs embraced by the majority of local people. As a result, it caused unrest, conflicts and strong reaction within the society. In addition, preaching activities are in fact attended by another person as receiver/ listener of propaganda, and in public places (such as mosques, prayer rooms, or homes) where another person can see it. Thus, the sub-element "in front of the public" has been fulfilled. The judges considered that TM, as a religious leader, should probably know that his act could cause disruption of public order or disrupt the intra-religious peace. The judges believed that the doctrine taught by TM—as indicted by the prosecutor— proven by the fact of law was based on the suitability of the evidence brought by both the prosecutors and TM. Shia teachings of TM mainly revolved around the five pillars of faith; namely *tawhidullah/ ma'rifatullah* (the one supreme God), *al-nubuwwah* (prophethood), *al-imamat* (leadership), *al-'adl* (justice of god), and *al-ma'ad* (the Day of Judgment).

There are 9 pillars of Shia Islam, namely: prayer, fasting, *zakat*, *khumus* (pay one-fifth of the owned property), *Hajj*, enjoining unjust, *jihad* for the sake of God with one's wealth, body and souls, and *al-wilayah* (obedience to the *ulama*). The

other teachings are about two sentences of *shahada* (the Muslim profession of faith, there is no god but Allah, and Muhammad is the messenger of Allah). The Shia teaching of TM obliges *shahada* to entitle friends and in-laws and several wives of Prophet Muhammad as *kafir* (traitors). This trial testimony is based solely on witness testimony of Rois. Consequently, the judges argued that there is not enough evidence since it did not fulfill the minimum requirements of two valid pieces of evidence. The verdict regarding whether TM had taught that the Qur'an embraced by the Muslims today is not authentic (*tahrif al-Qur'an*) and somewhat inconclusive. In the Shia teaching, the authentic Qur'an is brought by Imam al-Mahdi al-Muntadhar who is currently invisible. In a public trial, there are some differences between the statements of witnesses brought by the prosecutor with the witnesses presented by TM's parties. For Sunni Muslims, the Qur'an is purely maintained (Qur'an, 15:9). However, the judges finally concluded that the doctrine taught by TM stated that the current Qur'an is not original and accused him with violation against Islam. The judges believed that *taqiyah* attitude (justified lying in Shia teaching), did not show the actual purpose. The trial concerns witnesses brought by TM who are siblings, students, and followers, as well as the notion of *taqiyah*.

In linking it with the truth of witnesses' testimony, in this case, the judges believed that these things can affect the inability of the credible witnesses. Thus, the witnesses submitted by TM were unacceptable and

the accusation of *taqiyyah* was not proven. Based on a brief exposure above about consideration, the judges sentenced TM for his spreading of the Shia doctrine, notably and particularly about the unauthenticity of Koran. Therefore, TM was charged with the blasphemy Article. The truth resulting in a court, it is merely a procedural justice and law. Therefore, this decision would definitely not necessarily be able to satisfy TM and his proponents. Hence, the relative claims of the court contrasts with the protection of free expression. Instead, this trial process shows us how a different way of thinking can be judged as blasphemy (Jones, 1980).

The trial process was contradictive. It viewed blasphemy as dangerous speech (Levy, 1995; Villa-Flores, 2006). Blasphemy can be classified into two types, active and passive (Nash, 2007). The passive blasphemy requires the harm caused by blasphemy which affects the whole community and it seeks restitution and redress. Active blasphemy requires individuals to demonstrate the actual harm they experienced. The Shia existence in Sampang did not actually harm the Sunnis. Nonetheless, the blasphemy is merely a 'verbal offense against the sacred' (Levy, 1995, p. 1). The settlement of this case has similarities with cases such as in Pakistan, using the court as a law enforcement agency for blasphemy. The implication, in addition to strengthen the religious views of the majority, is also to bully minorities not to make any opinion on state religion. (Forte, 1994). Kumekawa (2010) stated that the law grants the attorney the power to punish

heresy with jail and also the authority to ban religious groups that merely misrepresented state-sanctioned faiths.

DISCUSSION AND CONCLUSION

The Sampang Public Court's decision did not make the Shia followers retreat, neither did it dampen their spirit in what they believed was the truth. Instead, the decision made them more vibrant in preaching their faith. The followers of Shia have overwhelmingly experienced social pressure. The greatest pressure was on December 29, 2012, when the boarding house of TM was aggressively attacked and burned. TM, the leader of the Shia community, was eventually found guilty and sentenced to two years in prison for blasphemy. The conflict drove out 300 Karanggayam residents who are still living in emergency shelters in Sidoarjo Regency, East Java. Moreover, Shia followers had suffered even in the place where they were evacuated to. They could not work as they were living in a refugee camp. Children and women could not do their activities freely. In demanding for justice, in June and July 2013, some followers of Shia conducted long marches from the refugee camp to Jakarta in order to meet the president. These facts show that social violence in Indonesia is identified with vigilante or group fighting (Schäfer, 2015). Hence, implementing interreligious harmony in many areas in Indonesia, particularly for Muslims, continues to be a monumental task for the authorities.

The authorities have to enforce adequate policies and take steps to protect Islam from radicalism and intolerance. Sakai and Isbah (2014) and Susilo and Dalimunthe (2019) stated that the paradigm of conservatism had increasingly entered Islamic educational institutions in the last decade, not only seeking to deepen religious fundamentalism, but also vocally limiting the diversity of religious cultures at the grassroots. FKUB (Forum Kerukunan Umat Beragama/ Inter-Religious Harmony Forum) in Sampang have also played a role as a promoter and educator of the importance of religious harmony and acted as reconciler-mediator in resolving religious conflicts (Rokhmad, 2016). Thus, it is imperative for the authorities to prevent interpretations of Islam which are too conservative or literal and thus treat Shia Muslims with hostility. Local authorities did little to prevent the attacks and failed to prosecute those responsible. It is one of the most troubling aspects of these crimes (Kraince, 2009). Some of the most troubling instances of religious violence involve the harassment of religious minorities and the forcible closure of their places of worship. In the context of modern Islamic Indonesia, the government with the support of the national Muslim organizations should help heretical groups to be brought back to the true Islam ipso facto Sunni as a means to end the conflict between the two denominations (Hasyim, 2011). In the case of Sunni-Shia conflict, The Minister of Religious Affairs allegedly supported the forced conversion of Shia Muslims to Sunni Islam in a reconciliation program. It shows us that Islam is merely a practice of social theology, and in spite of influential

in politics, has not actively become a best practice in engaging in policy participation (Epley, 2010). Hence, the blasphemy law usually applies to perceived offenses against mainstream Islam and grants permission to the maintenance of Sunni domination (Kumekawa, 2010).

The harsh treatment from the majority brings even positive sympathy to Shia followers within the wider community. The decision of the public court indeed affects the public's view upon the teachings of Shia. However, this does not necessarily diminish their sympathy toward Shia followers who were expelled to and who suffer in the refugee camp. The real sympathy comes from institutions which are concerned about human rights issues. They actively support and regret the injustices committed by the state to minority groups. The sympathy of the public may bring them closer in understanding what and how Shia is. Such matters will increase the growing number of Shia followers. The moderate intellectuals, educated people, and the urban middle class are sympathetic to Shia. Even though they may not be Shia followers, they can understand the doctrines and rites of the Shia. Eventually, it is already a good sign for the development of the Shia. The teachings should be culture-sensitive, as a leader of a minority group, TM should have preached the teachings of Shia in a way that suits the culture of the local community. Jones (1980) stated that such controversy is greater when the purpose for which free expression is limited for group activity. Even though Indonesia's Constitution protects freedom

of religion through the blasphemy law and is purposively made for promoting religious harmony, state secularism, and the structures of religious pluralism (Breidlid, 2013; Feener, 2014). Regulations, precisely the laws of blasphemy, which should protect minority groups from various allegations, are even more often used as a tool to punish a person or certain minority group with blasphemy charges (Gunn, 2013; Harsono, 2012). Likewise, Forte (1994) and Uddin (2011) stated that the law against blasphemy had become a weapon against religious minorities in Indonesia. Law enforcers more often criminalized minority groups, such as Ahmadiyah and Shi'a, with charges derived from this blasphemy law. Thus, it seems logical to argue that the state has legitimatized violence against the minority community in Indonesia. This is related to many Indonesians facing religious discrimination and intolerant actions. In this line, Hamayotsu (2013) suggested that it must be addressed to maintain national commitment to protect the dignity of humanity, while ensuring healthy democracy through the creation of harmony and unity among groups.

It can be concluded that the Sampang Public Court announced a verdict that TM remained guilty of blasphemy for teaching a doctrine which is different from the common Sunni belief in the surrounding communities. He was sentenced to two years of imprisonment. At first, this case initially started from the reports of Rois to the police about Shia's beliefs and practices carried out by his brother, TM. In the

context of national interreligious harmony, Indonesian politics which is supposed to be secular and democratic, have instead been the main player in exploiting the freedoms of the post-Suharto period to violently harass less conservative Muslims and minority communities. This supports the argument that the crisis in modern-day Islam is seemingly exacerbated by the attempts of the Muslims to resist intrusions into their orthodox values. The national constitution has protected people so as to be able to practice their preferences for different values they hold sacred, but it is not necessarily free for them to show their individual differences in faith in Indonesia.

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Conceptual Paper

Islam-Christian Relations in Indonesia

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ABSTRACT

Relations among believers of different religions are often characterized by conflict and disharmony. The interreligious conflict and disharmony are not in line with the doctrine and religious mission itself, which on the contrary promote peace and harmony. If the undesirable opposite happens, it means there is a gap between the normative teachings with the empirical reality. Why does that happen? This article reveals the issues related to the Christian-Muslim relations in Indonesia over a period of time along with the factors underlying the disharmony of Christian-Muslim relations in Indonesia. The method used to analyze this problem was the historical-sociological approach. This study concludes that the Christian-Muslim conflict in Indonesia is triggered by external rather than (internal) problems such as political and economic issues as well as the shalow understanding of the believers themselves.

Keywords: Christian, interreligious conflict, Islam, relations

INTRODUCTION

The relations among believers of differing religions were in existence since the Prophet Muhammad's era where he served as the leader of the people and concurrently of the country. The Prophet laid the foundations of government and enacted regulations on interfaith relations known as "The Medina" (*Mithaq Medina*) agreement. The contents of the Charter of Medina, among others,

concern cooperation and mutual help between Muslims and Jews to confront those who attack against the holder of the agreement. The agreement in the Medina Charter was shared between Muslims and Jews in the city to maintain Yasrib (Medina).

The Medina Charter, also commonly called the Constitution of Medina, designed by the Prophet was a very brilliant idea , which was to give recognition to the principles of universal humanity in a plural society. That was recognized by many historians as a serious effort by the Prophet to build a civil society which inspires today's modern political order such as religious freedom, human rights and guaranteed security.

Pulungan (1994) illustrated the Charter of Medina in 14 principles, namely: 1) the principle of *keumatan* (civil society); 2) the principle of brotherhood; 3) the principle of equality; 4) the principle of freedom; 5) the principle of inter-religious relations; 6) the principle for the protection of the oppressed; 7) the principle of coexistence; 8) the principle of peace; 9) the principle of defense; 10) the principle of consultation; 11) the principle of fairness; 12) the principle of law enforcement; 13) the principle of leadership; and 14) *amar ma'ruf nahi munkar* principle (those upholding the good and avoiding the bad).

THE EXAMPLE OF TOLERANT ATTITUDE IN THE PROPHET'S ERA

Siradj (2006), for example, pointed out that there was a Christian named Bahira who realized danger to the prophethood of Muhammad, as the last prophet. Bahira realized that the safety of the Prophet was threatened. Then he reminded Abu Talib, the uncle of the Prophet to protect the Prophet from his enemies. Similarly, when the Prophet suffered psychological shock after receiving the first revelation, Khadijah, his beloved wife took the Prophet to Waraqa ibn Nawfal, a famous Christian monk. Waraqa calmed down the Prophet and assured Khadija that it was a sign of his prophethood. This was the example of the sincerity of the Christians (represented by Waraqa) in the history; they protected the Prophet from potential harm.

Similarly, the Qur'an also has noted the Islamic-Christian relations as stated in the following verses:

In ar-Rum verse 2-4, Allah stated "Destroyed [i.e. cursed] were the companions of the trench [containing] the fire full of fuel, when they were sitting near it and they to what they were doing against the believers".

In al-Buruj verse 4-8, Allah stated "The Byzantines have been defeated. In the nearest land. But they after their defeat will overcome. Within three to nine years. To Allah belongs the command [i.e. decree] before and after. And that day the believers will rejoice".

In al-Maidah verse 82, Allah stated "You will surely find the most intense of the people in animosity toward the believers to be the Jews and those who associate others with Allah; and you will find the nearest of them in affection to the believers those who say "We are Christians". That's because

among them are priests and monks and because they are not arrogant".

Qur'an puts sympathy over the "tragedy of Najran", the tragedy that befell the Christians in Najran (now a city located in the south of Saudi Arabia). They were tortured and burned in fiery trenches.

According to Siradj (2006) among the Arab tribes who sent a delegation to the Prophet Muhammad was the tribe of Najran. They were quite a large delegation, 60 people led by three recognized leaders: `Abd al-Masih, the so-called` Aqib; Abd al-Harith ibn Alqamah, a Nestorian bishop, and Ibn al-Harith, a leading figure of Bani Harith. They were welcome in the Mosque by the Prophet in Medina. They stayed at the Prophet's Mosque and partly in the houses of the Prophet's companions. They stayed a few days, even had time to do the church service in the Prophet's Mosque. Initially they asked for permission to perform church services outside the mosque, but the Prophet just let them do it in the mosque. While in Medina, the Prophet held dialogue with the leaders of the delegation. Before they returned, there was agreement between both parties which stated that the soul, religion and their properties were fully protected by the Prophet.

The same tolerance was accorded to by the Majusi to Muslims. History told us that the Zoroastrian community in Abyssinia received Muslim refugees led by Ja`far Ibn Abi Talib, which reached 100 people, 18 of whom were women.

Genealogically, the Jewish, Christian and Islamic religions have the same lineage, namely through Abraham. Christianity was born as a divine religion through the Prophet Isa, while Islam through Prophet Muhammad. Jesus is a descendant of the Prophet Ishaq, one of the sons of Abraham. which then descended to the Israelites (Jews, sons of Jacob). While the Prophet Muhammad is a descendant of Ishmael, half-brother to Isaac, which then descended to the Arabs. Meanwhile on the teaching aspect, there is also a closeness and a meeting point between Islam and Christianity. Therefore, Allah encouraged humans to head to *kalimah sawa* ', to the belief in Allah, the angels, the Apostles, scripture and the final day. Driven by the spirit of *Kalima Sawa,* the Prophet built a community of Medina known as the "Constitution of Medina" (Siradj, 2006).

The harmonious relations among religious followers continued during the al-khulafa al-Rashidun, Umayyad period and Abbasids era. But the harmonious relationship from time to time was also marred by stains of crusade in the 10-11 century AD, mainly due to political and economic interests. This is according to Siradj (2006) triggered by the ambition of the kings in Europe and the Middle East to fight for the Jerusalem area.

Coward (1995) listed the encounter of Islam with other religions in six stages: beginning from the time of the Prophet in Makkah until the modern age today, where Muslims met with people of various religions in different parts of the world such as the Nestorian Christians and Monophysites, Mazdean, Sabian,

Melkite Orthodox, Jews, the Samaritans, the Haranian, the Manikhean, Buddhist and Hindu. Coward contended that historically during the Middle Ages, Muslims had more knowledge about other religions compared to non-Muslims, and had a more objective attitude towards people of other faiths than Christians. In the context of the current pluralistic world, Coward believed Muslims had the opportunity to formulate ideas on interfaith relations as they were pioneers in this.

CHRISTIAN-MUSLIM RELATIONS IN INDONESIA DURING THE OLD ORDER PERIOD (1945-1965)

In the Indonesian context, since centuries ago, there have been many different religions: Hinduism, Buddhism and various beliefs, which include both both animism and dynamism. There was a tendency to mix the various religious aspects (syncretisms) especially in Java. Academic discussions on religious issues in the palaces in Java by the religious elite was also a common tradition. According to Ongkokham (1993), they were mutually tolerant. But it should be admitted, however, that religious differences or differences in opinion on theology also often led to bloody conflict.

The pattern of interfaith relations in the past was strongly influenced by the politics of religion as well as the stelsel politics of the colonial government. Each was left in an antithetical relationship, which involved competition. The colonial government practiced religious politics which emphasized dogma (teaching) not ethics (behavior). As a result, religious

life lost its inspiration among the people. Also, the colonial ruling elite controlled interfaith dialogue in such a way that it was constrained to a large extent (Sumartana, 2005).

According to Sumartana (2005), since the 19th century AD, religions appeared in a formative phase characterized by an attempt to formulate teaching and education befitting the challenges that arise today. Contact relations with religious centers abroad led to the emergence of religious purification. Religious orthodoxy became prominent with new developments such as Christianity becoming Western-centric, Islam becoming Arab-centric, Hinduism becoming India-centric, and Buddhism becoming Srilangka-centric and Thai-centric. Such tendencies have had effects on current interfaith relations, e.g., the stigma of the Crusades and the wars between Protestants and Catholics in the history of Europe also influenced the sentiments of the Indonesian people. The long list of "religious wars" impacted religious harmony and contributed to conflicts in modern times, like that in Northern Ireland, Lebanon, Israel, Bosnia and in other places.

By the time Christianity came to Indonesia, most of the population had converted to Islam. Both religions were equally newcomer religions for Indonesia. Christianity came to Indonesia in conjunction with the arrival of the West (colonial rule) in the 16-17 century AD, while Islam arrived earlier (9-10 century AD) through Muslim traders from Arabia, Persia (Iran), or India (Gujarat) (Sudarto, 1999).

The roots of Muslim-Christian conflict had been in place long before their encounters in Indonesia. According to Cooley, as quated in Sudarto (1999), since the beginning the relationship between Muslims and Christians in Indonesia have shown tension. This is because, prior to entering Indonesia, these religions had competed and been in conflict with each other in West Asia, North Africa and Western Europe. The conflicts were then brought by these two religions into Indonesia. One of the reasons for conflict according to Madjid, as quated in Sudarto, was due to economic factors. The arrival of Western people, the Portuguese, English and Dutch to East Asia, including Indonesia, was to liberate their economic dependence on the Muslim world, which at that time dominated the world economy. However, Cooley concluded that the political aspect was the dominant factor affecting the relationship between Islam and Christianity in Indonesia.

Siradj (2006) asserted that the tension of Christian-Muslim relations was not motivated by factors such as creed or belief. As in the time of the Crusades, political and economic factors contributed more to the tensions. Politically, the position of Christianity as the religion brought by Dutch colonialism was less favorable than Islam. Christians were associated to the invaders. This tension was coupled with the political situation in Indonesia since the early 1970s. To address status quo, the New Order regime included the non-Muslim minority in bureaucratic circles and in organizations overseeing the management of economic resources. And at the same time, the New Order government also marginalized Muslims in those domains. Thus the issue of religion was considered normal in that imbalanced situation. Muslims politically opposed the policy of the state, and sometimes they turned to radical Islamic movements for support. Suspicion was escalating between Muslims and Christians. A number of groups had the privilege from the state from which their conglomerates emerged. This new rich group enjoyed the ruler status. On the other hand, the majority of Muslims were displaced and marginalized. This imbalance created economic disparities that lead to a prolonged crisis, which could explode at any time in the form of religious conflicts. The problems got more complicated as Indonesian politics was still far from being the true democracy that it aspired to be. Thus, the disharmonies among Muslim-Christian relations were not uncommon as it was motivated by political overtones than religious ones.

Another factor that triggers the disharmonious relationship between Muslims and Christians according to Siradj (2006) is due to the superficial understanding of religion among some Muslims. With a very superficial knowledge of religion, they often claim to be leaders representing the majority of the Indonesian nation. One example of superficiality is evident from the efforts of some people who claim to be religious scholars. They aim to replace Pancasila with Islamic principles by establishing Islamic state, a thought

that leads to the formation of a theocratic country. This of course is questionable: Would the Prophet Muhammad have approved such a doctrine (Siradj, 2006)?

Here, the two religions instill mutual hatred. The West, as a Christian representation expanded their economy to Indonesia with missions on Christianity propagating the religion. Islam, on the other hand see the West as the imperial power feeding the Christian missions. Both have interest and bring potential conflicts, during the colonial period, the Old Order and New Order eras.

Thus, if viewed from the historical perspective, in the colonial period, the tense relations between Muslims and Christians was triggered by evangelism (missionaries) who received big support from the Dutch colonial government, both in terms of political and financial assistance. During the Old Order, the tension between the two religious communities was aggravated while the discussion of the 1945 Constitution was going on, and during the period when the Constituent Assembly election as well as the 1955 general elections were held. In the preamble of the 1945 Constitution, "seven words"[1] associated to Islamic nuances were defined. The Christians regarded the seven words as efforts to establish an Islamic state. The words were then finally removed (Sudarto, 1999). According to Rabi' (1998),

the founders of the Republic of Indonesia, who also represented the majority of the people who are Muslims, aspired to establish Pancasila as the state ideology in an earnest effort to find a state system that ensures harmony and religious pluralism.

