

Pertanika Journal of  
**SOCIAL SCIENCES  
& HUMANITIES**

JSSH

VOL. 25 (4) DEC. 2017



PERTANIKA  
JOURNALS

A scientific journal published by Universiti Putra Malaysia Press

## *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 25 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.

#### Goal of *Pertanika*

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

#### Quality

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.

#### Abstracting and indexing of *Pertanika*

Pertanika is almost 40 years old; this accumulated knowledge has resulted in Pertanika JSSH being abstracted and indexed in SCOPUS (Elsevier), Thomson (ISI) Web of Knowledge [BIOSIS & CAB Abstracts], EBSCO & EBSCOhost, DOAJ, Cabell's Directories, Google Scholar, MyAIS, ISC & Rubriq (Journal Guide).

### Future vision

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.

### Citing journal articles

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

### Publication policy

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](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*).

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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.

Most scientific papers are prepared according to a format called IMRAD. The term represents the first letters of the words **I**ntroduction, **M**aterials and **M**ethods, **R**esults, **A**nd, **D**iscussion. IMRAD is simply a more 'defined' version of the "IBC" [Introduction, Body, Conclusion] format used for all academic writing. IMRAD indicates a pattern or format rather than a complete list of headings or components of research papers; the missing parts of a paper are: *Title, Authors, Keywords, Abstract, Conclusions, and References*. Additionally, some papers include Acknowledgments and Appendices.

The *Introduction* explains the scope and objective of the study in the light of current knowledge on the subject; the *Materials and Methods* describes how the study was conducted; the *Results* section reports what was found in the study; and the *Discussion* section explains meaning and significance of the results and provides suggestions for future directions of research. The manuscript must be prepared according to the Journal's **INSTRUCTIONS TO AUTHORS**.

### Editorial process

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.

As articles are double-blind reviewed, material that might identify authorship of the paper should be placed only on page 2 as described in the first-4 page format in Pertanika's **INSTRUCTIONS TO AUTHORS** given at the back of this journal.

### **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 and the editorial board 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 chief executive editor sends the article-identifying information having been removed, to three reviewers. Typically, one of these is from the Journal's editorial board. Others are specialists in the subject matter represented by the article. The chief executive editor asks 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 literature.

3. The chief executive editor, in consultation with the editor-in-chief, examines the reviews and decides whether to reject the manuscript, invite the author(s) to revise and resubmit the manuscript, or seek additional reviews. Final acceptance or rejection rests with the Editor-in-Chief, who reserves 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 chief executive 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 chief executive editor 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 chief executive editor in consultation with the editorial board and the editor-in-chief 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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URL: [www.journals-ij.upm.edu.my](http://www.journals-ij.upm.edu.my)

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Tel: +603 8946 8855, 8946 8854

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Muthusamy, Ponniamah Muniandy and Rajantheran Muniandy*



# Foreword

Welcome to the **Fourth Issue 2017** of the Journal of Social Sciences and Humanities (JSSH)!

The JSSH is an open-access journal of Social Sciences and Humanities, published by Universiti Putra Malaysia Press. It is independently owned and managed by the university on a non-profit basis for the benefit of the social science community.

This issue contains **26 articles** consisting of one short communication, one case study while the rest are research papers. The authors of these articles hail from **Pakistan, Malaysia, India, Mauritius, Thailand, Russia, Turkey, Iran, China, South Korea and Indonesia**.

The short communication in this issue looks at improved risks and benefits of assessment tool for institutional review boards (*Wei-Hong Lai, Tze-Ming Ho and Zainanda Zainal*), while the case study discusses language choice of Malaysian Tamil university students in Facebook (*Malarvizhi Sinayah, Thanalachime Perumal, Elantamil Maruthai, Paramasivam Muthusamy, Ponniamah Muniandy and Rajantheran Muniandy*).

The research papers cover a wide range of topics. One examines spirituality at work and organisational commitment of university teachers (*Thakur, K., Singh, J. and Kaur, P.*) while others examine the following: the CRM framework for higher education in Mauritius (*Roopchund, R. and Alsaïd, L.*); business model innovations transforming the hotel industry and its implications for small and medium hotels in Mauritius (*Goorah & Panchoo*); green product and consumer behaviour: an analytical study (*Shamsi, M. S. and Siddiqui, Z. S.*); emotional intelligence: a study on academic professionals (*Chitra Krishnan, Richa Goel, Gurinder Singh, Chitra Bajpai, Priyanka Malik and Seema Sahai*); an empirical study to enquire the effectiveness of digital marketing in the challenging age with reference to Indian economy (*Richa Goel, Seema Sahai, Chitra Krishnan, Gurinder Singh, Chitra Bajpai & Priyanka Malik*); consumer awareness of digital payment with special reference to the village area (*Priyanka Malik, Gurinder Singh, Seema Sahai, & Chitra Bajpai, Richa Goel and Chitra Krishnan*); intercultural communication among the local elites in Indonesia (a study of Banten province) (*Karomani*); estimation of future paddy production and sustainable land allocation in Malaysia: a polynomial approach (*Subramaniam Munusamy, Yogambigai Rajamoorthy, and Khalid Abdul Rahim1*); Islamic background of Thai Muslim youth with Islamic ethical behaviour: a study of Muslim youth in three southern border provinces of Thailand (*Laeheem, K.*); enhancing learners' sentence constructions via "wheel of grammar" (*Grace Julian Chambers and Melor Md. Yunus*); barriers to implementing action research among Malaysian teachers (*S. Kanageswari Suppiah Shanmugam and Lee Shok Mee*); aspirants' agendas and party ideology in newspaper political ads in Nigeria (*Sharafa Dauda and Nik Norma Nik Hasan*);