Motivated by the disharmonious relationship between religions, the New Order government through the Minister of Religion, KH. Muhammad Dahlan, held the "Top-Down dialogue " on 30 November 1967. But the dialogue which gave birth to the "Interfaith Council" was not considered successful due to the occurrence of interreligious conflict. Mukti Ali, the next Minister of Religion tried to formulate a dialogue which was grounded in good faith and which would foster mutual trust of each religious community. Finally Mukti Ali reformulated the "Interreligious Council" involving more religious leaders.

HARMONY, TOLERANCE AND INTERRELIGIOUS DIALOGUE OF THE NEW ORDER ERA (1966 – 1998)

Thus Sumartana (1993), further claimed it was evident that since the beginning of the New Order until now –both on the initiative of the government and the religious communities itself-- interfaith dialogue had been built, and even had become a national agenda for the sake of stability and successful development – though there were some people who claim that it was not successful due to the lack of mutual agreement between followers of the two religions, especially with regard to the principles of propagation. During the period

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[1] The seven words are: "the obligation to enforce Sharia Law for adherents", of a series of words in the Preamble to the 1945 Constitution, namely: "The state is based on the Deity with the obligation to enforce Sharia Law for adherents".

between the years 1972-1977, it was noted that the government had organized dialogues which took place in 21 cities (Syadali, 1997).

In the decade of the 1980s to the present, dialogue initiatives in creating inter-religious harmony and understanding continue to be carried out, either by the religious elite, young intellectuals and the government itself, e.g. a dialogue organized by the International Conference on Religion and Peace (ICRP) initiated by Djohan Effendi and his colleagues, institutional dialogue (institutional dialogue), the dialogue among the delegates from various religious organizations involving legitimate religious councils, such as the Indonesian Ulema Council (MUI), Association of Indonesian Churches (PGI), the Conference of Catholic Bishops Indonesia (KWI), Parisada Hindu Darma, The Representative of Indonesian Buddhists (WALUBI) and so on. The transformative discourse of dialogue was often done by intellectuals or NGOs such as the Institute for Interfaith Dialogue in Indonesia or the Inter-Faith Dialogue (Interfidei / DIAN), Paramadina, Institute of Islamic and Social Studies (LKiS) in Yogyakarta, Institute for Pesantren and Community Development Association (LP3M) in Jakarta, Community Interfaith Dialogue (MADIA), and others. But the fact was, the tension and turmoil triggered by religious sentiment (Muslim-Christian) in some areas, such as in Situbondo, Tasikmalaya, Ketapang, Kupang, Ambon, Poso, Maluku resulted in the destruction of places of worship such as mosques, prayer rooms, and churches. This hampered the

Government's efforts to solve the problems of conflict. The conflict in Poso led to *Perundingan* (Negotiation) *Malino I* and *Malino II*. This was followed by other negotiations such as in the Maluku conflict resolution. Malino II negotiation was expected to generate a significant benefit in the creation of peace and harmony among religious believers in Indonesia. But even this effort, was unable to overcome and prevent the resurgence of conflict among religious believers. This phenomenon shows the gap (gap) between the ideals of religion (das sollen) as teachings and messages of the Lord with the empirical reality that occurs in society (das Sein).

Reese (1996) stated that imposing a particular religion on the people would endanger political stability. This was also explained by Spinoza, that the imposition of beliefs/religions on the people would lead to civil disobedience, and chaos in politics and religion. Therefore, according to him, the state should support tolerance to ensure the security of citizens. Oppression in the name of religion was opposed by Locke (1999), who added that religious tolerance should be extended to people of all variants of religious beliefs and rituals. But, Locke eliminated atheism in the expansion of the tolerance. *Second*, at the latitudinarianism stage, the country or region establishes a particular religion as the official religion. In this case, people do not have an obligation to embrace the official religion. Furthermore, it must be stated clearly that those who embrace non-official religions are not expelled from the country. The third stage is

pax dissidentium, and at this stage religious freedom has been completely owned by the people and endorsed by the state.

In this context, Indonesia as the country has come to the dissidentium pax stage, giving freedom to its people to embrace the six official religions endorsed by the state. At the institutional level and theoretically, religious tolerance policy has been formulated in the legislation, but at a practical level, such a great formula often cannot be implemented perfectly into everyday life as there are still social and religious issues which have not been solved. Therefore we need the synergy between the government as policy maker and the public as the doers. In making policy, the government should pay attention to the growing aspirations of the people, so that policies can be made applicable. The government also should proactively promote the establishment of religious tolerance and facilitate the public's willingness to juxtapose one religion with other religions or one school and other schools.

To arbitrate religious conflicts is not easy. The preventive required measure is to provide an integrated understanding of religion. Understanding of religion cannot be done partially as it may lead to misunderstanding of other religions. In this case Ali (1998) said that to understand religion integrally, several prerequisites were required. First, the intellectual needs to be able to understand the religion or the religious phenomenon as a whole and ready to comprehend all the information about other religions. Secondly, it needs

a considerable emotional state, not to be indifferent, as was done by the positivists. This does not mean that we agree with the notion that religion is only an emotional issue, because religion includes intellectual, emotional and volition. In understanding other people's religion there should be feeling, attention and matexis (participation). Participation is best learned through the constant interaction with people of other religions. This experience helps us to understand more about their religion, because their daily practice is sometimes different from the teachings that we learn from the book. Third, there is a will. This willingness should be oriented towards constructive purposes. The excessive love on one religion may eliminate appreciation of the differences among the religions (which should be avoided). Mukti Ali added that in addition to the three prerequisites above, humans needed to be equipped with first hand experiences. This is because the vast experiences will provide additional qualifications to understand other religions. Through experiences, one can absorb the thoughts of others, a wide variety of other's actions, feelings and ways of thinking.

CONCLUSION

From the discussions, it can be concluded that there are three factors that lead to conflict in religious life: political, economic, and shallow religious understanding. To achieve the necessary religious harmony, the integrated understanding of religion including empathy, sympathy and habits for interfaith dialogue are important.

In general, religious life in Indonesia is harmonious, with some problems sometimes triggered by political and economic interests. Religion should be kept out of political and economic interests, and should play a role in the control of deviations. This can come about through interfaith dialogue.

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Concept Awareness of Universal Design in Interior Design Program in the U.A.E.

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ABSTRACT

Universal Design (UD), a term coined by Ronald L. Mace is a concept of equality of use of space, built environment and products irrespective of the limitations and disabilities users may have. The concept is founded on eradicating the discrimination, marginalization and social disengagement of the disabled. In addition to those born with disability, and those who have become disabled because of mishaps, a more disconcerting situation is the demographic change caused by a steadily growing aged population across nations. The elderly, as with other disabled populace, find it difficult to complete even their routine daily tasks due to diminished accessibility. The goal of this paper is to assess the awareness of UD amongst students pursuing interior design in the U.A.E. Since most of the academic institutions in the region are run either by the American, Canadian or British Universities, this work will be able to reflect on the importance such universities give to UD in their curriculum. Healthcare and social engagement of the disabled is the main concern, hence. Providing avenues for the disabled implies creating universally accessible and usable built environments and products. Designers need to be cognizant of

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the relevance of UD as an integral part of their profession. Such awareness requires that the values and concept of UD be taught during the formative years in the schools and colleges. More specifically the designers of built environment – the Architects and the Interior designers should take concerted efforts to understand and implement the philosophy of UD.

Keywords: Architectural domain, inclusive design, interior design, universal design

INTRODUCTION

Since the 20th century, the average human life span has been on the continual increase (from 47 years in the start of 20th century to 76 at the start of 21st century (Connell, 1997; Overall, 2005), owing to better health care and living conditions. Such an ever-growing ageing population has significantly changed world demographics. Aged people are prone to have diminished ability or even disabilities in their later stages in life and are often unable to complete daily routine tasks without help. This not only makes them dependent, but also limits them access to many avenues in built spaces, or able to use products that have become commonplace in their lives previously.

In addition to this, there are other people who have been disabled from birth or those who have been injured through accidents or when at war. All of these people need access to everyday utilities and unhindered access to and the easy use of space as well as products in order to avoid stigmatization, marginalization and to also be engaged socially and democratically. The inclusiveness of those suffering from a disability lies in the concerted efforts of designers to create spaces and products within the built environment that are easily accessible.

Universal Design (UD) is a philosophical concept projected into the design of space and products. Social recognition regarding the need for 'inclusive design' or 'design for all' appeared within European nations earlier than the rest of the world (Kennig & Ryhl, 2002). Ronald L. Mace, designer, academic and architect coined the term 'Universal Design' in the 1970's, and formalized the concept through the formation of The Center for Universal Design in 1989. The main emphasis of this movement was to remove discrimination and inequality between those with and those without disabilities (including children and the older generation) when accessing and using living spaces and products.

However, the awareness of the concept of Universal Design still seems to seek due recognition and consideration in the realms of design ethos of architectural and product creation. Literature on Universal Design exposes a lack of concept awareness and thus seeks remedial action through different means, chiefly through the introduction of the concept at academic levels. This paper seeks to establish further facts by conducting a structured interview of students pursuing a program in Interior Design in the U.A.E. in institutes affiliated to American Universities.

Researchers seek to emphasize the importance of, and lack of awareness of Universal Design, alternatively called 'Inclusive Design' or 'Design for All' by defining it as a social, academic and professional movement (Froyen et al., 2009; Olguntürk & Demirkan, 2009). In the 21st century, there is growing need for awareness regarding Universal Design, given the rapid technological advances and multiple avenues for engaging people with disabilities socially. Disabilities may appear in different forms: those related to old age (physical or mental), temporary (caused by accidents), or permanent (accidental or from birth). However, the architectural design environment at present does not conform to philosophical tenets and theoretical principles regarding Universal Design, and as such, impedes continued social engagement of the disabled (Danford, 2003). This lack of awareness in fact is a global issue in academic and professional practice (Powell & Pfahl, 2018).

Danford (2003) exemplified the success of the concept of by implementing Universal Design via an experiment. This experiment comprised taking a group of 32 adults (24 of which had at least some form of disability (visual/hearing/mobility, whilst the remaining eight did not have any disability) on a tour of a 'Universally Designed' building. He sought their opinion on the ease or difficulty of completing standard, routine expectations, such as accessing and using washrooms, entering confined spaces and other sundry tasks. All the participants reported that the tasks presented no difficulty.

Universal Design (UD) has thus a created environment with products and features that all users, irrespective of abilities, can use and access easily without specific, concerted adaptations (Story, 1998). Socially, the need for specific adaptations that disabled people require to access daily life and activities in both public and private environments often lead to stigmatization and sometimes become noticeable as 'different'. Story (1998) explained that disabled people might utilize more effort to complete mundane tasks, and that 'normal' people saw this as 'disconcerting'. Taking it further, such stigmatization may impede social participation and consequently, and more importantly, social engagement through 'productive' contribution. Thus, a lack of 'Universal Design' could ultimately lead to marginalization of people with disabilities (Knight & Ricciardelli, 2004).

It could be said that the well-being and quality of life of people with disabilities depends on the number of activities they can perform independently, including social pursuits and engagements Studies note that a lack of awareness of UD evident in the current 'designer' ethos impacts those who are disabled negatively. A lack of UD concepts in the built environment and within production design creates barriers for the disabled (Burgstahler, 2015; Demirkan, 2007; Kadir & Jamaludin, 2013). Furthermore, it leads to isolation, social disengagement, and ultimately can be seen as accentuating physical disability (Bennett, 2005; Brown et al., 2008; Glass et al., 1999; Grundy & Bowling, 1999).

Universal Design is a concept and a theoretical premise that when embedded into an overall design ethos would allow all users of living spaces and environments (as well as products) to use them equally, without specific adaptations, stigma, or disconcert. In general, the design of UD products are universally accommodating and fulfill the needs of all users (Goldsmith, 2007). Implementing UD in architecture, products, or utilities has many important ramifications, such as independence, equality, engagement, social health, and associated benefits, both tangible and intangible for those who require it. However, academic institutions training architects, design engineers and environmental planners (such as town planners and entertainment sites) do not include UD as a core curriculum subject (Aslaksen, 1997). Thus, designers are mostly oblivious to the core ethos UD – its theoretical and philosophical base. Secondly, most built environment and product manufacturing adhere to and revolve solely around codes and regulations.

Designers 'best practices' rarely, if at all, consider UD as a mandatory part of spaces designed by architects or even products created by design engineers. Academics profess that incorporating UD into day-to-day living requires minimal additional cost, whereas built environments show that accommodating such changes requires, for example extra layout floor/height (Horne et al., 2008).This comes at a premium in modern urban settlements and clients of the designers that offer UD may not agree to the increased costs, unless imperative. In order to include UD in the architectural domain, related research from the literature includes:

1. Incorporating UD as a theoretical, mainstream subject, with proper definitions, practices, and use with its tangible and intangible benefits (Afacan, 2011; Hosny & Anous, 2015; Olguntürk & Demirkan, 2009; Türk, 2014).

2. The design process should involve disabled users and recognition of their considerations should be included in practice (Ergenoglu, 2013).

3. Explore newer avenues through collaboration with a wider spectrum of designers across professional, socio-cultural and national boundaries to evolve designs that transcend codes and regulations (Singh & Tandon, 2018).

4. Evolve cost-effective solutions to engage the client and seek to add value to design (Carr et al., 2013).

Designers create spaces for clients considering aesthetics, utility, lived experiences and interactions with built environments. However, experiences can be subjective and prone to change (Poldma, 2010). In order to imbibe such knowledge into architectural design, Strokerson (2010) suggested a theoretical framework of the "implicit, naturalistic, ecological cognition of everyday existence." As a reflection of this, implementing UD is a concept with a philosophical outlook. All stakeholders, designers, architects, engineers, clients and users should be aware enough to look beyond their own needs and experiences in built spaces and products and should seek to engage all users, irrespective of their abilities and limitations in order to access all

facets with equality and moreover, without stigmatization or marginalization (Carr et al., 2013; Null, 2014).

Since UD is often claimed as an invisible design feature (Null, 2014), this article provides some of the best practiced examples in order to clarify this:

1. UD Teaching Facility: Kansas State University

   According to White (Jo White & Annis, 1995), the laboratory has many features such as; 1) hands-on integration of the universal design concept into both resident- and off-campus instruction and 2) applied research on user-based environmental design innovations. Five state-of-the-art prototypes testing and demonstration areas include an office/work environment, kitchens, bathroom/restroom modules, a lecture/focus group area, and an open product testing space.

2. Center for Real Life Kitchen Design

   This is located at The Virginia Tech College of Liberal Arts and Human Sciences, Blacksburg, Virginia. According to Byron, *"The newly launched Center for Real Life Design now offers faculty and students a multifaceted laboratory for exploring design and technology solutions for people with a range of physical and cognitive abilities and consumers who want to be environmentally responsible"* (Byron, 2017).

Both of these offer the best examples, taking into consideration the usability needs of people with various disabilities and also equal consideration to those of various ages and sizes (Null, 2014).

METHOD

The goal of this paper is to assess the awareness of UD amongst students pursuing interior design in the U.A.E. Since most universities and academic institutions in the region are either run by American, Canadian or British Universities or affiliated with them, this work should reflect on the importance such universities give to UD within their curriculum. This work hypothesizes that there is a need to increase awareness of UD in the professional realm. The literature review shows that such awareness is missing in academia and that incorporating further studies and information would help students be more appreciative of the needs of disabled and elderly people when designing and creating built spaces and products. The methodology follows a 'structured analysis', as outlined by Krathwohl (2004).

Questionnaire Design

The questionnaire consists of a list of main questions followed by examples of illustrative reasons to back up this main question. Such a method helps the researcher to ascertain the participant's depth of understanding in regard to the main question. The design of the questionnaire also helps investigate the awareness of UD in interior design. Since the literature review

emphasizes the importance of incorporating the awareness of UD into the curriculum of programs taught within interior design, this questionnaire targeted students pursuing such programs in the UAE, in the 'in studies.

The questionnaire was based mainly on the first question, where students were asked to define Universal Design. It aimed to understand their awareness of UD as a concept. The follow-up question sought to understand the implications of UD, as understood by those who were able to answer the first question. Participants were required to explain the definition they had offered (in regards to UD) by illustrating the answer with examples that they had observed within built or themselves.

The next question sought to how students understand the importance of UD within interior design. Thus, the questionnaire was exploratory in nature and sought to delve deeper into the accrued meaning of UD and how students understood UD as both a concept and in practice. Each interviewee was interviewed independently, and the time taken for each individual interview was approximately seven minutes. All interviews were recorded for accuracy and for future reproduction and analyses. The salient points were noted in writing by research assistants in the field.

Participants

All fourth-year students studying an Interior Design Program in 2015-2016 from seven universities in the UAE that offered this program were contacted to participate in this study. They were chosen because they were

Table 1

The number of students who participated in the survey

	University name	Program	State, city	Numbers of students interviewed	Total number of students in the program	Percentage of participation
1	University of Sharjah	Interior Architecture and Design Program	Sharjah	42	42	100%
2	American University in Sharjah	Interior Design	Sharjah	18	22	82%
3	Ajman University	Interior Design	Ajman	23	39	59%
4	Abu Dhabi University	Interior Design	Abu Dhabi	19	19	100%
5	American University in Dubai	Interior Design	Dubai	11	32	34%
6	Canadian University in Dubai	Interior Design	Dubai	9	22	41%

Table 1 *(Continued)*

	University name	Program	State, city	Numbers of students interviewed	Total number of students in the program	Percentage of participation
7	Al –Hosn University	Interior Design	Abu Dhabi	7	7	100%
Total				129	183	70%

seniors in this program, had completed their internship successfully and mostly working on their graduation project.

Amongst all those contacted, 129 students attended the interview. Table 1 shows the students participation according to university. Although the target is to get 100% participation, however, it was not achievable as some of the students were not available during the interview.

RESULTS AND DISCUSSION

In Figure 1, the results of question one (the definition of UD) shows that more than half of the students (57%) were not aware of the UD concept, or did not have enough of an idea to define what Universal Design is. This implied that they would not be able to illustrate the concept with relevant illustrations. Hence, they were not required to answer the follow-up questions. Less than half of the respondents (43%) could attempt to define UD, implying that they had at least some idea in regard to the concept. Out of those who attempted a definition of UD, only 18 (14% of the total participants and 33% of those who attempted) could answer the question correctly and with confidence. Examples of stated definitions are as follow:

- UD is the understanding of the environment (cultural, social, and behavioral)

QUESTION 1: DEFINITION OF UD
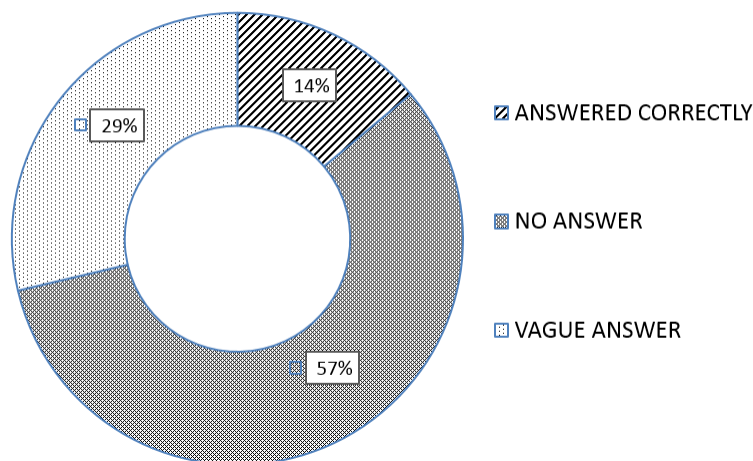
Figure 1. Question 1. Definition of Universal Design (UD)

- UD defines designs that serve people who have a specific disability, such as visual impairment
- UD sends a message especially to us (as a candidate of interior designer) to not ignore the people with diverse disabilities from the rest of the society

In the second category, 37 (29% of the total participants and 67% of those who attempted) responses to the first question did not relate to the concept and differed vastly from the standard expected response. Hence, such responses were deemed as inaccurate. Responses were recorded during the interviewing process to reveal the understanding of UD from the participants' point of view. Some of the definitions of UD given by participants are as follows:

- UD is just in relation to ergonomic design

- UD is an internationally acceptable design
- UD is a product design that is gaining an acceptance by all people.
- UD serves user groups from diverse religions
- UD reflects the ideas and lifestyles of sociologists

The results of the second question (example of UD in interiors) as shown in Figure 2 shows that among the 55 (43%) students who had some idea on UD, 60% were unable to provide specific example of UD, 23% provided irrelevant illustrative examples and only about 17% of the respondents that understood the concept gave a good example of UD.

The results of the third question (the importance of UD in interior design education) in Figure 3 shows that:

(a) 15% of students believe that UD is a crucial part of interior design in the present, due to the changing demographics owing to

QUESTION 2: EXAMPLES OF UD IN INTERIORS
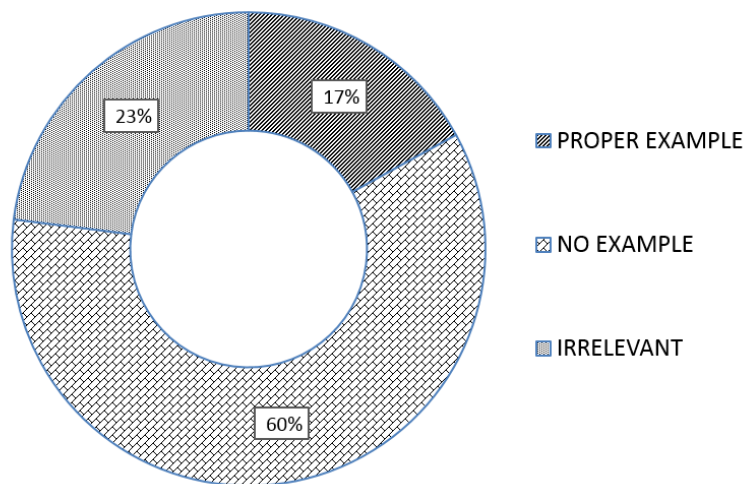
Figure 2. Question 2. Examples of UD in interiors (given by students)

a growing aged populace. They gave well-formulated, logical opinion and responses.

(b) 18% of the respondents said they believed that UD could be learnt whilst in the profession and has no relevance in the professional curriculum as it would interfere with technical nature of the course and dilute the rigor. In addition, they believed that the curriculum already had enough content and that UD would be an additional, unnecessary burden.

About 67% of students were unaware of the application of UD in the interior design field or did not have any idea as to how UD could be implemented in interior spaces. As such, they did not provide a definitive opinion to the query.

Overall, the result agreed with the literature suggesting that UD awareness is missing in academia as students have had no formal introduction to UD and are generally therefore not aware of the importance or relevance of UD within built spaces and the environment. Out of 129 interviewed, only 18 (14%) defined UD accurately, although the grasp of the concept (impact on practical use, factors to consider whilst designing, usefulness of UD towards social engagement, and the like) was not sufficiently strong. As per the design of the questionnaire, the 18 students who answered the first question correctly were asked the follow-up questions to illustrate their answers as clearly as possible with examples.

This group of students was aware of the importance of the concept. Further questioning regarding the source of their awareness towards UD revealed that that their knowledge of the concept was formed

QUESTION 3: THE IMPORTANCE OF UD IN INTERIOR DESIGN EDUCATION

15%

18%

67%

POSITIVE

NEGATIVE

NO OPINION
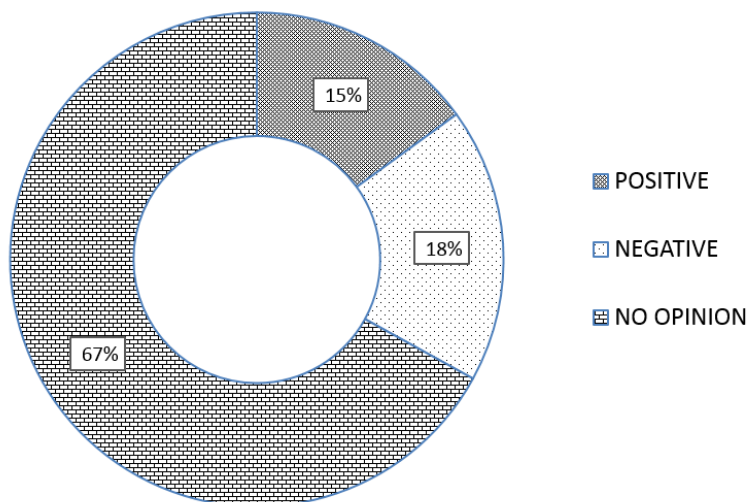
Figure 3. Question 3. The importance of UD in interior design education

by their own interest, studies, and research. They also mentioned that they had used the values of UD in their design projects, and their projects were distinctly different when compared to those of other students, in a positive way. They were pleased to be offered a chance to design the given spaces with an awareness of potential disabled users. It is also important to note that out of the 18 students who answered correctly, 10 (56%) were from American University of Sharjah where there is one elective course on UD offered under the ID program. Whereas in the other 6 universities, no specific course on UD is offered in the curricula.

CONCLUSION AND FUTURE WORK

UD is becoming increasingly relevant in current times as equality, well-being, inclusiveness and social engagement improve. UD has a philosophical premise and also tangible physical implications within the realms of design, including that of the built environment as well as production design. However, the awareness of this important facet of design is very low, if not completely absent amongst professionals and students of interior design and architecture. This study shows that UD is not a well-known concept amongst students where 86% of students in the survey were unable to give a proper definition of UD. The result of the survey seems to support the claim that universities do not include UD as a mainstream (theory and practical assignment), independent subject at any stage of the program. The results demonstrate the need for increasing the awareness of UD amongst interior design students by having UD as part of the curricula in the UAE and also elsewhere as universities in the UAE are run either by American, Canadian or British Universities, or are affiliated to them. Even those who recognize the importance of providing equal opportunities to all find it difficult to provide solutions for the disabled due to lack of formal training and sufficient insight into the concept of UD. Health care and social engagement of the disabled is a growing concern, hence providing avenues for the disabled implies creating universally accessible and usable built environments and products.

Further research needs to be done to investigate the advantages of UD as a social paradigm and the same should be made evident to students of interior design and product manufacturing. The next step would be to investigate the effectiveness of a specially designed course on UD as a step towards incorporating UD as a theoretical, mainstream subject in ID program. The course should involve disabled users in the design process and recognition of their considerations should be included in practice. Commentators believe that such exposition would invoke student interest in this important facet of spaces and product design. Incorporating UD within built spaces would help equality regarding the use of space and assist with social engagement. Eventually, it is hoped that it would help lessen the marginalization and stigmatization of those who are disabled.

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Firm Size and Growth: Testing Gibrat's Law in the Nigerian Life Insurance Industry

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ABSTRACT

The Gibrat's Law of Proportionate Effects (LPE) of 1931 states that a firm's size is irrelevant to its organic growth. This study tests this law in the Nigerian life insurance industry for the period of 2007-2014, sub-divided into 2007-2010 and 2011-2014; and on composite and life specialist insurers to account for both the time-varying and structural effects for the testing period. Additionally, it examines other determinants of firm growth in the industry. Using panel unit root test and generalized methods of moment (GMM) regression techniques, the study found that Gibrat's law does not hold in the entire industry and sub-samples over the entire period and the sub-periods. The results further indicate that smaller life insurers grow faster than bigger ones. In addition, while a firm's profitability has a positive association with its growth, age and reinsurance do not determine life insurers' growth in Nigeria. These findings provide further valuable insight on the determinants of life insurers' organic growth and the applicability of LPE in the financial service sector of developing economies. A paradigm shift from 'one-cap-fits-all' regulatory approach to more proactive policy measures aimed at spurring older firms' growth is recommended for accelerated growth and deeper penetration of the life insurance industry in Nigeria.

Keywords: Firm size, firm growth, Gibrat's law, life insurers, Nigeria

INTRODUCTION

There have been growing concern among scholars to establish relationship between the firm size and firm growth after the emergency of the Gibrat's LPE of 1931 (Gibrat, 1931). This law states that firm's organic growth rate is independent of its size, which suggests a random walk. Practitioners and academia in different industries have made attempts toward establishing link between firms' internal growth rate and size. Those studies covered manufacturing and service sectors as well as developed and developing economies.

Insurance industry is not left out in the search but with a smaller number of studies compared to manufacturing and other financial service sectors. Studies on insurance industry include Adams et al. (2014), Choi (2006, 2010), Hardwick and Adams (2002), Javaheri (2013), Pan et al. (2012), and Tien and Yang (2014). But the ones that focused only on life insurance are: Hardwick and Adams (2002) on UK life insurers, Adams et al. (2014) on Swedish life sector, and Tien and Yang (2014) on Taiwanese life industry. The findings of these scholars differ considerably as some provide supportive evidence for presence of Gibrat's law, others, do not. To date, there is no consensus on the debate based on the available empirical evidence on insurance industry.

So, this study adds to literature by testing the Gibrat's LPE on both composite and life specialist insurance firms in Nigeria for the period 2007 to 2014, sub-divided into 2007 to 2010 and 2011 to 2014 periods, to check the time-varying effects within the period of testing, that is, the incubation period after the recapitalization (2007-2010), and on the long-run (2011-2014). Both Goddard et al. (2002) and Oliveira and Fortunato (2008) argued that growth persistence in larger firms might be for a short period rather than long-run.

This study is unique in two ways. To the best knowledge of the author, there is no evidence of prior attempt to test the Gibrat's law in Nigerian insurance markets. Again, this study is the first to consider the structural effect of life insurance industry in the test of the LPE. An analysis of life insurers based on composite and life specialists is important due to the inherent cross-selling advantage in the composite life insurers.

The present study is imperative because the existence of LPE is contextual (Daunfeldt & Elert, 2011), hence, generalization of findings from other countries may not suffice for a valid forecast in another. In view of this, Tien and Yang (2014) advocated for more studies in developing countries for further insight into the dynamics of the Gibrat's Law in the insurance industry and expansion of the extant literature on asset-growth nexus among insurers in different countries.

Evidently, there has been a consistent increase in assets (size) of life insurers in Nigeria in more recent years, unlike the non-life industry. The sector has a ten-year (2005-2014) average growth rate of 22.62% while non-life recorded 14.69% (Nigeria Insurers Association [NIA], 2014). The rapid growth in asset within the sector necessitates the investigation whether it connects internal growth of the industry. The focus on life sector is justified on its strategic significance in economic growth and human development via the provision of risk management, financial intermediation and security, job creation and poverty alleviation, as well as, long-term investment funds for government and manufacturers in Nigeria. The sector held investment assets of ₦168.7 billion as at 2012 (Nkwor, 2017) and contributed 0.5%[1] to the GDP as at 2013 (Swiss Re, 2014).

The study investigates the relationship between the life insurance firm size and growth by testing the Gibrat's Law as well as other firm-specific determinants. It further investigates if growth behaviour differs between the composite and life specialist insurers in Nigeria.

The remainder of the paper is structured as follows. Section two presents an overview of the Nigerian life insurance market while section three discusses the Gibrat's Law and other determinants of growth. Section four presents the data and method of analysis while the penultimate section discusses the results and the last section concludes the study highlighting the policy implication of the findings of the study.

NIGERIAN LIFE INSURANCE INDUSTRY

The concept of modern *(life)*insurance in Nigeria dates back to 1900, though, before the advent of modern insurance in Nigeria there existed primitive forms of insurance (Irukwu, 1971). The industry evolved over time from informal to formal and the first insurance law in Nigeria was the Insurance Act 1961, which was a fall out of J.C. Obande Commission. Akintola-Bello (1986) noted that the historical development of the insurance industry witnessed a positive dramatic turn following the enactment of the Insurance Act 1976, which provided for insurance licensing, operation, guidelines and penalties for defaulters. At present, two laws regulate the sector in Nigeria, Company and Allied Matters Act [CAMA] (1990) and the Insurance Act No. 37 (2003).

The insurance landscape in Nigeria changed following the 2005 reform. The exercise among other things, consolidated the industry from 104 to 60 (*re*)insurance as well beefed up the minimum share capital of insurers[2]. Apparently, the

[1] This is against 0.2% for Non-life in the same period. However, insurance industry in Nigeria generally has poor penetration of 0.7% compared to South Africa with 15.4% ranking 1st in Africa and 2nd in the World (see, Swiss Re, 3/2014).

[2] The Nigerian insurance industry is made up of 17 life specialists, 31 non-life specialists, 10 composite companies and 2 reinsurers with capitalization requirement of ₦2 billion for life specialists, ₦3 billion for non-life specialists, ₦5 billion for composite companies, and ₦10 billion for reinsurers.
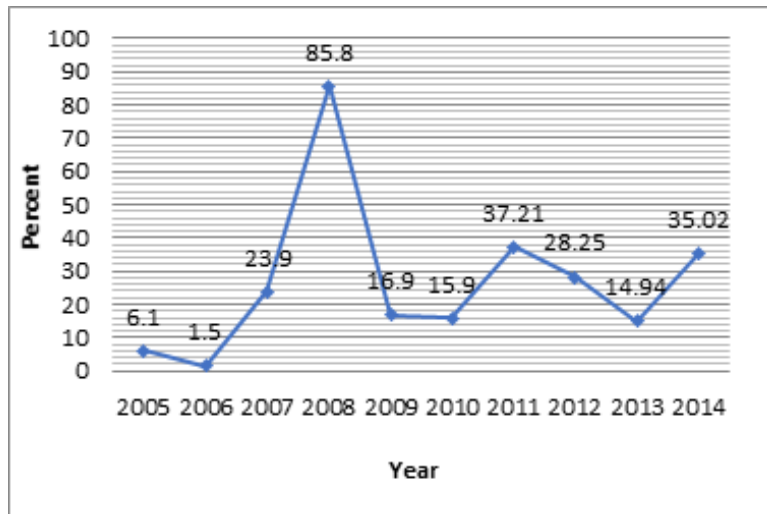
Source: Insurance Digest, NIA (2014)

Figure 1. Percentage growth rate in premium income of Nigerian life insurers, 2005-2014

exercise strengthened the industry's capital base as well engendered higher level of competition and professionalism, which in turn, significantly impacted on the image and reputation of the industry.

As at date, the Nigerian life insurance sector is made up of 17 life specialists, which engage only in life insurance products; and 10 composite insurers, which engage in both life and non-life lines totalling 27 companies licensed by the National Insurance Commission (NAICOM) to transact life insurance business.

The industry has recorded a consistent impressive growth in size in the recent time as shown in Figure 1. As at 2005, the percentage growth rate stood at 6.1% but trough and peak records were in 2006 with 1.5% and in 2008 with 85.8%[3]. The

peak could be a fallout of mergers and acquisitions in the industry as well as 'switchings' from composite or non-life to life (which requires lower capital) following the recapitalization exercise.

It is disturbing to note that the insurance development indicators in Nigeria are abysimally low as indicated in Swiss Re (2015), notwithstanding, the available oppotunities for business growth. The debate has been that these indices could be improved if the operators catch into improved disposable income among Nigerians due to natural resource endowment and demographic advantag[4].

The implication of the recent reform and subsequent increase in the assets of life insurers is an expected growth in the

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[3] As expected, the astronomical increase in 2008 is as a result of the recapitalization exercise, which started in 2005 and was concluded in 2007. The exercise injected more capital into the sector which, as expected, induced the assests and the premium income in the preceeding year.

[4] According to World Bank report, Nigerian population as at 2014 was 178.5 million with a per capita income of 5680 (World Bank, 2015). Nigeria Insurers Association report shows that about 40% of the population is estimated to be younger than 25 years old in 2020, which is a favorable figure for business growth in the life sector.

industry, if that is dependent on size of firms as found in Swedish life insurance sector (Adams et al., 2014).

GIBRAT'S LAW AND DETERMINANTS OF INSURERS GROWTH

The Gibrat's Law

The framework of Gibrat's LPE stems from corporate growth assumption in industrial economics, which could be applied in any sector with concentrated firm size distribution. This law holds that irrespective of size, firms have equal chance for proportionate growth rate. It postulates that the organic growth rate of a firm is autonomous of its size. This is to say that "the rate of firm growth is independent of its past size and growth trajectory" (Carrizosa, 2007). The law suggests that the link between the firm growth and its size is a stochastic process that can be expressed in a model as shown in Eq. (1).

$$\frac{(SIZE)_{i,t}}{(SIZE)_{i,t-1}} = \alpha SIZE_{i,t-1}^{\beta-1} \varepsilon_{i,t} \quad [1]$$

Where, $(SIZE)_{i,t}$ is the size of the insurer i at time t, while $(SIZE)_{i,t-1}$ stands for the size of the insurer in the previous year, which determines the firm growth rate between periods, t-1 and t. α is common to all insurers in the market, while the term β represents insurer-specific growth rate.

Following the tradition of the previous studies, for example, Hardwick and Adams (2002), Choi (2006), Tien and Yang (2014), and Adams et al. (2014), firm size is assumed to generate lognormal distribution, therefore, Eq. (1) is re-written to take natural logarithm in Eq. (2).

$$In\text{SIZE}_{i,t} = \alpha + \beta In\text{SIZE}_{i,t-1} + \varepsilon_{i,t} \quad [2]$$

Where, $(SIZE)_{i,t}$ Most of the earlier studies (e.g. Choi, 2010; Hardwick & Adams, 2002; Tien & Yang, 2014) employed Heckman two-stage regressions technique in testing for the LPE. Heckman's (1979) technique overrides the econometric shortcomings of ordinary least square (OLS) method. However, some studies applied panel unit root tests in investigating the Gibrat's law in different sectors (e.g; Aslan, 2008; Goddard et al., 2002; Oliveira & Fortunato, 2006) and only insurance sector (e.g., Adams et al., 2014; Pan et al., 2012). Following the objective of the study wherein firm size was hypothesized to have relationship with the firm growth, that is, firm growth is taken to be a function of firm size in Nigerian life insurance sector. To test this assumption, a modified Gibrat's function of Eq. (2) is adopted using panel data model as captured in Eq. (3).

$$In\text{SIZE}_{i,t} - In\text{SIZE}_{i,t-1} = \alpha_i + \sigma_t + (\beta i - 1)In\text{SIZE}_{i,t-1} + \sum_{j=1}^{p} \mu_{ij}(In\text{SIZE}_{i,t-1} - In\text{SIZE}_{i,t-j}) + \varepsilon_{i,t}$$

$$[3]$$

Where, α_i and σ_t stand for individuality and time effects, μ_{ij} stands for coefficients on lagged growth terms while ßi-1 represents the size coefficient for firm i. β indicates the effect of firm size on firm growth. The condition for Gibrat's Law is: if $\beta = 1$, it means firm's growth rate is independent of the initial size; if $\beta > 1$, bigger firms grow faster than the smaller ones; and if $\beta < 1$, smaller firms grow faster than the bigger ones. It means that where β significantly deviates from 1, Gibrat's Law does not

hold, but otherwise, it does. Where it holds, it means that growth rate and initial size of the life insurer are independently distributed, and as such, follow a random walk stochastic process.

Because Eq. (3) lacks "economics" (Oliveira & Fortunato, 2008), it is expanded to incorporate other variables (firm-specific and control) that could influence firm growth dynamics as shown in Eq. (4). Therefore, a multivariate panel data empirical growth model (Eq. 4) was adopted to test the relationship between firm-specific factors such as firm size, firm age, profitability, reinsurance utilization and the control variables for changes in interest rate and capital market development, and life insurers' growth in Nigeria. Life insurers' growth [$In(SIZE)_{i,t}$] is the changes in life insurers' asset-based growth (dependent variable) while $In(SIZE)_{i,t-1}$ is the initial size of a life insurers (one of the independent variables). Earlier empirical works such as Adams et al. (2014), Choi (2010), Goddard et al. (2002), Hardwick and Adams (2002), and Tieng and Yang (2014) used firm-level factors in testing firm growth.

$$In\text{SIZE}_{i,t} = \beta_0 + \beta_1 In(\text{SIZE})_{i,t-1} + \beta_2 In(\text{AGE})_{i,t-1} + \beta_3 In(\text{PROF})_{i,t-1} + \beta_4 In(\text{REIN})_{i,t-1} + \beta_5(\text{INT})_t + \beta_6(\text{CMD})_t + \varepsilon_{i,t}$$

[4]

Where, AGE stands for firm age, PROF represents profitability, REIN refers to reinsurance utilization, INT means interest rate and CMD means capital market development.

Determinants of Insurers' Growth

Earlier empirical studies did not only test the asset-based size Gibrat's process in insurance industry but also investigated the influence of some firm-level factors on the managerial activities of corporate insurance firms. Appendix Tables A.1 and A.2 show the summary of previous studies on Gibrat's Law in insurance industry and their findings and firm-specific determinants of insurers' growth investigated by previous authors and their findings respectively. Following is the empirical review of the factors investigated in this study.

Firm Size: Yang (2015b) asserted that firm size influenced consumers' choice of insurer in the first instance, possibly, due to 'too big to fail' philosophy. Hoyt and Trieschmann (1991) documented performance and insurer's size to be independent while Gorter and Bikker (2011) argued that larger insurers had both scale of economies and diversification benefits advantages, unlike their smaller counterparts, it is therefore expected to have positive impact on the firm's performance and growth.