sociology of political support in Russia: the Ukraine crisis, Putin and the dynamics of public opinion (*Iliia A. Bykov and Aleksey Kuzmin*); the effect of medium on the message: paper-and-pencil vs. electronic teacher corrective feedback (*Maliheh Rezaei and Nasrin Shokrpour*); exploring teachers' and parents' perceptions on social inclusion practices in Malaysia (*Donnie Adams, Alma Harris and Michelle Suzette Jones*); corporate governance disclosure in Indonesia (*Chaerul Djusman Djakman, Sylvia Veronica Siregar and Siti Nurwahyuningsih Harahap*); investigating task-induced involvement load and vocabulary learning from the perspective of metacognition (*Mark, Feng Teng*); investigating the educational offering in a quasi-autonomous Thai municipality (*Peerasit Kamnuansilpa, John Draper, Hirofumi Ando, and Narong Kiattikunwong*); uncritical inference test in developing basic knowledge and understanding in the learning of organic spectroscopy (*Cha Jeongho, Kan Su-Yin and Chia Poh Wai*); EFL advanced adult learners' use of English modals in narrative composition (*Laleh Khojasteh, Nasrin Shokrpour and Najmeh Torabiardakani*); the role of secure base and safe haven: a means of re-constructing the broken-self in Yvonne Vera's 'under the tongue' (*Dodhy, S., Kaur, H., Yahya, W. R. W. and Bahar, I. B.*); exploring factors for pedestrian fatalities at junctions in Malaysia (*Rizati Hamidun, Azzuhana Roslan and Rohayu Sarani*); and the influence of product quality and service quality on house buyer's satisfaction in prima home (*Aziam Mustafa, Nasriyah Adnan and Siti Salwana Mohd Nawayai*).

The papers are intriguing, thought-provoking and have set new milestones. Please recommend the journal to your colleagues and students who would find its contents useful for their research.

I would like to express my gratitude to all the contributors who have made this issue possible including the reviewers and editors. Last but not least, the editorial assistance of the journal division staff is fully appreciated.

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

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## **A Study of Spirituality at Work and Organisational Commitment of University Teachers**

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### **ABSTRACT**

Organisations today are not only concerned with skills and qualifications of employees but are also looking for workforce who can integrate their body, mind and soul with the work and maintain cordial work relationships. Incorporating spirituality at the workplace has now become an important need of the day. The present study is intended to explore the relationship between demographic profiles of individuals and spirituality at the workplace. Further, this study focuses on the relationship between organisational commitment and spirituality at work. For the present study, descriptive research design was used and data was collected using questionnaire containing items on both constructs. The study findings outline that gender has a significant impact on sense of community while age bears no impact on this factor. In contrast, age has a significant impact on intention to stay whereas gender has no impact on one's intention to stay. Additionally, spirituality at work and organisational commitment are found to have considerable relationship. Spirituality at work can be compared with other aspects such as leadership styles, work-life balance, organisation citizenship behaviour and organisation culture. This research can further be extended to other industries and an industry wise analysis can be carried out.

*Keywords:* Intention to stay, Mystical experience, Organisation commitment, Sense of community, Spirituality at work

### **ARTICLE INFO**

*Article history:*

Received: 14 July 2017

Accepted: 30 November 2017

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### **INTRODUCTION**

As life has no sense without work, likewise, work without spirit has no meaning. Employees who maintain spirituality at work

have more positive values like responsibility, justice, and mutuality. According to Khasawneh (2011), spirituality at work is an endeavor to discover the extreme objective in persons for working in their life, so as to build a strong relationship between the individual and the organisation. Spirituality at the workplace is also a key component of organisational success. In view of this, many employees are looking for a work environment that is more meaningful to them, in which they feel more connected to work (Riordan & Griffeth, 1995). Spiritual organisations value and respect the beliefs of their employees and are comparatively more creative, competent and profitable (Marschke, Preziosi, & Harrington, 2009). In essence, spirituality at work is the feeling of belongingness towards the organisation. Spirituality and organisational commitment are also very much interlinked. Organisational commitment refers to the involvement and dedication, sincerity and the job the employee is performing, which should be very effective and make him / her an effective employee (Bielby, 1992; Shaw & Reyes, 1992; Valentine & Barnett, 2003). Spirituality at work and organisational commitment are two essential aspects of an employee work life (Grant, O'Neil, & Stephens, 2004; Suarez & Michel, 2015). An employee must possess appropriate knowledge, skills and attitude to contribute in achievement in an organisation's stated objectives. Thus, in order to align an individual's objective with the organisation's mission and to bring out the best out of the employee, organisations

are emphasising on activities which provide a sense of belongingness to the employees. It is not only the religious belief or activity which is needed by the employee. It can also be the culture which gets adopted at the workplace and the organisation. For example, Air India is seen to follow the Indian culture and represents Indian tradition which creates a fellowship and trust among the company employees as well as their customers.

Similarly, large corporate organisations, namely, Google, Amazon and Facebook have adopted some of the finest human resource practices for their employees, such as favorable working conditions and celebrations of various festivals during working hours which create satisfaction and a sense of connection among employees and the organisations. Hence, human resource management policies must be oriented to maximise employees' good experience at the workplace, which further automatically lead to employee commitment with increased productivity and goodwill.

### **Literature Review**

According to Beheshtifar and Zare (2013), spirituality at work fulfills employees' ultimate purpose of life. Garcia-Zamor (2003) also point out that spirituality leads to employee happiness and feeling of belonging to the organisation, which in turn lead to productivity, effectiveness as well as job satisfaction. Pawar (2009) suggests the comprehensive model of spirituality at work spanning around focal points, such as individual, organisation and group.

Milliman, Czaplewski, and Ferguson (2003) argue that attitude has a direct and major part in spirituality at work. Further, Corner (2009) point out that employees should feel free to express their spirituality at the workplace. According to Altaf and Awan (2011), employees who can freely express their spiritual beliefs at the workplace unquestionably develop an affection with the firm. Meanwhile, Cullinan, Bline, Farrar and Lowe (2008) found that individuals with stronger organisational commitment are less likely to engage in behaviours which are detrimental to the organisation's interests. They further suggest that dimensions of organisational stress such as role conflict and role ambiguity have a significant influence on the organisational commitment (Biswas & Biswas, 2010).

Groen (2001)'s study explain that one can be spiritually infused when the leadership within the organisation is also spiritually infused on both internal and external aspects of leadership. This is also supported by Cheng, Jiang and Riley (2003) who found supervisory commitment to have considerable impact on employee behavioural outcome. According to Luis Daniel (2010), companies are increasingly incorporating the aspect of spirituality within their organisations in order to create a better environment for their employees. When team members embrace and experience spirituality at work, some important attributes such as trust, creativity and respect can be found within the organization, with positive consequence on team effectiveness. Gotsis and Kortezi

(2008) postulate that spirituality at work encompasses two important variables - one is character and the other is well-being. Likewise, Jurkiewicz and Giacalone (2004) explain the importance of value of the organisation for employees' self-development as well as for the development of the organisation. Hence, in order to achieve high productivity and effectiveness, employees and the organisation should have a common value for which they work together. Values, when linked with spirituality within an organisation will yield job satisfaction and high retention rate, with other variables fulfilling its importance. Kolodinsky, Giacalone, and Jurkiewicz's (2008) study examined the positive relationship of organisational spirituality with job involvement, organisational identification and rewards satisfaction. The study proposed that workers ought to encourage their employers to follow spiritual values, regardless of whether the employees themselves observe this form of spirituality. Suárez and Michel (2015) mention that employees' spirituality creates a unified harmony with the workplace, where leadership and motivation increase as a result of trust, spirituality and prayer. Further, Dhiman and Marques (2011) argue that organisations which carry the spiritual mindset are more prosperous, have contented employees and are more responsive towards their environmental accountabilities.

Meyer and Allen (1991) describe three components of organisation commitment viz. affective, continuance and normative.

Affective commitment explains emotional attachment of employees with their organisation. While staying committed to the organisation because the employee has a need to do so is called continuance commitment. The employee is aware of the cost associated with leaving the organisation. In case of normative commitment, the employee feels it obligatory or a moral duty to stay with the organisation. As workers age, there are less options for alternative employment, thus, there is a tendency to stay longer with their current organisation (Mathieu & Zajac, 1990). Furthermore, older employees stay longer because they have invested more time into the organisation as compared to young individuals (Dunham, Grube, & Castaneda, 1994). Similarly, Hellman (1997) also discovered that with increasing age, federal employees were less likely to leave the organisation.

According to Rego and Pina e Cunha (2008) and Badrinarayanan and Madhavaram (2008), people experiencing spirituality at work are more affectively committed to their organisations, are more loyal and have a sense of obligation. Improvements in spiritual climates of the firm can foster organisational commitment, leading to improved organisational performance. Further, Thakur and Singh (2016) mention that a culture can be developed in which employees feel more connected to each other. By clearly defining the mission and vision of an organisation and by becoming an ethical organisation, workers' faith can be developed and maintained. Providing a clear growth path in the organisational ladder and

empowering the subordinates are effective ways to win employee trust. If organisations are able to align the individual's values and objectives with organisational mission and vision, the firm / organisation can become more productive and successful.

### **Rationale of the Study**

Education is a core sector for achieving the objective of employment; it is a platform which provides the best human resource capital for social and business endeavours. For example, in India, by 2020, this resource capital will be the second largest graduate talent pipeline globally, as predicted by India Brand Equity Foundation. One of the research requirements for spirituality at the workplace construct is that it is still lacking in theoretical base and needs to be studied with other organisational behaviour variables such as organisation commitment, employee engagement and deviant workplace behaviour. The present study is focused on the teaching faculty of Punjab, the only university from where teachers (the sample) were selected for the study.

### **Objectives**

- To study the relationship between the demographic profile / age and spirituality at work of teachers in universities of Punjab.
- To study the relationship between spirituality at work and organisational commitment.

**Hypotheses**

- H<sub>01</sub>: There is no significant relation between gender and organisational commitment.
- H<sub>02</sub>: There is no significant relation between gender and spirituality at work.
- H<sub>03</sub>: There is no significant relation between age and organisational commitment.
- H<sub>04</sub>: There is no significant relation between age and spirituality at work.
- H<sub>05</sub>: There is no significant relation between spirituality and organisational commitment.

English language. Therefore, language was further simplified to suit respondents' comprehension level. Subsequently, the survey was administered again - Cronbach's alpha value was of acceptable range, demonstrating reliability of the instrument used.

Table 1  
*Reliability analysis*

Reliability Statistics	
Cronbach's Alpha	N of Items
.881	42

**METHODOLOGY**

In order to address the objectives framed for the study, descriptive research was carried out. A structured questionnaire was administered among 120 respondents who were selected using stratified random sampling. Out of the responses received, 85 questionnaires were valid. Data analysis was done using the SPSS tool. Factor analysis, t-test, one-way ANOVA and correlation analysis were run to analyse the data.