This study adopts natural logarithm of annual total assets as measure for firm size. The essence of taking the log of the asset is to remove possible problems of extreme values in the dataset which could negatively affect the empirical results while total rather than net assets is considered because big firms with large liabilities in their financial structure may produce a negative net asset, therefore, misrepresenting the firm's size. Earlier authors that used the same measure in similar studies include: Adams et al. (2014), Andersson, et al. (2013),

Choi (2010), Hardwick and Adams (2002), Olaosebikan (2013), and Yakob et al. (2014).

***Company Age*:** The age of an insurer shows how old or young the firm is. It is of essence to insurers' performance and could be an important determinant of growth due to scale of economies in diversification and costs saved over the years as the firm advances in age. More specific, firm's age suggests its ability to weather tough prior conditions in the market (Hong & Bao, 2015) and have better knowledge of the local markets (Olaosebikan, 2013), which is expected to build capacity over the years. When this is achieved, survival reputation builds over the years of business distresses and industry reforms. Yet, the survived younger insurers have the tendency of growing faster than the more established ones (Adams et al., 2014). This suggests an inverse association between firm age and firm growth.

Focusing only on insurance industry, Hardwick and Adams (2002) and Pottier and Sommer (1997) documented positive relationship between age and insurers' performance, because age of insurers had positive influence on their investment behaviour (Nkwor, 2017). But in the light of Gibrat's process, Adams et al. (2014), Choi (2006), and Tien and Yang (2014) found negative relationship between age and growth rate in the USA, Taiwan and Sweden respectively, which supported that younger firms (insurers) tended to grow faster than the older ones. So, the a priori expectation is a negative link between insurers' age and growth.

The age of an insurance firm is measured by the number of years the firm has been in operation in a given market and it is being obtained by subtracting the year of incorporation from the base year of study. The year of operation could be either year of incorporation, license or commencement of business. Adams et al. (2014) used licensed year while Choi (2010) and Tien and Yang (2014) used year of incorporation. The justification for the use of year of incorporation might be its certainty unlike the year of license or commencement of operations which may stagger. So, the study adopts year of incorporation.

Profitability:Profitability is an important factor in firm growth as the profit income is either retained for the purpose of internal financing thereby reducing the cost of external funding or invested for further returns as investment income. Either of these purposes enhances growth and development of firms. Empirically, Tien and Yang (2014) documented positive influence of profitability on the growth of Chinese life insurance industry. Similarly, Adams et al. (2014) found a positive link between Swedish life insurers' growth and profitability and suggested that profitability could be an important factor that encourages companies from actualizing their investment dreams and catching into investment opportunities.

The usual measure for profitability in insurance literature is the inverse of underwriting loss ratio (e.g., Cummins & Outreville, 1987; Lamm-Tennant & Weiss, 1997; Chen et al., 1999) or an inverse of

economic loss ratio (e.g., Choi, 2010; Ma & Pope, 2003). However, recent studies by Adams et al. (2014) and Tien and Yang (2014) respectively used ratio of total annual net profit to gross premium income and net profit divided by total net written premium, but the study adopted ratio of profit before tax (PBT) to gross premium income.

Reinsurance: Reinsurance refers to insurance of insurance risk (Evans, 1999) and is important in insurer's corporate financing (Yang, 2015a). Because the cost of external financing is usually higher than the internal model, reinsurance contributes in optimizing the value of insurers. It also gauges the level of underwriting risk hedging by an insurer because it aims at reducing volatility and uncertainty of the insurers' pricing risks (International Association of Insurance Supervisors [IAIS], 2011).

Many studies, for example, Andersson, et al. (2013), Lee and Lee (2012), Liu et al. (2016) showed that reinsurance affected insurers' performance and liquidity, which in turn, impacted on profitability and growth prospect. However, the empirical investigations of Shiu (2004, 2009) showed negative relationship between growth and reinsurance transactions in the UK insurance markets.

Interest Rate: Change in interest rate impacts on life insurers' pricing, reserves, rate of guaranteed returns and profit sharing (Holsboer, 2000). Basically, change in interest rate affects the assets-liabilities match of insurers' portfolio performance and management. The negative implications are felt on the life insurers' stability (Beer

& Gnan, 2015), solvency (Berlin & Grundl, 2015; Browne et al., 1999), investment opportunities described as "gambling for redemption" (Antolin et al., 2011) and profitability (Berlin & Grundl, 2015).

Browne et al. (1999) empirically examined the impact of market interest rate on US life insurers' performance vis-à-vis solvency and found that high-interest rate positively affected the solvency of life insurers. Similarly, Adams et al. (2014) documented a significant positive relation between Swedish life insurers investment earning and real interest rate. On the whole, insurers' growth is constrained by low interest rate. By this, a positive association is expected between interest rate and life insurers' growth.

Capital Markets Development: Financial market development is important to life insurance industries in both developing nations (Outreville, 1996) as well as developed ones like the OECD countries (Li et al., 2007). Beck and Webb (2003), Li et al. (2007), and Outreville (1996) empirically tested the interactions between life insurance market activities and financial markets development. These studies severally found positive and significant effect of financial markets development on life insurers' performance and growth. The impact of financial markets development does not vary on level of economic development; therefore, it is expected that capital markets development in Nigeria should have positive effect on growth of the life insurance companies.

METHOD

The study focused on the Nigerian life insurance sector for the period, 2007 to 2014 as data availability could permit. The data for the firm-specific variables were extracted from the Annual Statements and Accounts of Nigerian life insurers. Out of 27 firms transacting life insurance business in the Nigerian market as at 2014, 24 were selected, made up of 9 composite and 15 life specialist companies

The three selection criteria used were: the firm must have started operations on or before the base year of the study which was 2007; data availability for at least 6 years (not more than two-year missing data); and the firm must have consistently followed approved reporting practice by NAICOM. These criteria were meant to ensure data streaming; data consistency as well reduce the incidence of missing data respectively. The data for country-specific variables were extracted from the Central Bank of Nigeria Statistical Bulletin 2015. The sample period is subdivided into 2007-2010 and 2011-2014. The sub-period tests are to account for time-varying effects within the testing period to check for growth persistence or otherwise. The whole sample is sub-divided into Composite and Life Specialists, to gauge structural effects due to their market characteristics and cross-selling advantage of composite over life specialists. Whether difference in structure affects the growth pattern of the groups.

Previous authors such as Choi (2006, 2010) and Hardwick and Adams (2002) used cross sectional data estimation, but a number of estimation errors had been adduced against the method. The study adopted panel data estimations using panel unit root tests (PURTs) and GMM techniques. The panel GMM mitigates the problem of heteroscedasticity and endogeneity, thus produces consistent and asymptotically efficient estimates. Following the works of Adams et al. (2014) who used PURTs developed by Im et al. (2003) and Levin et al. (2002), the tests shall be referred herein as Levin-Lin-Chu for Levin et al. (2002) and Im-Pesaran-Shin for Im et al. (2003).

The null hypothesis for both Levin-Lin-Chu and Im-Pesaran-Shin is that there is unit root. The assumption in Levin-Lin-Chu is that the coefficient for firm size, β_i is a common unit root process while β_i is assumed individual unit root process in Im-Pesaran-Shin. This can be written thus: H_0: $\beta = 1$, H_1: $\beta < 1$ (for Levin-Lin-Chu) and H_0: $\beta_i = 1$ for all i, H_1: $\beta_i < 1$ for some i (for Im-Pesaran-Shin). PURTs are conducted to confirm if the growth (β) of Nigerian life insurers "follows a random walk (Gibrat's process) or converges towards the means" (Aslan, 2008) and not solely to test the stationarity of the variables.

However, Table 1 provides the descriptions of and justifications for the variables used as well as the six hypotheses tested. The dependent variable is the firm size, which is measured as the logarithm of annual total asset while the independent variables are the firm age, profitability, reinsurance usage, and control variables are market interest rate and capital market development indicator. While the

independent variables are expressed in their natural log form, the control variables are presented in ratios.

Hypotheses Tested:

H₁: *Ceteris paribus*, Gibrat's law holds in the Nigerian life insurance industry.

Table 1

Description of and justification for the variables used

	Definition	Expected sign	Justification for inclusion
Dependent variable			
Size ($SIZE$)$_t$	Annual total assets	none	Measure used for firm's size
Independent variables			
Initial size ($SIZE_{t-1}$)	Annual total assets at the beginning of the sample periods	+	To test the Gibrat's law of LPE
Age (AGE)	Number of years the company has been in operation	−	To test if age affects firm's growth
Profitability ($PROF$)	Ratio of annual profits after tax to gross premium	+	To test the impact of profitability on firm's growth
Reinsurance ($REIN$)	Ratio of annual reinsurance ceded to gross premium	−	To test the impact of reinsurance utilization on firm's growth
Control Variables			
Interest Rate (INT)	1-year treasury bill rate	+	To test the impact of interest rate on firm's growth
Capital Markets Development (CMD)	Ratio of stock traded to GDP	+	To test the effect of capital markets development on growth of life

H₂: *Ceteris paribus*, younger life insurers have the tendency of growing faster than the older ones in Nigeria.

H₃: *Ceteris paribus*, there is a positive relationship between insurers' profitability and growth rate in the Nigerian life insurance industry.

H₄: *Ceteris paribus*, life insurers that highly reinsure have lower rate of growth in the Nigerian life insurance industry.

H₅: *Ceteris paribus*, higher market interest rate induces higher growth rate in the Nigerian life insurance sector.

H₆: *Ceteris paribus*, a well-developed capital market leads to higher growth rate among life insurers in Nigeria.

RESULTS AND DISCUSSIONS

This section discusses results of PURTs and panel GMM regression. Tables 2 and 3 present the PURTs results from the analysis of variables included in the study for the eight years period, 2007-2014.

Analysis of PURTs on Gibrat's Law

From Table 2, the PURTs results for the entire period, 2007-2014 and the sub-period, 2007-2010 on the 24 life insurers do not allow us to accept the null hypothesis. This suggests that Gibrat's Law does not hold, rather smaller life insurers have the tendency to grow faster than the older ones in Nigeria. From the same table, we cannot reject the null hypothesis for the subperiod, 2011-

2014. However, the evidence is not strong enough to reverse the result for the absence of Gibrat's Law.

Further tests on the composite and life specialists' insurers as shown in Table 3 provide similar results that cannot allow us to accept the null hypothesis. The results indicate that class of life insurers in Nigeria does not support Gibrat's Law neither. These findings are consistent with Adams et al.'s (2014) results, which suggest that LPE does not hold in both developed and developing life insurance markets.

Panel Analysis of Determinants of Firm Growth

The summary statistics of the variables used in the study as shown in the first part of Table

Table 2

PURTs results for 2007-2014, 2007-2010 & 2011-2014 on the entire sample

	2007-2014 Statistic (Prob.)	**2007-2010** Statistic (Prob.)	**2011-2014** Statistic (Prob.)
Levin-Lin-Chu	-17.948 (0.0000)**	-8.664 (0.0000)**	0.404 (0.657)
Im-Pesaran-Shin	-5.211 (0.0000)**	-3.551 (0.0175)**	0.326 (0.185)

Note:

(i) This table presents PURT results for the period 2007-2014 and sub-periods, 2007-2010 & 2011-2014 for life insurers in Nigeria

(ii) Absolute figures are the statistics of each unit root method

(iii) p-values are in parenthesis

(iv) ** indicates that the null hypothesis cannot be accepted at conventional 5% level of significance (one tailed test).

Table 3

PURTs sub-samples results for the entire sample period, 2007-2014

	Composite Insurers Statistic (Prob.)	**Specialists' Life Insurers** Statistic (Prob.)
Levin-Lin-Chu	-13.065(0.0000)**	-12.317(0.0000)**
Im-Pesaran-Shin	-3.382(0.0004)**	-3.980(0.0000)**

Note:

(i) This table presents PURT results for composite and specialists' life insurer in Nigeria for the 2007-2014

(ii) Absolute figures are the statistics of each unit root method

(iii) p-values are in parenthesis

(iv) ** indicates that the null hypothesis cannot be accepted at conventional 5% level of significance (one tailed test).

Table 4
Summary of descriptive statistics and correlation matrix

Part 1: Summary Statistics

| | All Firms | | | | | | Composite | | Life Specialists | |
| | 2007-2014 | | 2007-2010 | | 2011-2014 | | 2007-2014 | | 2007-2014 | |
	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
SIZE(₦)	7811007	7570359	6585262	5301635	9033103	9084336	10648957	10322581	6056639	4408573
AGE(yrs)	16.5	15.1	18.7	15.3	16.7	15.1	20.9	9.2	13.7	17.3
PROF	-0.302	1.503	-0.247	1.459	-0.360	1.570	-0.193	1.437	-0.368	1.545
REIN	0.124	0.126	0.117	0.124	0.131	0.126	0.158	0.146	0.103	0.107
INT	8.896	3.372	5.693	1.356	11.903	1.228	8.902	3.377	8.892	3.385
CMD	2.730	1.950	3.924	2.163	1.640	0.775	2.789	2.003	2.694	1.925

Part 2: Correlation Matrix

	$SIZE_{t-1}$	AGE	PROF	REIN	INT	CMD
$SIZE_{t-1}$	1					
AGE	0.379	1				
PROF	-0.021	-0.211	1			
REIN	-0.240	-0.203	0.145	1		
INT	0.104	-0.037	-0.015	0.042	1	
CMD	-0.112	0.069	-0.054	-0.001	-0.393	1

Note: The first part of this Table presents means and the standard deviations of the variables included in the regression estimation for the periods, 2007-2014, 2007-2010 & 2011-2014. The second part of the Table shows a correlation matrix for the independent variables included in the study in the 2007-2014 regression equation (1-tail).

4 for the entire and sub-periods indicate an average assets size of ₦7,811,007.00 for 2007-2014 period and ₦6,585,262.00 for 2007-2010 and ₦9,033,103.00 for 2011-2014 respectively. The table also indicated an average assets size of ₦10,648,957.00 for composite insurers and ₦6,056,639.00 for life specialists. On the whole, life insurers operate with large assets size in the later years (2011-2014) while composite insurers have largest assets size. Another important observation is the negative profitability ratio at all the period and each class of insurers. This suggests that life insurance operators in Nigeria operate at loss. The level of dispersions of each of the variables is relative by within the range except the ratio of net profit to gross premium.

The second part of Table 4 shows the correlation matrix of the independent variables included in the regression equation for the entire period. The highest correlation found was below 40%. Only initial assets and age had a correlation of 0.379 (37.9%), which was the highest. This suggests no problem of multicollinearity as confirmed with a further check with the variance inflation factors (VIFs) calculated for each variable. The VIF results indicate the highest as 3.3, which is quite below the benchmark of 10. Therefore, none of the variables is expected to pose any problem of multicollinearity in the estimation model.

Tables 5 and 6 present the results of the multivariate regression analyses applying GMM dynamic technique on Equation (4). GMM technique is suitable for panel data analysis (Adams et al., 2014). The results of the analyses are meant to test the hypotheses

stated earlier. Interestingly, the adjusted R-square results for all the regressions are above 50%, indicating a good fit in all periods and classes except for composite life insurers where the R^2 is 0.17. By rule of thumb, autocorrelations suspicion is erased as the Durbin-Watson statistics are within the acceptable bounds of between 1.2 and 2.5.

With reference to the estimates of coefficients and p-values of the regression results shown on Tables 5 and 6, each of the six listed hypotheses is tested on the Nigerian life insurance data for the periods of 2007-2014, 2007-2010 and 2011-2014, and classes of composite and life specialist insurers.

H_1 - (Growth and firm size): For the entire sample period of 2007-2014, the estimate of β_1 is 0.081, which is significantly less than one at 0.05 level of significance. Similarly, the estimates for the subperiods (2007-2010 and 2011-2014) are 0.072 and 0.085 respectively, which is less than one each. While the estimate for 2007-2010 is significantly less than one at 0.1 level of significance, the estimate for 2011-2014 period is also significantly less than one but not statistically significant at any level. Turning to composite and life specialists' classes, their estimates of β_1 coefficients are 0.047 and 0.096 which are significantly less than one, though, not statistically significant for composite but statistically significant at 0.05 level for life specialists' insurers.

Taking the PURTs results together with these findings, we reject the hypothesis that size is irrelevant to organic growth in the Nigerian life insurance industry for the period 2007-2014 and for the classes tested.

Rather younger firms tend to grow faster than the older ones in the industry. Reason could be traced to excessive risk aversion by larger life insurers in Nigeria together with managerial inertia inherent with large insurers. Nkwor (2017) documented that younger life insurers in Nigeria had higher investment risk taking appetite aimed at higher investment returns, which aided growth and fostered competitive relevance in the market. These findings are consistent with previous studies of Javaheri (2013) and Tien and Yang (2014) on developing insurance markets of Iran and Taiwan respectively, as well, on developed market of Sweden using PURTs and panel GMM estimation techniques by Adams et al. (2014). Our results reject H_1.

Fixed effect (FE) and random effect (RE) panel model estimations were conducted as a robust check on the GMM results. The results for the estimation (β_1 coefficients) on the overall sample for the testing period of 2007-2014 at 5% level of significance were: FE 0.080(0.038) and RE 0.083(0.401), which were not significantly different from that of GMM. Thus, absence of Gibrat's law in the Nigerian life insurance industry was upheld.

H_2 - (Growth and firm age): The estimates of β_2 coefficients are significantly less than one at both overall and sub-sample periods and in both classes. The coefficients are negative and statistically insignificant in all the tests conducted except for the second sub-period (2007-2010) which coincides with the period immediately after the reform exercise of 2005. This agrees with the earlier conclusion that younger life insurers have the tendency to grow faster than the older ones. In view of these results, H_2 is accepted.

H_3 - (Growth and Profitability): The estimates of β_3 are positive and statistically significant at all the periods and classes tested. For the entire period (2007-2014), composite and life specialists the coefficients are significant at 0.05 level. The level of significance varies between the earlier periods, 2007-2010 and later time, 2011-2014. By and large, these results present evidence that current profit of life insurers is a strong determinant of asset growth rate in Nigeria. However, strengthened and enforcement of regulatory restrictions on "no premium no cover" policy of NAICOM may have significantly contributed to the improved result from earlier work of Olaosebikan (2013), who document a negative relationship. Our results support H_3.

H_4 - (Growth and Reinsurance utilization): As expected, all the estimates of β_4 are negative and statistically significant at 0.05 level for all periods and all classes. This means that the effect of reinsurance on life insurers' organic growth rate does not vary over time and structure for the period, 2007-2014 in Nigeria. Our results concur with the Olaosebikan's finding and note that reinsurance cost (reinsurance price) has negative and discouraging impact on the profitability vis-à-vis growth of micro insurers in Nigeria. The high price could be associated with the high-risk nature of the dominant consumers in this sector, with the

general low life expectancy which affects the price of life products at both primary and reinsurance markets. This finding upheld hypothesis H_4.

H_5 **- (Growth and Market interest rate):** The coefficient estimates of B_5 for the entire period (2007-2014) and the first subperiod (2007-2010) were positive but not significant, while the latter period of 2011-2014 has insignificant negative coefficient estimate. A mix result is also observed in the structural analysis. As negative estimate was observed in composite class, a positive coefficient was observed in life specialists, but none was significant. So, interest rate has

positive influence on the life insurers growth in Nigeria for the period of investigation.

$H6$ **- (Growth and capital markets development):** The estimates of capital markets development coefficients are positive for the period investigated and the classes analysed. The estimates were significant at 0.05 level for the entire period (2007-2014) but are not in the subsequent sub-periods (2007-2010 and 2011-2014). Similarly, the estimate for capital markets development is significant for life specialists' insurers at 0.05 level but is not for composite insurers.

Table 5

GMM regression results on the determinants of life insurers' firm growth in Nigeria, 2007- 2014, 2007-2010 & 2011-2014

		Dependent Variable is In(SIZE)		
Coefficients	**Variable**	**2007-2014**	**2007-2010**	**2011-2014**
β_0	Intercept	1.276 (0.771)	1.911 (1.770)	8.230 (7.167)
β_1	In(SIZE)$_{t-1}$	0.081 (0.039)**	0.072 (0.042)*	0.085 (0.102)
β_2	In(AGE)	-0.028 (0.113)	0.135 (0.085)	-0.295 (0.270)
β_3	PROF	4.183 (0.787)**	3.517 (1.845)*	4.026 (1.412)***
β_4	REIN	-0.605 (0.228)**	-0.536 (0.265)**	-0.820 (0.395)**
β_5	INT	0.075 (1.820)	0.015 (0.017)	-0.467 (0.442)
β_6	CMD	6.741 (3.382)**	0.031 (0.036)	0.513 (0.614)
N		168	72	96
Adj. R^2		0.57	0.51	0.55
S.E. of Reg.		0.85	0.58	1.12
D-W stat		1.5	1.2	1.3
Mean dep. Var		6.52	6.62	6.46
S.D. dep. Var		1.30	0.84	1.61

Notes: (i) This table presents panel regression for life insurers in Nigeria for the 2007-2014
(ii) Absolute figures are the coefficient estimates while standard errors are in parenthesis
(iii) ***, ** and * indicates statistically significant at 1%, 5% and 10% level (two tailed test) respectively.