**Data Analysis and Findings**

Initially a study was conducted on 50 teachers in order to check the validity of the questionnaire in which definition of face, content, construct and criterion were considered. Results showed that question framing was done using complex

**Factor Analysis for Spirituality at Work.**

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.865, which is greater than 0.7, therefore, the data is acceptable. In total, 64.039% variance is explained by three factors, while the other questions have relatively less contribution. Therefore, three factors have been framed which define the best value for spirituality at work. The significance value of each question is determined and is greater than 0.5. The factors taken are as follows:

Factor 1 includes questions 3, 6, 8, 9, 11, 13, 15, 17 and 18 which is stated as sense of community. Factor 2 includes questions 1, 2, 4, 5, 7, 10, 12 and 14 which is stated as congruence with organisation values. Factor 3 comprises question 16 which is stated under mystical experience.

Table 2  
KMO and Bartlett's test

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.865		
Rotated Component Matrix <sup>a</sup>			
	Component		
	1	2	3
<i>I feel that I am at the right place where I actually wanted to work.</i>	0.811		
<i>I share a strong sense of purpose and meaning with my co-workers about our work.</i>	0.780		
<i>There is a real sense of trust and personal connection between my co-workers and I.</i>	0.723		
<i>My subordinates inspire and guide me at work.</i>	0.719		
<i>Sometimes, I experience unmatched energy at work.</i>	0.680		
<i>I feel myself as part of the community at work.</i>	0.621		
<i>My work will help me achieve my mission in life.</i>	0.595		-0.537
<i>My work fulfills my livelihood.</i>	0.587		
<i>My connection with the greater source has a positive impact on my work.</i>	0.517	0.503	
<i>I am passionate about my work.</i>		0.829	
<i>My work is meaningful.</i>		0.750	
<i>Sometimes, I am highly motivated at work.</i>		0.744	
<i>My everyday work decisions are based on my spiritual beliefs.</i>		0.712	
<i>I am grateful to be involved in my present work.</i>		0.706	
<i>Sometimes during work, I completely forget about sense of time.</i>		0.618	
<i>There are moments when I feel complete joy at work.</i>		0.609	
<i>My values and beliefs match with my work.</i>		0.580	
<i>Sometimes, at work I feel everything is blissful.</i>			0.918
Extraction Method: Principal Component Analysis			
Rotation Method: Varimax with Kaiser Normalization			
a. Rotation converged in 5 iterations			

**Organisational Commitment.** The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.743 which is greater than 0.7, therefore the data is acceptable. A total of 72.221% variance is explained by seven factors, while the other questions have a negligible value. As such, seven factors have been framed which define the best value for organisational commitment. The significance value of each item has been determined and is greater than 0.5. The factors taken are as follows: Factor 4 includes questions 28, 29, 32, 34, and 41, which is stated as “intention to stay”. Factor

5 includes question 26, 30, 33, 35, 36, and 37 which is stated “intention to leave”. Factor 6 includes question 19, 38, 40, and 42 which is stated as “loyalty”. Factor 7 includes questions 23 and 24, which is stated as “not connected with organisation”.

Factor 8 includes questions 25 and 31, which is stated as “necessity to stay”. Factor 9 includes questions 20 and 21, which is stated as “connectedness”.

Factor 10 includes question 22, which is stated as “easy switching”, the others are neglected due to low significance value.

Table 3  
KMO and Bartlett's test

KMO and Bartlett's Test							
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.743						
Rotated Component Matrix <sup>a</sup>							
	Component						
	1	2	3	4	5	6	7
<i>I feel that I have very few options to consider if I want to leave this organisation.</i>	0.805						
<i>Leaving the current organisation will disturb many aspects of my life.</i>	0.785						
<i>Currently, it would be really difficult for me to leave my organisation, even if I wanted to.</i>	0.769						
<i>I will continue to work in this organisation because other organisations may not provide or match the benefits that I have here.</i>	0.739						
<i>Staying with an organisation for most of the career is a good thing.</i>	0.671						
<i>I would not leave this job even if I get a better offer elsewhere.</i>							
<i>After leaving this organization, I may not have other alternatives available.</i>		0.803					
<i>Employees cannot be always loyal to their organisation.</i>		0.751					
<i>Leaving my current organisation would be too costly for me.</i>		0.742					
<i>Shifting job from one organisation to another is not unethical.</i>		0.660					
<i>Moving jobs from one firm to another is very common nowadays.</i>		0.648				-0.504	
<i>I am not too attached to my organisation.</i>		0.523		0.521			

Table 3 (continue)

<i>One of the major reasons I continue to work in this organisation is that I believe loyalty is important and therefore, I feel a sense of moral obligation to remain.</i>	0.830	
<i>Remaining loyal to one's organisation is always rewarding.</i>	0.829	
<i>Things were better in the days when people stayed in one organisation for most of their profession.</i>	0.603	
<i>To be a company man is not considered to be sensible anymore.</i>	0.579	
<i>I am not emotionally connected with my organisation.</i>	0.908	
<i>There is no family-like feeling in my organisation</i>	0.858	
<i>Right now, staying with my organisation is a matter of necessity as much as desire.</i>		0.609
<i>This organisation has a great deal of personal meaning for me.</i>		0.600
<i>I am not afraid of what might happen if I quit my job without having another one.</i>		
<i>I enjoy discussing about my organisation with people outside.</i>		0.718
<i>I really feel as if this organisation's problems are my own.</i>	0.524	0.564
<i>I think that I could easily become as attached to another organisation as I am to this one.</i>		0.821
Extraction Method: Principal Component Analysis		
Rotation Method: Varimax with Kaiser Normalization		
a. Rotation converged in 25 iterations		

**Normality.** Normality test shows which factors explain both workplace spirituality and organisational commitment. Sense of community and intention to stay have the highest significance value which make these as major factors. All the other factors have low significance value, and are therefore,

considered to be less effective. For the major factors, t-test and one way ANOVA. ( $p > 0.05$ ) was performed.

### T-Test and One Way ANOVA

**Sense of community.** In the t-test, (2-tailed), the significance value is less than 0.05, so,

the null hypothesis is rejected ( $H_{02}$  means that there is a significant relationship between gender and sense of community). The results show that males feel a higher sense of community compared to females. In the one way ANOVA, the significance

value,  $p$  is 0.093, which is greater than 0.05, so, the null hypothesis is accepted ( $H_{04}$  means that there is no significant relationship between age and sense of community).

Table 4  
*Significance of difference in sense of community and intention to stay experiences between males and females*

Factor	Gender	Mean	Std. Deviation	t-value	p-value	Inference
Sense of Community	Male	4.2711	.59058	2.966	.004	Significant
	Female	3.8698	.64591			
Intention to Stay	Male	3.8200	.73651	2.375	.020	Significant
	Female	3.4000	.88915			

**Intention to stay.** In the t-test, (2-tailed), the significance value is greater than 0.05, so, the null hypothesis is accepted ( $H_{01}$  means that there is no significant relationship between gender and intention to stay. Males feel higher intention to stay compared females).

In the one way ANOVA, significance value,  $p$  is 0.02, which is less than 0.05, so, the null hypothesis is rejected ( $H_{03}$  means that there is a significant relationship between age and intention to stay).

**Correlations**

The Pearson correlation value varies from +1 to -1, its value indicates the direction and strength of the relation between variables. The sig. (2-tailed) value is  $0.00 < 0.05$ , so, the null hypothesis is rejected ( $H_{05}$  means that there is a significant relationship between the sense of community and intention to stay. Through the analysis of Table 5, it is clear that sense of community is highly correlated with congruence and correlates normally with intention to stay, loyalty, and necessity to stay. Intention to leave is negatively correlated with connectedness and mystical experience.

Table 5  
Correlation analysis

Correlation	Sense of Community	Congruence	Mystical Exp.	Intention to Stay	Intention to Leave	Loyalty	Non Connectedness	Necessity to Stay	Connectedness	Easy Switching
Sense of Community	Pearson Correlation	1	.753**	.052	.561**	.318**	.565**	-.311**	.424**	.222*
	Sig. (2-tailed)		.000	.635	.000	.003	.000	.004	.000	.041
Congruence	Pearson Correlation	.753**	1	.100	.300**	.266*	.560**	-.327**	.349**	.183
	Sig. (2-tailed)	.000		.362	.005	.014	.000	.002	.001	.095
Mystical Experience	Pearson Correlation	.052	.100	1	.093	-.016	.077	-.067	.080	.036
	Sig. (2-tailed)	.635	.362		.396	.881	.483	.541	.467	.744
Intention to Stay	Pearson Correlation	.561**	.300**	.093	1	.369**	.461**	-.353**	.483**	.150
	Sig. (2-tailed)	.000	.005	.396		.001	.000	.001	.000	.171
Intention to Leave	Pearson Correlation	.318**	.266*	-.016	.369**	1	.364**	.080	.295**	-.121
	Sig. (2-tailed)	.003	.014	.881	.461**		.001	.467	.006	.271
Loyalty	Pearson Correlation	.565**	.560**	.077	.461**	.364**	1	-.201	.451**	.288**
	Sig. (2-tailed)	.000	.000	.483	.000	.001		.066	.000	.007
Non Connectedness	Pearson Correlation	-.311**	-.327**	-.067	-.353**	.080	-.201	1	-.243*	-.058
	Sig. (2-tailed)	.004	.002	.541	.001	.467	.066		.025	.600
Necessity to Stay	Pearson Correlation	.424**	.349**	.080	.483**	.295**	.451**	-.243*	1	.204
	Sig. (2-tailed)	.000	.001	.467	.000	.006	.000	.025		.061
Connectedness	Pearson Correlation	.222*	.183	.036	.150	-.121	.288**	-.058	.204	1
	Sig. (2-tailed)	.041	.095	.744	.171	.271	.007	.600	.061	
Easy Switching	Pearson Correlation	.346**	.360**	.082	.308**	.087	.340**	-.209	.246*	.228*
	Sig. (2-tailed)	.001	.001	.457	.004	.430	.001	.055	.024	.036

\*\*Correlation is significant at the 0.01 level (2-tailed) \*Correlation is significant at the 0.05 level (2-tailed)

**Regression.** The *R* value represents the simple correlation between intention to stay (organisation commitment major variable) and spirituality at work variables (sense of community, congruence, mystical experience) that is 0.596, which indicates average degree of correlation. The *R* square value indicates that spirituality at work accounts for 35.6% of variation in

organisation commitment; the balance 64.4% variation is explained by other factors - intention to stay = 1.131 + (0.778\*sense of community) + (+0.293\*congruence) + (0.082\*mystical exp).

Based on the complete analysis, null hypothesis is rejected and a significant relationship exists between spirituality at work and organisational commitment.