Table 6

GMM results on the determinant of firm growth for composite and life specialist insurers.

Dependent Variable is In(SIZE)			
Coefficients	Variable	Composite	Life Specialists
β_0	Intercept	4.137 (1.663)**	0.503 (0.434)
β_1	In(SIZE)$_{t-1}$	0.047 (0.084)	0.096 (0.047)**
β_2	In(AGE)	-0.806 (1.052)	-0.023 (0.103)
β_3	PROF	2.787 (0.854)**	4.667 (0.317)**
β_4	REIN	-0.640 (0.292)**	-0.636 (0.116)**
β_5	INT	-2.704 (4.837)	1.436 (1.872)
β_6	CMD	7.350 (9.692)	6.955 (3.425)**
N		63	105
Adjusted R^2		0.17	0.80
S.E. of Reg.		1.17	0.59
D-W Stat		1.9	1.2
Mean dep. Var		6.65	6.46
S.D. dep. Var		1.28	1.32

Notes: (i) This table presents panel regression for composite and specialists' life insurers in Nigeria for the 2007-2014
(ii) Absolute figures are the coefficient estimates while standard errors are in parenthesis
(iii) ***, ** and * indicates statistically significant at 1%, 5% and 10 percent level (two tailed test) respectively.

CONCLUSIONS AND POLICY IMPLICATIONS

The study used data from 24 life insurers to empirically investigate the existence of the Gibrat's Law or otherwise in the Nigerian life insurance market grouped into Composite and Life specialist insurers for the period of 2007-2014, subdivided into 2007-2010 and 2011-2014. Additionally, the study investigated other firm-specific factors as well as control variables that influenced Nigerian life insurers' growth. Some interesting revelations were made.

One, Gibrat's law does not generally hold in the Nigerian life insurance industry for the periods investigated: 2007-2014, 2007-2010 and 2011-2014, as well, for Composite and Life specialist insurers. The results indicate growth persistence both on the long- and short-run, which is also consistent in both classes of life insurers investigated. This suggests that both time-varying and structural effects do not make any difference in size-growth relationship of the Nigerian life insurers. Two, younger insurers (both composite and life specialists)

tend to grow faster than the older ones in Nigeria over the tested period.

For other life insurers' growth determinants in Nigeria, within the firm factors that enhances the life insurers' growth rate is profitability, while age and reinsurance usage discourage firm growth. The macroeconomic control variables (interest rate and level of capital markets development) influence life insurers' growth in Nigeria.

These findings contribute to new knowledge and deeper understanding of firm growth in financial service industry. The findings of this paper are strategic to regulators and policymakers because of the contributions and the feedback effects of insurance industry on the entire economy. Again, knowledge of the link between size and growth in the Nigerian life insurance markets has significant contribution to the extant literature on LPE and the determinants of corporate growth in the financial service industry.

Given that firm size influences corporate life insurers' growth in Nigeria irrespective of time (the period of investigation) and type of life insurer, the implication is that firm size is an important consideration in short- and long-run growth strategy. Therefore, 'one-size-fits-all' regulatory approach should be changed in favour of differential licensing policy anchored on firm age to enable life insurers in Nigeria exploit the improved personal income among Nigerians and demographic advantage for accelerated growth and deeper penetration of the industry. The main policy implication

of the findings is that policymakers should adopt a regulatory framework that fosters growth of big insurers in the industry such as innovative products and use of technology such as FinTech (*InsurTech*) services to accelerated industry growth. Again, the recent campaign by NAICOM for microinsurance and Takaful insurance models in Nigeria should be sustained because of their high growth potentials to small sized firms.

For further studies, the present work can be extended to non-life sector for a holistic assessment of Nigerian insurance industry. It can also be done as a comparative investigation of life and non-life sectors for more in-depth and insightful understanding of the dynamics of Gibrat's Law in the Nigerian insurance industry.

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APPENDIX

Table A.1

Summary of previous empirical studies on Gibrat's law in insurance industry

Authors/Year	Country/Period	Data/Method Used	Findings
Hardwick and Adams (2002)	U.K Life industry 1987-1996	Cross-sectional/Heckman Two-Stage Procedure	Gibrat's Law was found on the overall period but absent in the three short sub-periods (1987-1990, 1990-1993 & 1993-1996). Therefore, growth of life insurers in UK is independent of size.
Choi (2006)	U.S P-L insurers 1992-2000	Cross-sectional/Heckman 2-Stage Method	LPE holds on the long run and short run periods (1992-1996 & 1996-2000) in the US P-L insurance industry.
Choi (2010)	U.S P-L insurers 1992-2001	Cross-sectional data/ Heckman 2-Stage Regressions	Supportive evidence for Gibrat's Law was found both in long-period and two short-sub-periods (1992-1996 & 1997-2001) in the US P-L insurance industry.
Pan et al. (2012)	Chinese insurers 2005(12)-2011(05)	Time-series/Sequential panel selection method	Gibrat's Law holds for only one firm against the total sample size of 35 insurers investigated.
Javaheri (2013)	Iranian insurers 2003-2009	Panel Regression/Chi-Square	Smaller firms grow faster than the big firms, which refutes the Gibrat's Law of proportionate effects in Iran
Tien and Yang (2014)	Taiwan's Life insurance 1996-2007	Cross-sectional/Heckman 2-Stage Regressions	Both for the entire sample period and sub-periods (1996-2001 & 2002-2007) as well as subsamples (foreign & domestic insurers), there was no supportive evidence for Gibrat's Law in Taiwan
Adams et al. (2014)	Swedish Life insurance sector 1855-1947	PURTs/GMM	Gibrat's law does not hold for the overall sample period and the second sample period (1903-1947), but it held in the period (1855-1902). The overall finding is that smaller firms grow faster than the larger ones in Swedish life insurance industry.

Source: Literature reviewed by the Authors

Table A.2
Summary of insurers' growth determinants investigated by previous authors

Author/Date	Country Studied	Firm-Level/Control Variables Investigated	Results/Findings
Hardwick and Adams (2002)	U.K Life industry	Input Cost, profitability, Output mix, Company type, Organizational form and Location	Only the cost-efficiency and diversification were found as a significant determinant while the other variables-- profitability, type of company and organizational form do not have significant influence on the firm growth.
Choi (2006)	U.S P-L insurers	Input Cost, Profitability, and Output mix, Agency, Organizational form and Group affiliate	All the variables have significant influence on insurers' growth while output mix has mixed result.
Choi (2010)	U.S P-L insurers	Input Cost, Profitability, Reinsurance and Output mix, Agency, Organizational form and Group Affiliate	Results indicate that input cost and diversification as a measure of output mix influence firm growth while the rest of the variables do not.
Tien and Yang (2014)	Taiwan's Life insurance firms	Company age, profitability, Expense ratio, Product diversification and Cross-marketing.	All firm-specific variables tested: firm age, profitability (current), lagged expense ratio, diversification and cross-marketing influence insurers' growth prospect in Taiwan.
Adams et al. (2014)	Swedish Life insurance sector	Input cost, Profitability, Company age, Organizational form, Reinsurance, Real rate of interest, Real GDP and Financial regulation	Profitability, organizational form, reinsurance utilization, real interest rate and the regulation affect the growth potential of life insurers Sweden while reinsurance and real GDP do not.

Source: Literature reviewed by the Authors

SOCIAL SCIENCES & HUMANITIES

Deradicalizing and Strengthening Civic Values among the Youth: An Analysis of Ideology Criticism Philosophy

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ABSTRACT

This article is aimed at discussing the programs which seek to deradicalize and strengthen civic values among the youth. The approach adopted in this present article is an analysis of ideology criticism philosophy. This analysis is used to study the aforesaid programs which are implemented by educational institutions in Indonesia. Ideology criticism is used to free our knowledge from either implicit or explicit ideological interest. Using the ideology criticism, we can understand the background of the emergence of radicalism with all forms of its expressions. We may also analyze all forms of expressions of resistances to radicalism ideology through deradicalization programs. This article concludes that the most important step to take in the process of deradicalization is to understand the characters and ideologies of radicalism and terrorism movements. This step is important because when incidences of radicalism and terrorism often happen in Indonesia, the actors of radicalism and terrorism are arrested or killed. Radicalism at present has become an ideology that has been growing and developing among its adherents. By understanding the characters and ideology of radicalism movements, the programs of deradicalization and civic values strengthening among the youth through the educational institution becomes more effective. What is also important to note is that such programs should be conducted dialogically and humanly. Cross-cultural dialogues should involve believers from various religions.

Keywords: Civic values, deradicalization, ideology criticism, the youth

INTRODUCTION

According to Mata Air Foundation and Alvara Research Center (2017), in Indonesia, ideologies of terrorism are always disseminated to youths, to radicalize them. The youths become the target of the regeneration of radicalism. It is in the middle of the process of being radicalized that they are stunned by religionism. It is inseparable from the strategy of the ideologies of radical groups who cunningly merge these doctrines with religious teachings. Being in an infidel zone (*dar al-kufr*) and a war zone (*dar al-harb*), Indonesia is not spared by these groups. For these radical groups, the form of the Unitary State of the Republic of Indonesia (*Negara Kesatuan Republik Indonesia*) and the ideology of *Pancasila* (Five Principles) has not fulfilled the realization of an ideal state in line with their mind (Nashir, 2017).

Since radicalism is widespread among the youths, the nation should be actively involved in the movement against radical ideologies. The resistance movement against this radical ideology was popularly called deradicalization group. One of the strategies used by the deradicalization program was addressing the issue through the educational institutions. If the educational institution is able to maximize its potency, the deradicalization programs will be effective (Hidayat, 2006).

Based on these arguments, the questions that arise are how Indonesia can overcome radicalistic movements and how civic values are strengthened among the youths, as an effort to overcome radicalism ideology.

LITERATURE REVIEW

According to Blumer (1996), ideology deals with a lot of aspects. In an ideology, there are a set of criticisms of the existing orders intended to be changed. Ideology also deals with a doctrine to justify the ideal state of values intended to be reached (Blumer, 1996). In other words, ideology deals with values, beliefs, criticism, reasons and strong defense among its believers. It is based on the ideology that the orientation of struggle, strategies, and stages to attain the intended ideal are determined by a good governance. In the religious praxis movement, ideology has been made as the direction, justification, and weapon to defend its adherents' inspiration and expectation (Zizek, 1994). As these radical groups use religion to justify terrorism, it is pertinent for the government to curb these ideologies from being spread widely, especially among the youths.

The explanation of the structural theory always relates the background of radicalism to two main factors (Sidahmed & Ehteshami, 1996). First is the precondition factor where the causes of radicalism and terrorist movements are indirect in nature. This factor is the accumulation of any disappointment experienced by radical and terrorist groups, especially those dealing with the failure of the religious elite to realize Islamic political ideals. But, the political ideals are still limited in their imagination because they have not succeeded in realizing a concrete political system in a country (Ayubi, 1991). That is why Oliver Roy (1994) called the idea of this Islamic political group

as Islamic political imagination. Oliver Roy exemplified some organizations with radical ideologies that failed to realize their struggles such as *Ikhwan al-Muslimin* in Egypt and *Jama'ati Islami* in Indo-Pakistan (Roy, 1994).

Second is the triggering factor, namely direct trigger of radicalism and terrorism movements where these groups blame the government for socio-economic injustice, no law enforcement, limited political participation that causes the people to feel powerless to voice their disgruntlement against the ruling regime.

Meanwhile, a psychological theory explains the psychological aspects of the actors of radicalism and terrorism, starting from the stages of recruitment, self-identify, personality, ideology implanting and motivations of its members. From the psychological point of view, the social background of the actors of radicalism and terrorism is predictable. For example, it is known that the actors of radicalism are individuals or groups who experience social alienation and economic troubles. Meanwhile, the rational choice theory explains that radicalism is made using the cost and benefit consideration. Through this theory, it is known that the actors of suicide bombing are those who are socially and economically low. This fact shows that actually there are socio-economic reasons behind their bravery to create a terrorist movement.

Dealing with the characters of the ideology of a radical movement, Hrair Dekmejian (1980, 1988) explained that this movement had three characteristics; namely, pervasiveness, polycentrism,

and persistence. The first characteristic, pervasiveness, shows that radicalism is a phenomenon of a socio-religious movement that happens evenly all over the world. This movement in general also gives a prominence of symbolic aspects of religious teachings. The second characteristic, polycentrism, is shown through a lot of socio-religious organizations with radical ideology. The activities of this movement are done by a lot of organizations. Each organization has a different ideology, leader, program, strategy, and tactic. Uniquely, these organizations are not related to one another. The third characteristic, persistence, means that these radical groups struggle continuously; they do not give up and are brave to take any risk as long as the aim is reached. Based on these characteristics, radicalized groups should recruit new cadres and as many as possible. It is through this way that the radicalism ideology is always implanted so that it is strongly rooted in the believers' hearts.

Recently there have been an increasingly growing number of studies on radicalism in Indonesia. In one study, for example, Makbuloh (2019) sought to explore how Islamic education could enable individuals to deal with threats of radicalism. As the results showed, when graduates used certain Islamic education methods, they developed more tolerant attitudes, higher skills, and noble characters. Makbuloh (2019) concluded that Islamic education could improve students' ability in the mastery of science.

Some scholars have found the solution for the problem of radicalism in the

Holy Quran. For example, Arifin (2019) in his study of the effectiveness of the socialization of *Tafsir Inspirasi* in social media pointed out the four principles of divinity, humanity, morality, and moderation as a possible remedy. According to Arifin (2019), radicalism will be reduced by loading the social media with content which reminds our community that this world finds its existence from an absolutely positive supernatural source, that emphasizes the importance of love among humans, that speaks of the significance of morality, and that reminds us ultimate peace is achievable through moderation and compromise and not extremism and radicalism.

In another study, Sumbulah (2019) investigated women's organizations' preventative role in family-based radicalism using interviews and focus group discussions. As she reported, such organizations helped both families that had been affected (high-risk families) and families that had not been affected (low-risk families) by radicalism. Studies like Sumbulah's (2019) emphasize the strategic role of women in fighting against radicalism.

As this review of related literature indicates, more studies are needed to investigate the different ways in which radicalism can be handled in the global world of today.

METHOD

For this study, data was collected from books, articles in journals, newspapers, and sources from the websites. This study used ideology criticism as the analysis method. Ideology criticism was formalized as the philosophical reflection to free human knowledge from hidden or disguised interest. By utilizing the critique of ideology, the society will be awakened from any false awareness which is always implanted by the ruling groups to preserve their powers (Hardiman, 2009; Suseno, 2005; Zizek, 1994). The use of critique of ideology becomes a deep study of the causes of various incidences of radicalism. The critique of ideology could also be used to evaluate the programs of deradicalization conducted by the government.

RESULTS

As mentioned by the former Head of the State Intelligence Agency (Badan Intelijen Negara), Marciano Norman (2014), terrorism actions in Indonesia had not ended yet. Radicalism and terrorist actions will never end as long as the ideology of its movement is not destroyed. At a certain level, these radical groups were successful in making the youths become cadres. Usually, the regeneration is made by the leaders of the radical group. Instead of merely using the conventional model in the regeneration, this movement also makes use of social media to seed radicalism. In effect, the youth are easily exposed to any information from the social media providing the contents of radicalism and terrorism. They skillfully interact through the cyberspace such as blogs, Facebook, twitter, telegram, and WhatsApp. They have become part of a virtual society (Maulana, 2017).

According to the data from the Indonesia Internet Service Users' Association (*Asosiasi Pengguna Jasa Internet Indonesia*), in Indonesia, there were 132.6 million internet users in 2016, most of whom are students, university students, and youths. Some of them even had more than one set of hand-phone and gadget. On the basis of this reality, it can be stated that the youth is the group that is most susceptible to the impacts of social media with large radicalism and terrorism contents. Since these youths are susceptibly exposed to radicalism through the internet network, the head of National Agency for Combating Terrorism (*Badan Nasional Penanggulangan Terorisme*), Police Commissioner General Suhardi Alius (2018) reminded that the youth should be careful with the contents on social media. The youths should be smart and wise in making use of social media. The data from National Agency for Combating Terrorism showed that there were about 900,000 sites on the Internet that teach radical ideology, which means that, in a self-taught way, one may learn radical ideology through the Internet. Through the manual provided on the Internet, the youths may also learn how to assemble bombs (Maulana, 2017).

To counter these radicalizations, the youths, especially those studying in the universities, actually may become the pioneers of the program of deradicalization. In this context, it is important to ask the university students to give contributions to this nation through various cultural movements to counter radical ideologies. Due to their knowledge and great organizational

skills, the position of the youths is important to fight against various forms of radicalism in Indonesia. In fact, the youth have become the target of regeneration of the ideologies of radicalism and terrorist groups. Even at present, there is a tendency of terrorism actions starting to involve children, for example, in the incidence in Surabaya on May 13 and May 14, 2018. Elementary and secondary school students were involved in a series of suicide bombs. The children had become the victims of their parents' ideology (Pranawati, 2018). In that context, the Indonesian government has come up with deradicalization programs, and one such program is *Bela Negara* (Defend the State). The deradicalization programs also used institutions of education to eradicate these ideologies.

One of these programs was special among the youths at secondary school and higher education. The youths received lectures about strengthening civic values such as democracy, pluralism, and multiculturalism. In this context, university students should be given adequate insights so that they may apply civic values in the whole segments of their life. Up to now, the implanting of civic values to students has been conducted through various activities such as civic education. In Indonesia, the learning of Civic Education is positioned as an obligatory subject in the national education curriculum from elementary to tertiary levels. This shows that the government has a commitment to implant civic values to the youth. The learning of Civic Education finds its momentum since

at the same time we see that in the state and nation, there are many cases of radicalism. The trend of radicalism at present also shows the intense disability for these groups to accept the liberal government.

The phenomenon of radicalism with religious nuance has among others manifested in various radical movements happening in Indonesia. From the observation, it can be stated that one of the elements that serve as the target of the radicalism movement is the youth. This can be observed from some cases of terrorism and radicalism that involve the youth, especially university students. As a group susceptible to be the target of regeneration of the radical movement, university students should be involved in the program of deradicalization, instead of being exposed to radical ideologies. Moreover, the program of growing civic values should also be conducted through the educational institution. Therefore, the spirit of nationalism among the youth will be growing so that they will take pride in being an Indonesian.

DISCUSSION

Modernization and its consequent conditions have created a global world and have caused the emergence of fundamentalist groups in Indonesia. This is because groups with fundamentalist ideology, in general, intend to respond to any challenges induced by modernization and aim at offering the Islamic ideology. They intend to make Islam an alternative ideology that replaces the modern-secular ideology. But, since their ideologies are many and they also become social and political activists, the typology of the fundamentalist movements highly reflect radical characters (Ahady, 1992).

As an effort to fight against the ideology of radical groups, what should be done is not to give any chances to the emergence of radicalism and terrorist movements. This desire will be achieved if the factors triggering the radicalism and terrorist movements are minimized. The categories of the triggering factors in this context include social injustice, either at the global, national or local scale. Economic, legal and political injustice should also be considered. Another point that needs to be looked into is the interests of the elite groups.

The conflicts among the elite groups, either civil or military should be reduced if Indonesia is expected to be freed from any radicalism and terrorism incidences. The cases of medium and high scale corruptions that have attracted public attention should be handled by the concerned organizations by highly upholding the principles of justice. If the cases are not honourably handled, the problems of legal injustice could trigger radicalism and terrorism incidences. The problem of law enforcement should also be considered by the government and the political elite so that the latent danger of radical ideologies will not turn into radicalism and terrorist movements. A factor that must not be forgotten is the interpretation of the *jihad* teaching which is often partially understood by the actors of radicalism and terrorism (Rahardjo, 2002; Shihab, 1996). In this context, it

is important for the youths to understand the Islamic teaching of *jihad* completely. The accumulation of political, economic, legal, social, and cultural problems and the system of belief should be considered by the whole community so that everyone is aware of radicalism and the catastrophes it can bring about. In this vein, Islamic education has proved to be capable of empowering individuals to understand and deal with threats of radicalism. As mentioned above, there is research evidence that shows Islamic teachings can result in more tolerant attitudes, higher skills, and more noble characters (Makbuloh, 2019). Likewise, bringing values such as divinity, humanity, morality, and moderation to the attention of the public in the social media has also proved to be beneficial in minimizing radicalism (Arifin, 2019). Social organizations such as the women's organizations stated in Sumbulah's (2019) investigation have also indicated promising results that such organizations' are able to prevent family-based radicalism. Her findings clearly indicated how the organizations were capable of raising particularly high-risk families' awareness about the threat of radicalism.