Table 6  
*Intention to stay*

Model Summary					
Model	R	R Square		Adjusted R Square	Std. Error of the Estimate
1	.596 <sup>a</sup>	.356		.332	67384

a. Predictors: (Constant), Mystical Exp, Sense of Community, Congruence

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.131	.529		2.140	.035
	Sense of Community	.999	.174	.778	5.734	.000
	Congruence	-.394	.183	-.293	-2.155	.034
	Mystical Exp	.015	.017	.082	.914	.363

a. Dependent Variable: Intention to stay

**RESULTS AND DISCUSSION**

The first part of data using factor analysis suggests that the three major factors contributing mainly to spirituality at work are sense of community, congruence with organisation values and mystical experience. Organisation commitment factors are intention to stay, intention to leave, loyalty, not connected with organisation, necessity to stay, connectedness and easy switching. The study reveals that gender has a significant

impact on spirituality at work, whereby, males experience higher spirituality at work (sense of community) compared to their female colleagues. In contrast, organisation commitment is independent of gender, but males have slightly higher intention to stay compared to females. Spirituality at work does not vary with age; in other words, employees at any age can remain fully attached to his / her workplace. In contrary, organisation commitment of the

employees varies as their tenure increases in the organisation, as supported by Mathieu and Zajac (1990); Dunham et al. (1994) and Hellman (1997). Further, the results confirm that if employees feel connected to the workplace, there is no doubt that they will be committed and trustworthy employees, as proven by Kolodinsky et al. (2008) and Rego and Pina e Cunha (2008). Sense of community is also highly influenced by congruence to organisational values (Beheshtifar & Zare, 2013; Jurkiewicz & Giacalone, 2004; Thakur & Singh, 2016). These results can assist policy makers to avoid stereotyping, especially on the basis of gender and age. In addition, these results can help managers understand the differential needs and behaviour of their employees, which in turn, will lead to retention, commitment and greater productivity at the workplace.

## CONCLUSION

After empirical analysis, it is concluded that spirituality at work has a considerable impact on organisational commitment. There is a significant relationship between sense of community and intention to stay, which emphasise the role of effective teams and groups in increasing the stay of an employee in the organisation. Further, it is evident that intention to stay in an organisation is not dependent on gender. Furthermore, sense of community and willingness to stay in the organisation is also independent of age groups. On the other

hand, there is a relation between age and intention to stay; that means, different age groups have different priorities to remain within an organisation.

## LIMITATION AND FUTURE SCOPE OF STUDY

Location is always a constraint; it is a challenging task to include respondents in uniformity. There are issues of access to information in some universities, where employees are reluctant to share the information. To further confirm these findings, more research can be carried on various other demographic factors such as marital status, tenure and income. Spirituality at work can also be related to other organisational constructs such as deviant workplace behaviour, and happiness at work

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## **CRM Framework for Higher Education in Mauritius**

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### **ABSTRACT**

This research paper provides a conceptual CRM framework that may be used by public universities in Mauritius for managing student relationships. Several important components have been identified for improving relationships with students based on a survey carried out with students and staff in the different public universities in Mauritius. The research findings show that people integrity and trust, communication and adaptation, facilitation and support, technological support and student engagement activities are the most important factors for improving relationship building. The rationale of the study is built upon the increasing number of student complaints and problems in the public universities. The research outcome will be highly beneficial for the different stakeholders in higher education.

*Keywords:* Communication, CRM Framework, Higher education, Integrity, Public universities, Relationship building

### **INTRODUCTION**

There are four public universities in Mauritius, namely, University of Mauritius, University of Technology Mauritius, Open University and Université des Mascareignes. The oldest university is University of

Mauritius, which has been in existence for more than 50 years. There have been many recent press articles making reference to student outcry regarding the quality of student services and support offered (David, 2016). According to ACCRAO (2016), more than 43% of American universities are adopting some form of Customer Relationship Management (CRM) and the remaining are considering the implementation of one. The Hanover Research also stresses on the need for improving student satisfaction and the need to use technology for enhancing student

#### **ARTICLE INFO**

*Article history:*

Received: 14 July 2017

Accepted: 30 November 2017

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learning in higher education (“Trends in higher”, 2014). In the Mauritian context, the Tertiary Education Commission of Mauritius has also pointed out some weaknesses in the different public universities (“Participation in tertiary”, 2016). Virgiyanti, Hassan, Bakar, and Tufail (2010) support the fact that CRM is well established in the domain of universities. The main proposition of using CRM in higher education is that it is easier to retain existing students than to attract new ones. The present research will seek to develop a CRM framework that may prove to be highly useful to the academic community at large.

Amoako, Arthur, Christiana, and Katah (2012) postulate that in order to achieve customer satisfaction, CRM needs to comprehend and induce the behavior of a customer and to determine customer needs. CRM is also defined as a comprehensive approach for creating, maintaining and expanding customer relationships. Kuper (2014) claims that non-traditional students, when selecting an institution of higher education show the same service expectations as they do when making any other major purchase. Students have high expectations before, during and after enrolment for the service they receive as shown in studies that look at what they want from higher education providers. This particular view bolsters the need for universities to have CRM system in place.

Kotler and Fox (1995) point out the growing importance of marketing research and segmentation in the field of higher education. As such, universities

are refocusing their strategies to be more market and customer-oriented and are continuously responding to student needs and requirements, so as to enhance their competitive positions. Universities have set up dedicated student affairs office and international office to be closer to the students and increase student engagement and loyalty.

The debate on the application of marketing principle in higher education took momentum in the early 1990s (Hemsley-Brown & Oplatka, 2006; Sharrock, 2000). However, some academics are not convinced about the application of marketing in the field of higher education. Many stakeholders are also against the philosophy of treating students as customers, similar to the business context as they believe that it contradicts with educational values.

Scott (2000) believes that universities have been traditionally segregated with a narrowed vocation. He views globalisation as the most important challenge which has brought a paradigm shift in the overall functioning and philosophy of universities. It may also be deduced that it has even shaped the whole character of modern universities. This shift has been addressed by Carlson (1964) as a transition from “domesticated environment” before 1990s to a “wild environment” after this time (Preedy, Glatter, & Wise, 2003, p. 125-128). This paradigm shift is the key trigger for the development of CRM. Though Mauritian universities are younger in comparison to many traditional and long standing universities, the impact of globalisation and

marketisation is nonetheless, being felt, as more universities are fighting from the same pool of students. All universities nowadays are aggressively marketing their courses to attract the highest number of students. Hence, the research question that emanates logically is the assessment of the impact of globalisation and internationalisation for public universities.

It is important to further the discussion on the impact of globalisation on public universities, just as in other business sectors. Marginson and Van der Wende (2009) claim that higher education has always been more internationally open to globalisation than other sectors. The fundamentals of globalisation in higher education are prevalent and multifaceted. It is estimated that more than 1.6 million students study abroad, with more than 547,000 studying in the United States (Pimpa, 2003). Consequently, global competition in the choice of universities has emerged. The issues and consequences of global marketisation of higher education and privatisation (Arimoto, 1997; Kwong, 2000) have been discussed in the context of a number of important concerns, problems of increasing competition between institutions, nationally and internationally (Allen & Shen, 1999; Conway, Anderson, Larsen, Donnelly, McDaniel, McClelland, & Logie, 1994; Kemp, Madden, & Simpson, 1998), funding issues (Brookes, 2003), and widening participation or social segmentation (Ball, Davies, David, & Reay, 2002; Brookes, 2003; Farr, 2003; Reay, Ball, & David, 2002). It is true that public universities may

not compare with international brands such as Oxford and Cambridge. However, to realise the dream of becoming an education hub, Mauritius should benchmark the best practices in terms of student engagement and student life. Public universities should also learn from the mistakes and problems of old universities, and provide state-of-the-art services and facilities to students.

Higher education in Mauritius has a serious quality problem ("Ile maurice: Etudes", 2015). In the present competitive academic environment students have many options available to them. Therefore, it is important to study factors that enable educational institutions to attract and retain students. Higher education institutions which want to gain competitive edge in future may need to begin searching for effective and creative ways to attract, retain and foster stronger relationship with students, thus, making it necessary to invest in CRM for improvement.

In response to the current information age, a new term has been introduced, that is, *informationisation* – the development and expansion of information technology, besides globalisation. It has created a highly competitive and global environment for universities, resulting in a marked increase in on-the-spot free information about study programs, college amenities and ranking available to potential students who have become choosy about their studies (King, 2008). The use of technology for improving student experience is discussed later in the literature review. This view emanates from the sixth stream of CRM discussed under

the origins of CRM. This is also reflected in the investment of technology in public universities, such as Maclab at Open University.

As a result of increasing globalisation, informationisation and other factors, including novel ways of delivering education, work force requirements and population demographics (King, 2008), it is of little surprise if university management and policy makers have started thinking of strategic planning in order to develop and maintain a smart balance between the institutions' capabilities and objectives and their changing external environments. An important conveyor is the university's mission statement to the society, a marketing policy, which is a central part of this strategic planning. Adopting such a philosophy may help Mauritius achieve the objective of a global education hub.

From the wave of globalisation, there is the need for universities to be more customer centric. Achieving students' satisfaction will take such institutions to the point that a long-standing relationship can be established in which both sides, students and universities, can take advantages of. According to Pausits (2007, p. 13), "relationships take on the character of companions for life", given that life-long learning approach in the current world has made students to not only study at the university once, but also to have recourse to the institution again and again over time. To stress the importance of relationship in higher education, Pausits (2007, p. 125-126) has also stated that higher education

institutions should no longer hold the attitude of being "ivory towers", thus, need to transform themselves into "relationship-based organizations."

However, marketing education literature has not developed uniformly and there is an overall lack of development of theoretical models that are clearly adapted to educational services (Hemsley-Brown & Oplatka, 2006). As Oplatka and Hemsley-Brown (2004) point out, when literature originated in the 80s, it was basically theory and norms oriented, based on the application of models initially conceived for business, especially those from marketing communication, to the promotion of educational institutions. Later, the debate shifted to consider whether students fitted into the 'customer' label or whether it was about 'product's that educational institutions 'offered' to the labour market (Conway et al., 1994; Emery, Kramer, & Tian, 2001). This debate has already been clarified in the preceding section.

Similarly, Nicolescu (2009) too supports the adoption of more market-oriented and business-like competitive edge in their market. Marketing plans and market-oriented perspective in a university are positively correlated, a market-oriented mode cannot be achieved by merely adding a marketing position or office in a university. According to Preedy et al. (2003, p. 125-128), the concept of marketing for most educationists is an imported, even an alien concept, with a wide range of interpretation of marketing among education experts.

Wilkins, Stephens Balakrishnan and Huisman (2012) suggest that many institutions of higher education have evaluated their service quality performance through internal feedback systems. However, little has been elaborated from a real CRM perspective. Higher education should make use of social CRM – use of social media tools and techniques to achieve marketing objectives. Another important concept that will be elaborated further is the concept of student relationship management (Trocchia, Finney, & Finney, 2013; Zhou, Lu, & Wang, 2011).