Besides women, the youths, including university students, as the power of civil society that has been proved to have played an important role in the history of the nation, have an important role to play in the deradicalization movement. They should be given the freedom and power to urge the government to address the realization of a good governance. In this case, leaders are seen as models to instill this sort of culture. According to Haedar Nashir (2018), leaders in each level should intelligently control their words and behaviors. In other words, the public figures in this country should really have high integrity to make words and actions contribute to unity. Corruptive, consumptive, hedonic, and materialistic cultures should really be avoided. If the government and the elite groups fail to realize the noble ideals of the nation, radicalism and terrorism will continue to grow. University students may also play their roles by always presenting discourses on the themes of civic values such as democracy, pluralism, and multiculturalism.

CONCLUSION

Since radicalism has become a social-religious phenomenon, the effort to overcome radical ideology is a necessity. Based on ideology criticism, the problem of ideology should be considered if we expect to implement deradicalization. The narration of counter-ideology of radicalism and terrorism should continuously be conducted by all elements of the nation. Ideology internalization in the programs of deradicalization should be conducted by considering human aspects. In this context, the deradicalization programs are important to realize in the forms of cross-culture and religion dialogues for human interest. Dialogues, in this case, should not be understood formally but through informal ones such as through art performances theaters, music, sports, and social services. Through these social encounters, people

will forget their social status, cultures ethics, ideologies, and religions while in a formal situation they become distant, and distance differentiates individuals. In this context, the educational institution could become the path to deradicalize individuals by instilling civic values among the youths in Indonesia.

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Level of Well-Being among Migrants in Indonesia

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ABSTRACT

The true reason for migration is to seek for a better life. People who choose to migrate are motivated by economic intentions and the pursuit of well-being. Many research studies investigate the impact of migration focus on migrant workers only, not include the whole of migrants. This study aims to analyze whether migration has an impact on well-being in Indonesia, using both objective and subjective measurements. The sample unit of study is a person who was 22 years old or over in 2014, using longitudinal data of the Indonesian Family Life Survey. Objective well-being is measured by real per capita expenditures that reflect the differences in purchasing power in 2007 and 2014, while the subjective well-being is a self-rated assessment index of life satisfaction. The analytical method used is the logistics of panel data. The results show that migration significantly and positively affects well-being in Indonesia. It can be concluded that subjectively, migrants tend to have better well-being, and objectively, their purchasing power tends to be higher than that of non-migrants.

Keywords: IFLS, Indonesia, migration, objective well-being, subjective well-being

INTRODUCTION

A person who migrates seeks well-being, status, and affiliation (Jong & Fawcett, 1981). The decision to migrate is influenced by expectations of higher and more stable

Current affiliation

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income to meet the needs of life and to have economic security in old age. The drive to improve one's life is more dominant than any other factor in decisions to migrate. According to Lipton (1980) and de Haan (1999), the incentive of most migrants is to acquire a better standard of living. A primary goal of people who move from their place of origin is to get a better livelihood for themselves and their families, regardless of whether one decides to migrate on one's own or is following family members (De Haan, 1999; Lipton, 1980).

Some other experts argue that a person's motivations to migrate are economic motives (Borjas et al., 2010; Ehrenberg, 2000; Lee, 1966; Speare & Harris, 1986; Todaro, 1980). Some migration theories suggest also that migration occurs because of wage gaps between rural and urban areas (Harris & Todaro, 1970; Lewis, 1954). This demonstrates the individuals' rational considerations in the expectation of getting higher wages by migrating (Todaro & Smith, 2006) and that migration will stop when there is no longer a wage gap between rural and urban areas.

Migration has been occurring in Indonesia for a long time. In the 1970 Population Census, more than 11.5% of Indonesia's population lived outside the region of their birth, and more than half of them were living in a province that was different from the province of their birth. This number increased rapidly by 2010, where 23.4 million (11.8%) people lived in a province different than their place of birth (lifetime migration) and 5.4 million people (2.5%) lived in a province different from the province where they lived five years ago.

According to Sukamdi and Mujahid (2015), migration can occur due to various reasons such as employment, pursuing higher education, joining family or gaining access to better social services. Migration could also be part of a plan to return home after retiring from work. Previous research on migration in Indonesia used migration mostly as a dependent variable, except the study by Rangkuti (2009), which discussed the advantages of migrating by comparing wages before and after migration. Based on the data from the Inter-Census Population Survey (SUPAS), Sjaastad (1962) determined the factors that triggered migration in Indonesia were family reasons, such as marriage, followed by economic reasons. It has not been answered fully whether migration has an impact on improving the quality of life for migrants, because migrants are not just those who are looking for work, but also wives and children. In addition, migrants may move because of factors other than work, such as natural disasters or war. Therefore, the purpose of this study is to see the effect of migration on improving well-being in Indonesia.

Literature Review

Migration. The term migration refers to population mobility over the political or administrative boundaries of an area to another village, sub-district, district, province, or country (Siegel & Swanson, 2004). In a broader sense, migration is a

change of permanent residence or a semi-permanent one (Lee, 1966). Bell et al. (2014) developed the Rogers-Castro theory of scheduled migration patterns shown in Figure 1 combined the theory of migration schedules with life transitions and compared their variations between countries. Based on the migration schedule theory, the productive age group of 15–49 years is the most mobile age group. The pattern of migration increases between the ages of 20–30 years, as individuals enter education in college and join the labor market. After age 30, the rate of migration will continue to decline along with events in life until the retirement age at age 50 years. Migration increases again at during age 50–58 years when people return home after retirement.

Borjas et al. (2010) formulated a theory of family migration, which stated that family migration would occur if the net profit for the family is positive, meaning that there was a benefit in the destination. Therefore, the optimal choice for some family members is not necessarily the optimal choice for the whole family, and vice versa. This results in what is called a tied stayer and tied mover. Tied stayers are people who sacrifice better income opportunities elsewhere because their partner is better at their current location, while the tied mover is a person who moves with his partner despite the prospect of better employment at their current location.

Well-being. Sen (1987) in his book, "Development as Freedom" stated that well-being was a mental characteristic generated by pleasure and happiness. Alatartseva and Barysheva (2015) divided well-being into two aspects: objective and the subjective aspects. The objective aspect of well-being is defined as material well-being and quality of life which refer to the objective well-being. Meanwhile, the subjective well-being is defined as the internal experience of each individual. According to Alatartseva and Barysheva (2015), the objective aspect of well-being is the socio-economic aspect.
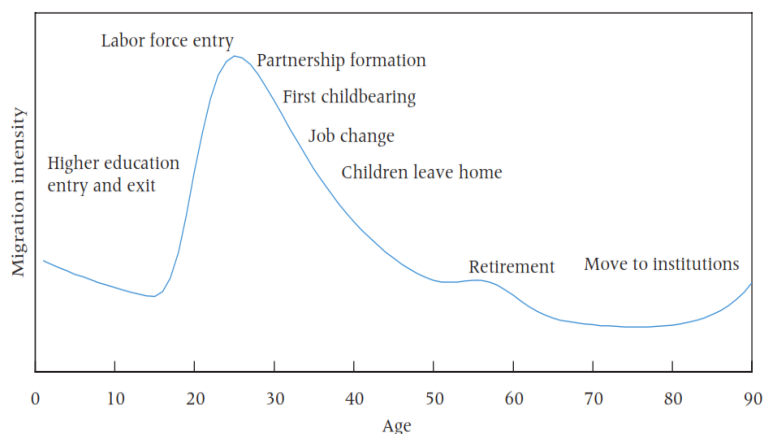
Figure 1. Profile of migration by age and transition of life (Bell et al., 2014)

This aspect is influenced by income level, living conditions, and education.

Bradshaw et al. (2011) measured subjective well being for children in UK by two dimensions: happiness and self esteem. Each of these dimensions of subjective well-being is assessed by a number of questions and a score is given to each response. A scale is created for each dimension by summing up the scores to each set of corresponding questions. The happiness scale ranges from 0-30 and the self-esteem scale ranges from 0-15. Thus, the higher the score, the better is the subjective well being on both scales.

Schueller and Seligman (2010) used two indicators of well-being, education and job attainment because these indicators became psychological, social, and physical capital in improving well-being. Jobs provide financial security and income generating opportunities, while education provides avenues for developing knowledge and getting better jobs.

Powdthavee (2006) stated that the commonly used indicator for analyzing living standards in Indonesia was an expenditure-based indicator of real household expenditure per capita per month. Furthermore, Powdthavee (2007) stated that per capita expenditure described more accurately economic status in the long run than income. This is because expenditure can better describe the ability of households to maintain their standard of living. Frankenberg et al. (1999) stated also that economic status in Indonesia was illustrated more often by tracking per capita consumption. Thereby, objective well-being is measured through the level of income, consumption patterns, and assets or wealth property owned (Osberg, 1985).

According to Chaudhury and Barman (2014), psychological well-being includes the perception of individuals in assessing their lives subjectively, while physical well-being is the ability to perform basic activities. These dimensions include lifestyle, nutritional coverage, and balance between body, mind, and spirit. Social well-being is the ability to interact in society. These dimensions include interpersonal interaction, social networking, and community support. Meanwhile spiritual well-being includes a vertical relationship that is related to the level of obedience to God, and a horizontal relationship that includes the relationship to the environment, others, and self.

Veenhoven (2012) stated that subjective well-being, or quality of life, was a synonym of the word happiness and happiness refered to the assessment of a person about his life, including cognitive assessment (life satisfaction) and assessment of affective (mood and emotions). A person is said to have high happiness if they are satisfied with their living conditions and have many positive emotional experiences. Well-being is the state or degree in which a person judges the quality of his life to be good (Kahn & Juster, 2002).

Landyanto et al. (2011) said that subjective well-being was an exchangeable perception between utility, happiness, life satisfaction, and wealth. Similarly, Nielsen et al. (2009) defined subjective well-being as life satisfaction that could be measured in seven domain areas: standard of living, individual health, achievement, personal relationships, security, community relations, and future security. According to Alatartseva and Barysheva (2015), the subjective well-

being is a moral and psychological aspect, so the level of subjective well-being depends on a person's respective perceptions. Therefore, subjective well-being is a measure of well-being that is based on individual perceptions in assessing the happiness and satisfaction of life.

Migration and Well-being. Jong and Fawcett (1981) classified the purpose of migration into seven conceptual categories, namely: (1) well-being (welfare or wealth) migration decisions are influenced by economic benefits, such as higher and stable income expectations that can meet primary and tertiary needs, including economic security (income security) in old age; (2) status migration is undertaken where there is expectation for better employment, education, and community status than in the previous residence; (3) comfort migration has the purpose of improving the dwelling, environment, and so on to improve one's comfort; (4) stimulation migration is motivated by a desire to engage in new activities, meet new communities, and become more active in the destination; (5) autonomy migration encourages freedom and economic independence, offering privacy and opportunity to be oneself; (6) affiliation migration may be influenced by family relationships at the destination, the desire to be in a new community, or to follow a spouse or family; (7) morality migration desire can be affected by religious worship, seeking a good influence for children, living a better life, and living in a better community.

According to Skeldon (2012), there is a strong relationship between migration and poverty because migration can be seen as a cause of poverty as well as a source of poverty. The higher the household income, the tendency to migrate will be smaller (De Jong, 2000). De Brauw and Harigaya (2007) said that households in Vietnam used migration to improve living standards during the 1990s. Using per capita consumption as a measure of well-being, they found that the per capita consumption of migrants increased after migration and poverty rates declined as much as three% over the previous year.

De Brauw et al. (2013) found that the per capita consumption of migrants in Ethiopia increased after migration. This study saw an increase in the frequency of meat consumption as an indicator of an increase in living standards in Ethiopia by migrants compared to non-migrants. Viewed by gender, they found that the benefits of migration were greater for male migrants than for women, although the benefits for women remained substantial. They concluded that the increase in internal migration had a major impact on improving living standards in Ethiopia and that the well-being of migrant workers increases after migration. In addition, the number of household members has a positive effect on the decision to migrate.

Previously, Beegle et al. (2011) conducted a study on the impact of migration on poverty and living standards in Tanzania using the consumption level approach. Their study indicated immense and powerful

migration impacts; migrants experienced a 36% higher consumption rate than those living in the village. The amount of transfer from migrants to household members is also relatively limited. They found that the movement of individuals to the region correlated with higher growth.

MATERIALS AND METHODS

Data

The main data used in this research was panel data sourced from the Indonesian Family Life Survey (IFLS) in 2007 and 2014. IFLS has three types of information used in this study which are information on individual mobility, information on expenditure consumption, and information about subjective well-being. The analytical unit used in this study were individuals aged 22 years and over in 2014 who answered using the MG module of IFLS 2014. The analytical unit included those who migrated and those who did not migrate. The number of panel sample units from 2007 and 2014 IFLS data was 21,259 samples.

Dependent Variable: Objective Well-being

The objective well-being variable in this research used the expenditure approach of average per capita consumption per month. For developing countries, the standard indicators for measuring material/objective well-being are consumption expenditures (Meyer & Sullivan, 2003). Per capita expenditure is a more accurate indicator of the state of economic status than income, according to Frankenberg et al. (1999), who

add further that this is because a person will tend to maintain the survival of his life's estimate, especially primary consumption such as clothing, food, and shelter by spending savings or borrowing money from others.

Per capita consumption expenditure was obtained by combining the data from Book 1 Chapter KS1 (food consumption) and KS2 (non-food consumption) and the Control Book on IFLS data. Consumption expenditure per capita in 2014 and 2007 were then calculated and the real value of per capita consumption 2014 was adjusted to the price in the base year of 2007. The trick is to deflate the price using consumer price index data. Next, the variable of objective well-being was established into two categories with the following conditions: (1) no rise, if the real consumption value per capita in 2014 is smaller or equal to 2007, and (2) increase, if the real consumption value per capita in 2014 is greater than in 2007.

Dependent Variable: Subjective Well-being

Landyanto et al. (2011) stated that the terms well-being, utility, happiness, life satisfaction, and wealth were interchangeable and could be measured with answers to questions such as those raised in the IFLS. Veenhoven (as cited in Amir, 2015) reinforced this statement by stating that the word happiness was used to express everything that was good, and in this case became synonymous with subjective well-being or quality of life and the conditions that indicated individual and social well-being.

Nielsen et al. (2009) constructed the Personal Well-being Index (PWI) based on principal component analysis (PCA). They pointed out that the PWI comprised items that made up subjective well-being; they described the level of life satisfaction in seven domain areas, living standards, individual health, achievement, personal relationships, security, community relations, and future security. The question items that constitute subjective well-being are as follows:

Please imagine a six-step ladder where on the bottom (the first step) stand the poorest people, and on the highest step (the sixth step) stand the richest people. On which step are you today?

1. On which step do you expect to be five years from now?
2. Concerning your current family life, which of the following is true?
3. Concerning your current standard of living, which of the following is true?
4. Concerning your food consumption, which of the following is true?
5. Concerning your healthcare, which of the following is true?
6. Taken all things together how would you say things are these days?

The PCA method will generate five well-being quantities, which are then reduced to three prosperity categories, namely:

1. Low well-being: first and second quintiles covering 40% of individuals with the lowest subjective well-being scores.

2. Middle well-being: the third and fourth quintiles covering 40% of individuals with subjective well-being scores.
3. High well-being: based on the fifth quintile that includes 20% of individuals with the highest subjective well-being score.

Subsequently, the subjective well-being variable is formed into two categories with the following conditions:

1. No rise, if the prosperity category in 2014 is smaller or equal to 2007
2. Increase, if the prosperity category of 2014 is greater than in 2007

Research Model

As mentioned earlier that this study aims to see the effect of migration on changes in the level of individual well-being; therefore, the formation of research dataset using variables changes for each independent variable (Allison, 2005). According to Allison (2015), to see changes in well-being between two survey times can be done in two ways, namely:

1. Using logistic equations for persons-years observations or panel data (xtlogit on Stata13)
2. Using binary logistic equations with independent variables with a different score between the two times

Allison (2015) stated two conditions must be met to be able to use the first method of which was, the dependent variable must be measured between different time events (at least two measures of occurrence). In this case, the well-being used in this study was

measured in 2007 and 2014, so the condition is met. The second condition is that the independent variables must change between survey times. The fixed effect model will not give a good effect on variables that do not change over time (time invariant), such as gender and tribe.

The dependent variable in this research is the change in well-being level of the panel individuals aged 22 years and above in year 2014, indicated as follows:

1. Y = 1, if well-being increased.
2. Y= 0, if well-being did not rise or decreased.

To see the effect of the change of status (migration) to increased well-being, the following model is used is as:

$$\text{logit } h(t_{tij}) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \; \dots + \varepsilon \quad (1)$$

RESULTS AND DISCUSSIONS

The objects in this research were individuals aged 22 years and over in 2014 which were observed also in 2007. The univariate analysis presented in Table 1 provides an overview of individual characteristics based on migration status and the level of well-being. Overall, the number of individual observations was 21,259 people consisting of 45.47% men and 54.53% women. As many as 4,590 people (21.6%) of them migrated or had a different residence between 2007 and 2014. Most of them were working and living in urban areas and most have an education level lower than elementary school.

Based on Table 1, there is a different pattern between objective and subjective well-being. As for objective well-being, 78.9% of the more prosperous individuals had an increase in real per capita consumption in 2014 compared to 2007; in other words, their purchasing power in 2014 was greater than in 2007. In contrast, in that group only 28.83% had a high subjective well-being perception.

Table 1

Distribution of respondents by selected variables

Variable	Categories	Number of observation	Percentage
(1)	(2)	(3)	(4)
Objective Well-being	Not rise	4.508	21.21
	Increase	16.751	78.79
Subjective Well-being	Not rise	15.130	71.17
	Increase	6.129	28.83
Migration Status	Non Migrant	16.669	78.41
	Migrant	4.590	21.59
Sex	Women	11.592	54.53
	Men	9.667	45.47

Table 1 *(Continued)*

Variable	Categories	Number of observation	Percentage
(1)	(2)	(3)	(4)
Age Group	22-29	3.858	18.15
	30-49	1.227	52.81
	50-59	3.426	16.12
	60+	2.748	12.93
Education Level	Elementary school or Lower	8.651	40.69
	Junior High School	3.874	18.22
	Senior High School	5.890	27.71
	University	2.844	13.38
Marital Status	Not Married	1.802	8.48
	Ever Married	2.153	10.13
	Married	17.304	81.4
Employment Status	Not employed	4.590	21.59
	Employed	16.669	78.41
Residence	Rural	8.760	41.21
	Urban	12.499	58.79
Archipelago	Other	8.238	38.75
	Jawa-Bali	13.021	61.25
Total		21.259	100

Table 2 indicates the differences in the tendency of well-being to change based on the characteristics of individuals and regions were not much different from the results of the descriptive analysis. There was a difference in well-being trends between age groups. The higher age groups had a higher tendency for individuals to become more prosperous. These results are in line with the findings of Frey and Stutzer (2002), Blanchflower and Oswald (2004). Some of reasons behind this positive correlation are that older people have lower expectations and aspirations than younger people, older

people revise their goals and expectations toward things that are more likely to be achieved, and older people have learned how to reduce and overcome the negative things that affect their lives. In addition, emotional maturity that comes with age plays a part (Seligman, 2002). Tendencies of well-being differ also in groups of individuals based on education level. In objective well-being, the higher the level of education, the tendency to be more prosperous will decrease. It is generally seen, however, that individuals who had educational attainment of junior high school were more likely to increase

Table 2
Results of logistic panel data regression (xtlogit)

Covariat	Objective Well-being				Subjective Well-being			
	Model 1		Model 2		Model 3		Model 4	
	OR	SE	OR	SE	OR	SE	OR	SE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Constant	0.541***	0.006	0.134***	0.006	0.139***	0.002	0.048***	0.003
Migration Status								
Migran	5.497***	0.122	7.963***	0.306	3.466***	0.122	3.401***	0.125
Age Group								
30-39			1.668***	0.056			1.263***	0.053
40-59			5.382***	0.192			1.803***	0.080
60 +			6.303***	0.291			1.805***	0.111
Education Level								
Junior High School			1.399***	0.045			1.317***	0.056
Senior High School			1.248***	0.037			1.535***	0.059
University			1.283***	0.049			1.707***	0.080
Marital Status								
Ever Married			1.142***	0.063			1,057	0.080
Married			1.121***	0.044			1.308***	0.068
Employment Status								
Employed			1.256***	0.033			1.121***	0.039
Residence								
Urban			1.124***	0.026			1.170***	0.036

Table 2 (Continued)

Covariat	Objective Well-being				Subjective Well-being			
	Model 1		Model 2		Model 3		Model 4	
	OR	SE	OR	SE	OR	SE	OR	SE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Archipelago								
Jawa-Bali			0.954**	0.021			1.196***	0.036

Notes: *** Significance at α = 0.01, ** Significance at α = 0.05, *Significance at α = 0.1

their well-being than individuals with lower than an elementary school education are. This means that in the period 2007–2014, those with educational attainment of junior high school and above tended to have higher purchasing power in 2014 than those who were not educated or had lower than elementary school educations.

From Models 2 and 4, it is seen that the smallest tendency of well-being is in the lower than elementary educational level. The higher the level of education, the higher the tendency to improve well-being. This is because education can increase one's knowledge and increase the ability to get a better job (Schueller & Seligman, 2010). This is also in line with Eddington and Shuman (2005), who suggest that there is a significant relationship between education and happiness, because education affects a person's social status. Eddington and Shuman (2005) add that the relationship between happiness and education may decline at higher levels of education, because higher education produces higher expectations and that if a highly educated person is unable to achieve those expectations then his happiness will decrease.

CONCLUSIONS

Based on the results of research and discussion in the previous section, it can be concluded that migration affects the level of well-being of individuals in Indonesia. The effect is significant on both the objective and subjective well-being, with the same pattern of influence between the two. Migration

positively affects both the objective well-being and subjective well-being. As mentioned, migration has a positive effect on objective well-being. This means real expenditure per capita of migrants in 2014 tended to increase when compared to real per capita consumption expenditure in 2007. In contrast, real per capita spending for non-migrants tended to decline in 2014. This demonstrates that migrants had greater income in 2014 than 2007, since expenditure per capita is used as a proxy for income. Objectively, therefore, migrants tend to be more prosperous than non-migrants are. Similarly, for subjective well-being, migration positively affects the well-being level. This means that the perceptions of migrants on the subjective measures of well-being in 2014 tended to increase when compared with 2007. Migrants tend to feel more improvements in their life satisfaction, happiness, material adequacy, and health in 2014 than in 2007. Thus, subjectively, migrants tend to be more prosperous than non-migrants are. The interaction of migration with the independent/control variables significantly affects the objective well-being in Indonesia. This means that migration affects other independent variables in influencing changes in per capita consumption levels in Indonesia. It can be concluded that the variation in the increase of real per capita consumption in the period 2007–2014 depended on the interaction between migration and educational attainment, employment status and residence. The interaction of migration with the independent/control variables also significantly affects subjective well-being, that is, the interaction between migration with education attainment, marital status, employment status, residence, and archipelagic area. It can be concluded that the variation in individual perceptions of life satisfaction, happiness, material adequacy, and health in 2014 depended on the interaction between migration and gender, education level, marital status, residence, and archipelagic area.

Limitations

This research is limited to the period 2007–2014, and all the individuals in 2007 were assumed to be non-migrants, even though in fact, there were migrants in 2007. In addition, this study does not describe all the determinants of migration and is limited to individual characteristics and region. Future research could use a longer data panel from the initial wave of the IFLS. The use of the CPI deflator cannot accommodate the differences in the purchasing power between regions. Therefore, the CPI deflator chosen for the estimation of the purchasing power of migrants in 2014 is the CPI of the regions where the migrants lived in 2014. In addition, the consumption expenditure per capita contains bias because it assumes equal consumption for every member of a household; it divides the total consumption by the number of family members. Per capita consumption, however, is thought to differ between age groups; this is called an equivalent scale (Bellu & Liberrati, 2005). For further research, the equivalent scale should be considered in calculating the per capita expenditure.

Implications

Some policy recommendations that can be given related to the conclusions of this research. The results of the study showed that urban and rural areas have an impact on well-being achievement. This indicates that there is still a large gap between urban and rural areas. Therefore, the distribution of development becomes a key in improving the well-being of the population. The development of facilities and infrastructure in rural areas needs to be improved further. The results of the study show also a phenomenon that educational investment is still very important to the achievement of well-being. Therefore, development programs related to education should be continued, especially those related to education subsidies and 12-year compulsory education programs.

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Changes of Lower Limb Kinematics during 2000m Ergometer Rowing among Male Junior National Rowers

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ABSTRACT

Rowing involves cyclic motions that have a number of similar repetitions of joint excursion. Similar movement patterns, physiological, muscular activity and biomechanical aspects were observed while rowing on dynamic ergometer and on water. The purpose of our study is to evaluate the changes of lower limb kinematics during 2000m rowing on dynamic ergometer among male junior national rowers. Ten male junior national-level rowers participated in the study. 24 passive reflective markers were attached on their lower extremity and their rowing motions were captured. Each phases of rowing cycle was interpolated to 100 time points separately. The lower limb joint kinematics were compared across every 500m sections to evaluate its changes during 2000m rowing trial. There was a statistically significant difference between stroke rates for every 500m of 2000m rowing trial as determined by one-way ANOVA ($F(3,36) = 4.880$, $p = 0.006$). Kinematical variabilities were observed across splits particularly in frontal and transverse planes of lower limb joints.

Keywords: Biomechanics, kinematics, rowing, youth

INTRODUCTION

Rowing involves cyclic motions that have a number of similar repetitions of joint excursion (Jürimäe et al., 2010). Cyclic motions are common in sports such as walking, running and cycling. In rowing, the execution begins with catch position, then drive phase, followed by finish position, recovery phase and then returns to the catch position and the cycle repeats. The drive phase begins at the catch position whereby the upper limb is maximally extended while the lower limbs is maximally flexed, and ends with maximum extension of lower limbs and maximum flexion of elbow joint. Then, the finish phase is indicated as the rowers reached to the back of the boat with extended trunk and legs. Next, the recovery phase is the return of the rower from finish position to catch position of following cycle. Successful elite rowers generate power mainly from legs (75-80% of total power) and only about 20-25% of total power was generated from arms (Cosgrove et al., 1999).

There are a number of studies that compared the biomechanical aspects of rowing on ergometer and on-water rowing (Dawson et al., 1998; Fleming et al., 2014; Mello et al., 2009) and across the types of ergometer (Holsgaard-Larsen & Jensen, 2010; Benson et al., 2011; Shaharudin et al., 2014a). There are two types of ergometer that are commonly used by rowers; dynamic and stationary ergometer. Dynamic ergometer consists of two sliders that were mounted underneath a stationary ergometer. Several authors have previously showed that rowing on dynamic ergometer may better simulate movement patterns associated with on-water rowing (Bernstein et al., 2002; Colloud et al., 2006; Elliott et al., 2002). Furthermore, similar physiological (e.g. heart rate, oxygen consumption and blood lactate concentration) (Benson et al., 2011; Mahony et al., 1999), muscular activity (Fleming et al., 2014) and biomechanical aspects (Dawson et al., 1998; Lamb, 1989) were observed while rowing on dynamic ergometer and on water.

However, Fohanno et al. (2015) found that rowing on dynamic ergometer might increase risk of injury due to increased load on lower limb joints to overcome inertial mass during catch. More precisely, rowers are dependent on their lower limb to exert forces on the foot stretchers (Kleshnev, 2007). Hence, the asymmetry of leg length and force generated at the foot stretcher may cause lower back imbalances and further increase lumbar pain (Janshen et al., 2009). Furthermore, rowers need to aim for maximum power output and it may result in asymmetrical or adverse body mechanics while rowing on ergometer compared to on-water rowing (Torres-Moreno et al., 2000).

According to Kingma et al. (1998), rowing stroke is advocated to move with symmetrically coordinated movements to minimise torsional force and tendency for low back pain. Moreover, executing the rowing stroke with asymmetrical lower limb motion may result in compensatory pelvic motions and contractions of trunk stabilisers muscles (e.g., transverses abdominis and erector spinae) and thus, influencing the action of the spine (Buckeridge et al.,

2012). Fatigue causes changes in rowing technique, such as changing the timing of coordination between body segments (Holt et al., 2003; McGregor et al., 2005). Pollock et al. (2012) found that a change in the timing of leg drive, trunk extension, and arm pull execution might also influence the coordination of the pelvic and spinal segments. For example, during the final sprint of 2000m race, the trunk has to generate greater force to compensate for the power loss from knee extension. Hence, the purpose of our study is to evaluate the changes of lower limb kinematics during 2000m rowing on dynamic ergometer among male junior national rowers. The findings from this study may provide insights in rowing technique modification and enhancement.

METHODOLOGY

Recruitment of Participants

Participants were recruited voluntary through national coach. Ten male junior national-level rowers participated in the study. Rowers of age 13 – 17 years old with no serious musculoskeletal injuries within the past year were included in the study. Consent was obtained from the participants and their guardians. The study protocol was reviewed and approved by Human Research Ethical Committee of Universiti Sains Malaysia (USM/JEPeM/15020080). The research was conducted in compliance to Declaration of Helsinki 1975.

Study Protocol

Participants underwent a physical check-up, which included the evaluation of weight, height, body circumference (i.e., hip, waist and thigh) and body segment length (i.e., shank and thigh). Shank is the part of the lower limb between the knee and the ankle, while thigh is the part of the lower limb between the hip and the knee. Standing height and body weight were measured using Seca Stadiometer (Model 224, Germany). During measuring standing height, participants were instructed to take a deep breath for measuring actual standing height respectively. Then, the body mass index (BMI) of each participant was calculated by division of body weight (in kilograms) over standing height squared (in centimetres). The shank-thigh length ratio was measured based on the markers attachment by using anthropometrical tape. The length of thigh was measured from greater trochanter marker to lateral epicondyle marker while the length of shank was measured from lateral epicondyle marker to lateral prominence of lateral malleolus marker. Hence, shank-thigh ratio was determined by the length of shank divided with the length of thigh.

Then, participants were asked to provide information about their medical history and any medications taking. Participants were advised to wear fitting clothes for accurate marker placement on the body. Prior to the test day, they needed to have at least six hours of sleep. They also needed to take a light meal before coming for the test. Next, 24 passive reflective markers

(model hard marker 15mm, QUALISYS AB, Sweden) were attached on both sides of anterior superior iliac spine anterior superior iliac spine, both sides of anterior superior iliac spine posterior superior iliac spine, both sides of anterior superior iliac spine greater trochanter, both sides of anterior superior iliac spine femoral wand, both sides of anterior superior iliac spine lateral epicondyle, both sides of anterior superior iliac spine medial epicondyle, both sides of anterior superior iliac spine tibial tubercle, right and left lateral malleolus, both sides of anterior superior iliac spine medial malleolus, both sides of anterior superior iliac spine calcaneous, both sides of anterior superior iliac spine second metatarsal head and both sides of anterior superior iliac spine fifth metatarsal head. One passive reflective marker was attached on the posterior part of ergometer. Correct positions of the markers were the key factor in achieving a good quality of motion capture.

After markers attachment, the participants stood stationary to capture the full-body static pose. Participants were notified to stand in the anatomical position with both upper limbs open a bit to the side with lower limbs were positioned with shoulder-width apart. The static pose was captured for two seconds. Then, four reflective markers were removed prior to the rowing trial once the static pose was captured. All the four markers were located on the medial anatomical landmarks which include right and left medial epicondyle and right and left medial malleolus. The markers were removed for the ease and smoothness

of rowing motion. Another 20 markers on the selected anatomical landmarks and one marker on the ergometer remained.

Next, all participants went through similar 2000m rowing test on dynamic Concept 2, Model D ergometer (Concept 2 Inc., Morrisville, VT). Participants were asked to perform warm up for two to three minutes with no workload and resistance followed by a minute of active rest. After that, standardized drag factor (e.g., resistance) referred from Australian Rowing Team Ergometer Protocols was added according to the body weight of participants. The tests began once the participant was ready. During the test, the 3D motion was captured for ten consecutive rowing strokes at every 500m split during 2000m rowing. Verbal encouragement was provided during the test. The time to completion was recorded after the participant reached 2000m of rowing.

Finally, the trajectory of reflective markers that were captured previously was identified using QTM software (QUALISYS AB, Sweden) to build a musculoskeletal modelling. Each marker was identified according to the acronym names of the anatomical landmarks. After the identification of markers was completed, the motion captured was further analysed using Visual3D Standard v4.90.0 (Gothenburg, Sweden) to create musculoskeletal model which allowed detailed analysis of coordination.

Once the markers identification was done, data from QTM software were exported to Microsoft Office Excel (Microsoft Corporation, 2007). A set of ten

consecutive stroke cycles was extracted and averaged to obtain a representative pattern for each 500m of 2000m rowing test. Then, the rowing phases were defined through the analysis of position and orientation of the wrist joint marker projected along the longitudinal axis of the ergometer (Shaharudin et al., 2015; Shaharudin et al., 2014b). The drive phase ranged from 0 to 100% and the recovery phase from -100 to 0% (Pollock et al., 2009). Each phases of rowing cycle (e.g., drive and recovery) was interpolated to 100 time points separately following technique by (Pollock et al., 2012). Therefore, the complete stroke was composed of 200 time-points. The interpolation technique is crucial to allow comparison across rowing phases and participants (Pollock et al., 2012). The interpolation and graphs were created by using MATLAB (R2014b, version 8.3,

The MathWorks, Inc., US) software. Next, the lower extremity joint kinematics was compared across the four data points (i.e., ten strokes for every 500m) to evaluate its changes during 2000m rowing trial.

Statistical Analysis

All the statistical tests were analysed using IBM SPSS (Statistical Product and Service Solutions) statistics software version 23 (International Business Machines Corporation, United States). Significance value was set at $\alpha = 0.05$. The descriptive statistics were applied on the anthropometric data and rowing performance. All data were expressed as mean ± standard deviation (SD). The Kolmogorov-Smirnov test was employed to determine the normality of the data.

Table 1

Physical characteristics of participants (N=10)

Physical characteristics	Mean ± SD
Age (years)	16.4 ± 0.5
Height (m)	1.73 ± 0.05
Weight (kg)	70.2 ± 9.2
BMI (kg/m^2)	23.44 ± 2.67
Hip circumference (cm)	97.9 ± 12.2
Thigh circumference (cm)	42.3 ± 2.45
Shank length (m)	0.43 ± 0.03
Thigh length (m)	0.49 ± 0.04
Shank to Thigh Ratio	0.9 ± 0.1

RESULTS

Physical Characteristics of Participants

The descriptive statistics were applied to assess participants' physical characteristics (Table 1).

Rowing Performance on Dynamic Ergometer

Rowing performance on dynamic ergometer data of all participants were presented in Table 2.

There was a statistically significant difference between stroke rates for every 500m split of 2000m rowing distance as determined by one-way ANOVA ($F(3,36) = 4.880$, $p = 0.006$) (Table 2). A Tukey's honestly significant difference (HSD) post hoc test revealed that there were significant differences of stroke rates between 500m section and 2000m section splits ($p = 0.044$), between 1000m section and 2000m section splits ($p = 0.013$), and between 1500m section and 2000 section splits ($p = 0.013$).

Table 2

Rowing performance on dynamic ergometer (N=10)

Rowing performance	Mean ± SD
Time to completion (min)	7.57 ± 0.42
Stroke per minute (spm)	
500m	32.2 ± 3.2
1000m	31.2 ± 3.2
1500m	31.2 ± 2.7
2000m	37.6 ± 7.0
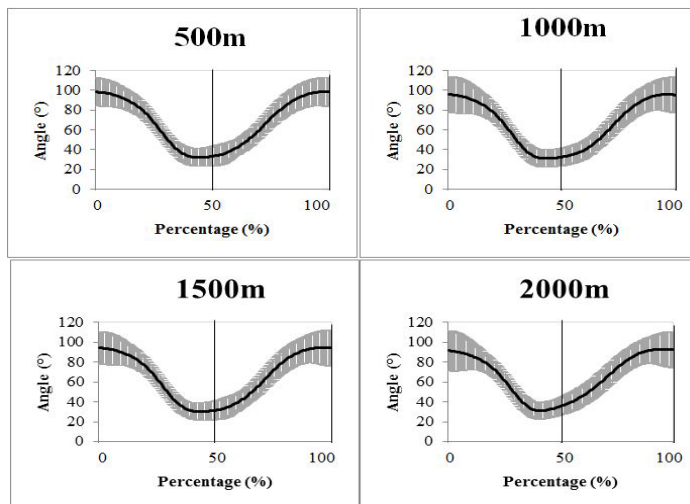
Figure 1. Changes of hip joint angle in sagittal plane across 2000m time trial rowing on dynamic ergometer. 0% to 50% indicates recovery phase while 50%-100% indicates drive phase.
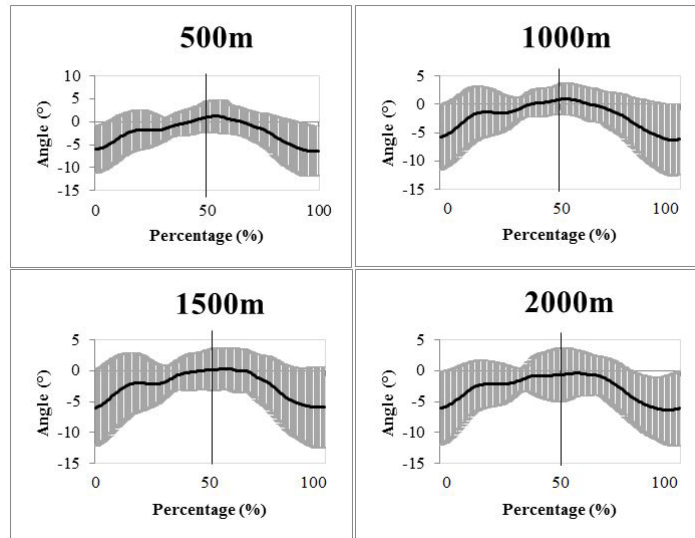
Figure 2. Changes of hip joint angle in frontal plane across 2000m time trial rowing on dynamic ergometer. Positive angle indicates adduction while negative angle indicates abduction. 0% to 50% indicates recovery phase while 50%-100% indicates drive phase.
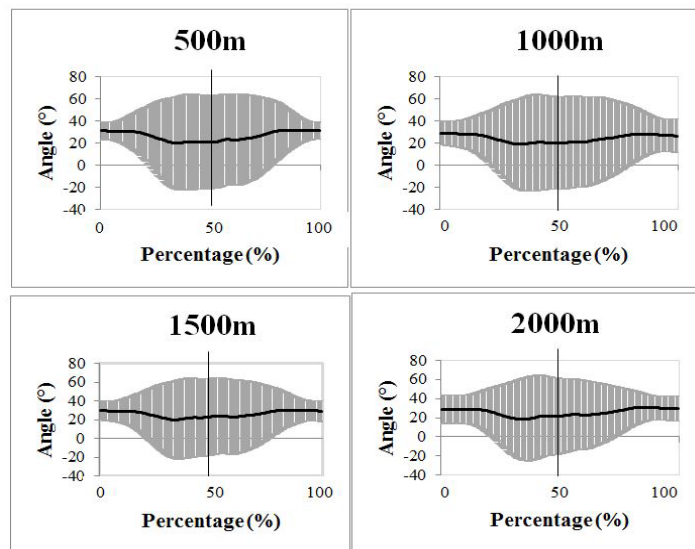
Figure 3. Changes of hip joint angle in transverse plane across 2000m time trial rowing on dynamic ergometer. Positive angle indicates internal rotation while negative angle indicates external rotation. 0% to 50% indicates recovery phase while 50%-100% indicates drive phase.
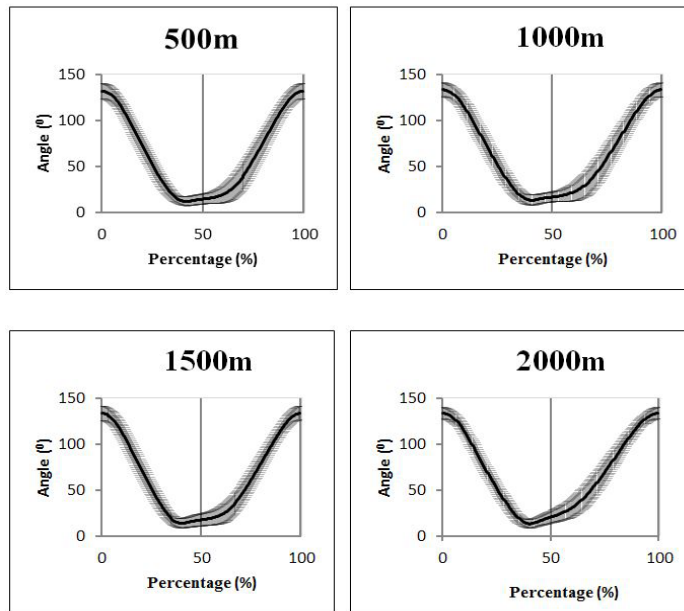
Figure 4. Changes of knee joint angle in sagittal plane across 2000m time trial rowing on dynamic ergometer. Increment of angle indicates knee extension and decrement of angle indicates knee flexion. 0% to 50% indicates recovery phase while 50%-100% indicates drive phase.
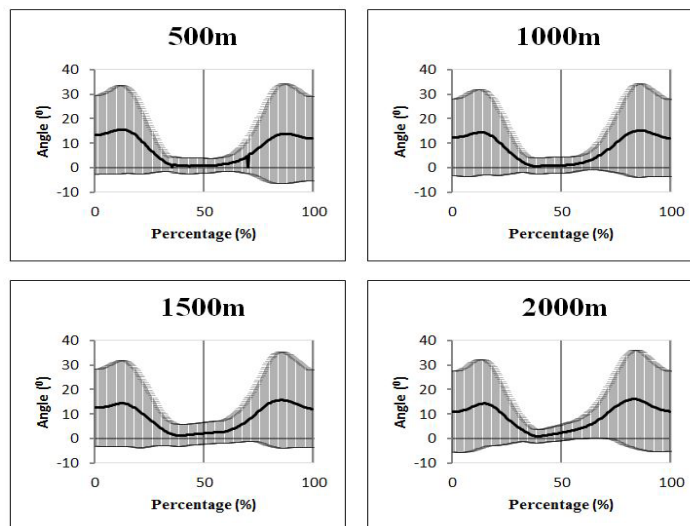
Figure 5. Changes of knee joint angle in frontal plane across 2000m time trial rowing on dynamic ergometer. Increment of angle indicates knee adduction and decrement of angle indicates knee abduction. 0% to 50% indicates recovery phase while 50%-100% indicates drive phase.
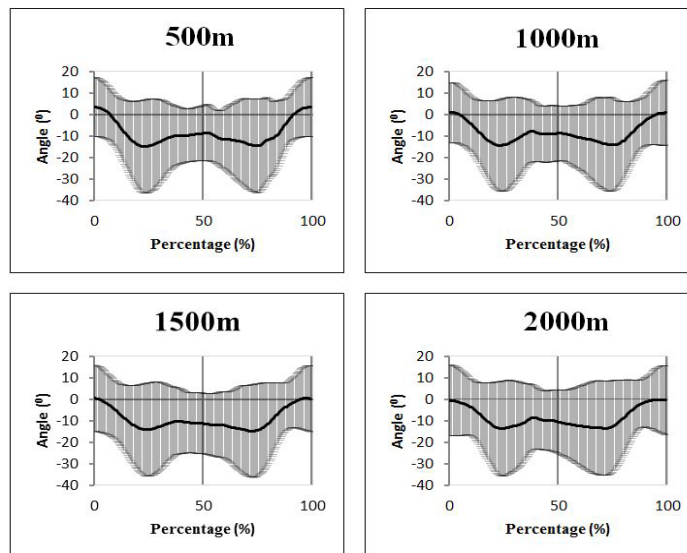
Figure 6. Changes of relative knee joint angle in transverse plane across 2000m time trial rowing on dynamic ergometer. 0% to 50% indicates recovery phase while 50%-100% indicates drive phase.
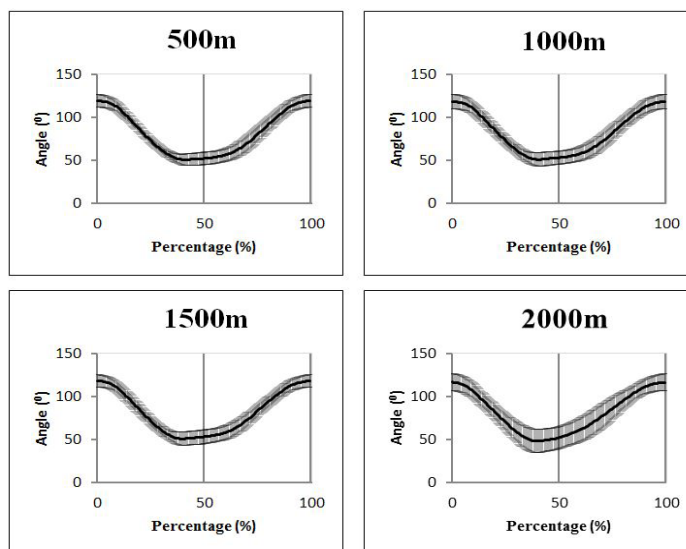
Figure 7. Changes of ankle joint relative angle in sagittal plane across 2000m time trial rowing on dynamic ergometer. 0% to 50% indicates recovery phase while 50% to 100% indicates drive phase.
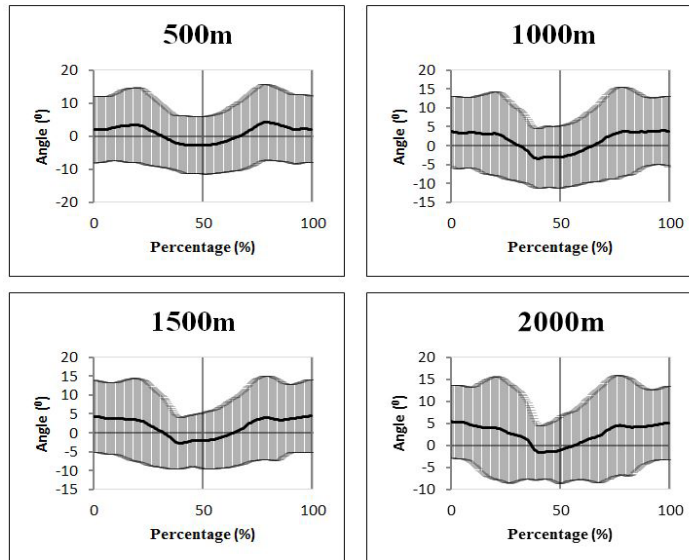
Figure 8. Changes of ankle joint relative angle in frontal plane across 2000m time trial rowing on dynamic ergometer. 0% to 50% indicates recovery phase while 50% to 100% indicates drive phase.
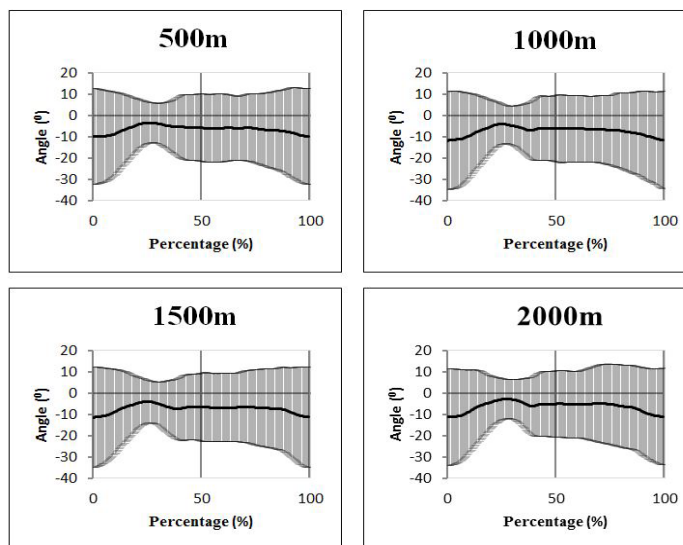
Figure 9. Changes of ankle joint relative angle in transverse plane across 2000m time trial rowing on dynamic ergometer. 0% to 50% indicates recovery phase while 50% to 100% indicates drive phase.

Ensemble Averages of Lower Limb Kinematics

Hip, knee and ankle joints angles in sagittal, frontal and transverse planes were evaluated for every 500m of 2000m rowing distance (Figure 1-9). The ensemble averages consisted of drive (from 0% to 50%) and recovery (from 50% to 100%) phases.

DISCUSSION

Our participants recorded 7.57 ± 0.42 min for 2000m ergometer rowing time trial which considered slow than 6.37 ± 0.08 min recorded in Australian male junior rowers (Lawton et al., 2012). The stroke rate was slightly fluctuated from 500m to 1500m splits and finished with the highest stroke rate. The consistency of stroke rates between 500m and 1500m enabled rowers to generate high stroke power at the last 500m split. The high stroke rates resulted in a shorter time to completion. Stroke rate and velocity are directly related whereby high stroke rate would increase the boat velocity (Soper & Hume, 2004). Previous studies showed negative correlation between stroke rate and stroke length (Fritzdorf et al., 2009; Thompson et al., 2000). As our rowers are shorter than rowers from previous studies (Mikulić, 2008; Soper & Hume, 2004), perhaps increasing stroke rates was a strategy to increase boat velocity.

The main objective of the study was to evaluate the changes of lower limb kinematics during dynamic ergometer rowing. To the best of our knowledge, studies regarding the changes of lower limb joints kinematics during dynamic ergometer rowing were scarce.

Figure 1 showed the flexion/extension movement of hip joint in sagittal plane.

Figure 2 showed the adduction/abduction movement of hip joint in frontal plane. The hip was adducted during at the end of drive phase and at the beginning of recovery phase then abducted during the beginning of drive phase and at the end of recovery phase. Figure 3 showed the internal/external rotation movement of hip joint in transverse plane. The hip was internally rotated during the beginning of drive phase and at the end of recovery phase and then externally rotated during at the end of drive phase and at the beginning of recovery phase. The high variability in frontal and transverse planes is probably due to the leg alignment that we did not measure. Besides, due to sitting position on ergometer, fewer changes in hip motions were observed except at sagittal plane.

For knee kinematic in sagittal plane (Figure 4), the participants showed maximum knee flexion during catch position and maximum knee extension during finish position throughout the four sections (e.g., 500m, 1000m, 1500m and 2000m). There was a plateau at the transition between drive and recovery phase whereby the participants rode the momentum at finish position before continue to the catch position. Knee pain is common in rowers (Hosea & Hannafin, 2012; Karlson, 2012; Smoljanovic et al., 2015). Excessive knee flexion during rowing places high compressive forces between the posterior of the patella and the femur (Waryasz et al., 2016). Furthermore, abnormal tracking of the patella often leads to an imbalance of forces around the joint (Thornton et al., 2017).

For knee kinematic in frontal plane (Figure 5), our results showed that the knee joint was always in adducted position

whereby the knees moved toward to the midline of the body for all sections. The motion was observed during the middle of drive phase until finish position. This finding is similar to Waryasz et al. (2016) whereby the rowers experienced a "knock-kneed" appearance through drive phase because of a genu valgum dysfunction or adductor moment of the femur. However, rowers with an increased abduction moment or "bow legs" may develop iliotibial band syndrome which is an irritation due to increased compression of the iliotibial band over the lateral femoral condyle (Fairclough et al., 2006). Thus, specific assessment of lower limb alignment is important to assess for rowers before the start of rowing session to avoid any knee injury that would be detrimental for performance.

For knee kinematic in transverse plane (Figure 6), external rotation was observed at the early of drive phase until the middle of drive phase, whereas, internal rotation were identified at the middle of recovery phase and ended at the late of recovery phase. In addition, during the first 500m, the knee was in internal rotation during catch position. However, the motion changed across the next three splits (e.g., 1000m, 1500m and 2000m) whereby the knee joint was in neutral position. These events showed that participants were struggling at first to adapt while generating strokes on dynamic ergometer. Hence, it was shown that at catch position (50%), the knees flexed, adduct and internally rotated while at finish position (0% and 100%) the knees extended, abduct and externally rotated.

Figure 7 depicted the movement of ankle joint in sagittal plane which was consistent across all 2000m time trial. However, the variability of ankle joint movement patterns increased as the participants rowed toward the time trial completion. At 2000m section, there was high variability begins from the middle of drive phase until the middle of recovery phase. This variability could be due to increased power production at the foot and high stroke rates. In a muscle activity study, it was shown that the gastrocnemius lateralis (GL) muscle was the earliest to activate, as plantar flexion was used prominently in the drive phase of rowing which GL enabled force transfer from the foot stretcher to the thigh muscles (Gerževič et al., 2011; Jürimäe et al., 2010). Hence, ankle joint motions in sagittal plane are important for force transfer from distal to proximal parts of lower limb.

Ankle joint motions in frontal plane showed high variability across all sections especially during the middle of drive phase (Figure 8). The ankle joint inverts during early to middle drive phase and during middle until end of recovery phase. Then, the ankle joint everts during the middle of drive phase until the middle of recovery phase. The position of ankle joint was consistently externally rotated across every studied splits (Figure 9). However, there was slight movement of ankle internal and external rotation during early and middle of drive phase.

Based on the figures, we observed that during the drive phase, as the knee joint abducted, the knee also externally

rotated. For the ankle joint, eversion-internal rotation coupling motion was also observed during drive phase. Then, the *vice versa* occurred during recovery phase whereby the knee joint adducted and internally rotated while the ankle joint inverted and externally rotated. Hence, following the kinetic chain concept, it was noted that movement in rowing at a specific joint may affect its neighbouring joints and segments.

Limitation

Dynamic ergometer design underestimated the kinetic energy which is required to accelerate the rower's centre of mass during on-water rowing as stroke rate and exercise intensity increased (Fleming et al., 2014). Particularly, muscles activities were markedly greater at early drive and recovery phase during on-water than dynamic ergometer rowing (Fleming et al., 2014). This is because rowing ergometers are more stable than on-water rowing hence, additional activation of stabilising muscles may not be necessary. Furthermore, some studies have found differences in arm motion (Lamb, 1989), handle force and acceleration profiles (Kleshnev, 2005) between ergometer and on-water rowing performance. However, these variables were not included in the current study.

CONCLUSIONS

Variabilities were observed particularly in frontal and transverse planes of lower limb joints. Knee and ankle motion of internal/ external rotation are important for rowers to stabilise their body especially during the end

of drive phase or in the position of finish. Early detection of the false technique is important to improve rowing performance because false technique increases risk of injury (Thornton et al., 2017).

PRACTICAL APPLICATION

Specific assessment of lower limb alignment is important to assess rowers prior to rowing season to avoid any injury that would be detrimental to performance.

CONFLICTS OF INTEREST

There are no conflicts of interest to declare.

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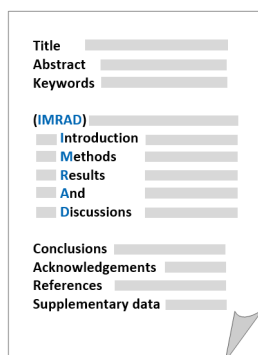
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e-book/online book	**Information prominent' (the author's name is within parentheses):** … (Niemann et al., 2004) … Or **'Author prominent' (the author's name is outside the parentheses):** Niemann (2004) …	Niemann, S., Greenstein, D., & David, D. (2004). *Helping children who are deaf: Family and community support for children who do not hear well.* Retrieved June 1, 2019, from http://www.hesperian.org/ publications_download_deaf.php Schiraldi, G. R. (2001). *The post-traumatic stess disorder sourcebook: A guide to healing, recovery, and growth* [Adobe Digital Editions version]. doi:10.1036/0071393722
Editor	**Information prominent' (the author's name is within parentheses):** … (Zairi, 1999) … Or **'Author prominent' (the author's name is outside the parentheses):** Zairi (1999) …	Zairi, M. (Ed.). (1999). *Best practice: Process innovation management.* Oxford, United Kingdom: Butterworth- Heinemann.

Books	Insertion in Text	In Reference List
Several works by same author in the same year	**Information prominent' (the author's name is within parentheses):** … (Fullan, 1996a, 1997b) … Or **'Author prominent' (the author's name is outside the parentheses):** Fullan (1996a, 1996b) …	Fullan, M. (1996a). Leadership for change. In *International handbook for educational leadership and administration.* New York, United States: Kluwer Academic. Fullan, M. (1996b). *The new meaning of educational change.* London, United Kingdom: Casell.
Several authors, different years referred to collectively in your work	**List sources alphabetically by family name in the in-text reference in the order in which they appear in the Reference List.** The cyclical process (Carr & Kemmis, 1986; Dick, 2000) suggests…	Carr, W., & Kemmis, S. (1986). *Becoming critical: Education knowledge and action research.* London, United Kingdom: Falmer Press. Dick, B. (2000). *A beginner's guide to action research.* Retrieved June 1, 2019, from http://www.scu.edu.au/schools/gcm/ar/arp/guide.html

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Journals	Insertion in Text	In Reference List
Journal article with 1-2 authors	**Information prominent' (the author's name is within parentheses):** … (Kramer & Bloggs, 2002)… Or **'Author prominent' (the author's name is outside the parentheses):** Kramer and Bloggs (2002) …	Kramer, E., & Bloggs, T. (2002). On quality in art and art therapy. *American Journal of Art Therapy*, *40*, 218-231.
Journal article with 3 or more authors (Pertanika's format)	*For all in-text references, list only the firrst author's family name and followed by* 'et al.' **Information prominent' (the author's name is within parentheses):** … (Erlo et al., 2008) … Or **'Author prominent' (the author's name is outside the parentheses):** Erlo et al. (2008) …	Elo, A., Ervasti, J., Kuosma, E., & Mattila, P. (2008). Evaluation of an organizational stress management program in a municipal public works organization. *Journal of Occupational Health Psychology*, *13*(1), 10-23. doi: 10.1037/1076-8998.13.1.10

Journal article with 6 - 7 authors	*For all in-text references, list only the firrst author's family name and followed by* 'et al.' **Information prominent' (the author's name is within parentheses):** … (Restouin et al., 2009) … Or **'Author prominent' (the author's name is outside the parentheses):** Restouin et al. (2008) …	Restouin, A., Aresta, S., Prébet, T., Borg, J., Badache, A., & Collette, Y. (2009). A simplified, 96-well–adapted, ATP luminescence–based motility assay. *BioTechniques, 47*, 871–875. doi: 10.2144/000113250
Journal article with more than 8 or more authors	**Information prominent' (the author's name is within parentheses):** … (Steel et al., 2010).. Or **'Author prominent' (the author's name is outside the parentheses):** Steel et al. (2010) …	Steel, J., Youssef, M., Pfeifer, R., Ramirez, J. M., Probst, C., Sellei, R., ... Pape, H. C. (2010). Health-related quality of life in patients with multiple injuries and traumatic brain injury 10+ years postinjury. *Journal of Trauma: Injury, Infection, and Critical Care, 69*(3), 523-531. doi: 10.1097/TA.0b013e3181e90c24
Journal article with DOI	**Information prominent' (the author's name is within parentheses):** … (Shaw et al., 2005).. Or **'Author prominent' (the author's name is outside the parentheses):** Shaw et al. (2005) …	Shaw, K., O'Rourke, P., Del Mar, C., & Kenardy, J. (2005). Psychological interventions for overweight or obesity. *The Cochrane database of systematic reviews* (2). doi:10.1002/14651858.CD003818.pub2

Newspapers

Newspapers	Insertion in Text	In Reference List
Newspaper article – with an author	… (Waterford, 2007)...	Waterford, J. (2007, May 30). Bill of rights gets it wrong. *The Canberra Times*, p. 11.
Newspaper article – without an author	… ("Internet pioneer", 2007) …	Internet pioneer to oversee network redesign. (2007, May 28). *The Canberra Times*, p. 15.
Article in an newsletter	… ("Australians and the Western Front", 2009) ...	Australians and the Western Front. (2009, November). *Ozculture newsletter*. Retrieved June 1, 2019, from http://www.cultureandrecreation.gov.au/ newsletter/

Conference / Seminar Papers

Conference / Seminar Papers	Insertion in Text	In Reference List
Print – *If the paper is from a book, use the book chapter citation format. If it is from regularly published proceedings (e.g. annual), use the Journal article citation format.*	… (Edge, 1996) … Or Edge (1996) …	Edge, M. (1996). Lifetime prediction: Fact or fancy? In M. S. Koch, T. Padfield, J. S. Johnsen, & U. B. Kejser (Eds.), *Proceedings of the Conference on Research Techniques in Photographic Conservation* (pp. 97-100). Copenhagen, Denmark: Royal Danish Academy of Fine Arts.
Online	… (Tester, 2008) … Or Tester (2008) …	Tester, J. W. (2008). The future of geothermal energy as a major global energy supplier. In H. Gurgenci & A. R. Budd (Eds.), *Proceedings of the Sir Mark Oliphant International Frontiers of Science and Technology Australian Geothermal Energy Conference*, Canberra, Australia: Geoscience Australia. Retrieved June 1, 2019, from http://www.ga.gov.au/image_cache/ GA11825.pdf

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Government Publications	Insertion in Text	In Reference List
Government as author	**First in-text reference: Spell out the full name with the abbreviation of the body.** … (Department of Finance and Administration [DOFA], 2006) … **Subsequent in-text reference/s: Use the abbreviation of the body.** … (DOFA, 2006)…	Department of Finance and Administration. (2006). Delivering Australian Government services: Managing multiple channels. Canberra, Australia: Author.
Government report - online	**First in-text reference: Spell out the full name with the abbreviation of the body.** … (Department of the Prime Minister and Cabinet [PM&C], 2008) … **Subsequent in-text reference/s: Use the abbreviation of the body.** … (PM&C, 2008)…	Department of the Prime Minister and Cabinet. (2008). *Families in Australia: 2008.* Retrieved June 1, 2019, from http://www.....

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Abbreviations: Define alphabetically, other than abbreviations that can be used without definition. Words or phrases that are abbreviated in the introduction and following text should be written out in full the first time that they appear in the text, with each abbreviated form in parenthesis. Include the common name or scientific name, or both, of animal and plant materials.

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