This section of the literature clearly identifies the literature gap as there is a lack of theoretical models adapted to education. It also outlines that globalisation and competition, have resulted in a dire need for relationship building to achieve competitive edge. There is a drive for educational institutions to achieve excellence and effective positioning.

Some research effort in the choice of higher education or consumer behavior has principally been influenced by the individual institution's need to predict the long term impact of choice and to understand the main factors involved in student choice (Farr, 2003). Educational institutions should also apply CRM to better know and understand their customers (Daradoumis, Rodriguez-Ardura, Faulin, Juan, Xhafa, & Martinez-Lopez, 2010). Additionally, the influence of technology on CRM has been highly significant (Hidayanto & Budiardjo, 2015), and reference is made to the use of Web 2.0 for higher interactivity with students.

A recent study by the American Association of Collegiate Registrars and Admissions Officers (AACRAO, n.d.) considered the application of CRM in American universities. The survey was conducted with 603 admissions and enrolment management officers. From the survey, it was observed that 64% practised at least one means of CRM in their institution. This implies that CRM is well established in developed economies. Another interesting finding is that 42% of institutions who do not have one are considering one. It may also be true for the public universities in Mauritius. Further findings establish that few institutions are using CRM to provide lifecycle management support. The majority of users (59%) indicate that their institution has been “moderately successful” in the overall use of the CRM. It is obvious that CRM applications are widespread and are available in many countries. Mauritius is a small island that has the potential of becoming a knowledge hub and therefore, should tap on the potential benefits that the implementation of CRM may bring. However, there is no literature available related to the application of CRM in the local context. There is some reference of its application in commercial sectors such as tourism and banking. The literature reflects that there is a huge potential for the use of CRM in public universities in recruitment, marketing and communication with students. It is interesting to note that in the United States, 64% of universities claim to have at least one form of CRM. Thus, there is need for government support to

improve the infrastructure, which may help to reduce costs of operations, as explained earlier.

Kordupleski, Rust and Zahorik (1993) have also identified the importance of quality service provision and increased market share, and claim that good service quality leads to satisfied customers spreading positive word of mouth. This may consequently lead to higher market share. This also confirms that students are more likely to continue their enrolment in educational institutions which meet students' expectations for service quality. Another variable identified by other researchers like Berry (1983), Morgan and Hunt (1994) is CRM, a key driver of customer satisfaction. CRM principles are endowed with a strategic focus for highlighting and finding sources of value for the customer and to fulfil his / her satisfaction. As a norm, the process of CRM uses information from the customers to manufacture and deliver innovative offerings to them (Berry, 1983).

In studies carried out by Berry (1983), and Morgan and Hung (1994), the researchers identified the long-run value of potential and current customers within service context and observed a boost in earnings of shareholders' wealth if marketing activities were to be directed towards maintaining and improving long lasting company-customer relationships. Vargo and Lusch (2004) also confirmed in their research that CRM principles help organisations to foster a culture that creates value for the shareholders and utility for customers. Payne (2006) in his

handbook of CRM notes the rise of CRM activities, emphasise a focus on profitable customers and explain how rising industry and competitive characteristics have made CRM a holistic strategic approach to manage customer relationships, creating satisfied customers and thus maximising the shareholder value.

In the context of higher education, universities are increasingly being identified as service providers and, as such, they are finding themselves focusing more and more on the needs of their students (Gruber, Lowrie, Brodowsky, Reppel, Voss, & Chowdhury, 2012). Understandably, college students have needs they seek to fulfill as they enrol at higher education institutions. Student needs satisfaction have many categories, but those that take precedence in the retention literature are financial (Wetzel, O'Toole, & Peterson, 1999), social (Bean & Eaton, 2001; Terenzini & Pascarella, 1977) and post-graduation career assistance.

There are several studies that have been carried out related to the subject of CRM in the Mauritian context. A study by Juwaheer (2000) clearly mentioned the lack of understanding of relationship marketing in Mauritius. The study was related to CRM in the service sector. Some of the interesting findings of the study were that more than 60% of the respondents claimed to have a database about their customers. About 52% of the respondents claimed that the aim of CRM is to increase loyalty of customers. Another research by Kandampully, Juwaheer and Hu (2011) showed that there is a positive correlation

between service quality and loyalty in the hotel industry. Subsequently, there have been studies related to testing the effect of CRM on loyalty. However, the contextual contribution is the application of CRM in higher education. Studies and research in higher education have focused more on internationalisation and service quality evaluation. Another field which has elicited interest is that of the implementation of TQM. A study by Claude Ah Teck and Starr (2013) analysed the perceptions related to Total Quality Management for school improvement. The Human Resource Development Council has also organised academic conferences on the internationalisation of higher education. Earlier some discussions on the drivers of CRM made reference to globalisation and internationalisation of higher education. Teeroovengadam, Kamalanabhan, and Seebaluck (2016) have made reference to the development of HESQUAL for measuring service quality in higher education through the use of both qualitative and quantitative research.

Many hotels in Mauritius have adopted the CRM strategy to survive the new dynamics of global competition (Oogarah-Hanuman & Naicker, 2016). Claiming to have a CRM strategy is not enough, more important is to gauge how effective the strategy has been for the hotel. A good strategy without proper execution is bound to fail. So, implementation is a major phase within the adoption process. Conceptually, CRM has been widely embraced by businesses. In practice, however, examples

of success contrast with anecdotes where the diffusion of CRM into organisations continue to be a slow process and/or where CRM implementation outcomes have fallen short of expectations.

Successful implementation depends on a number of factors such as fit-between of a firm's CRM strategy and programmes and its broader marketing strategy, and intra-organisational and inter-organisational cooperation and coordination among entities involved in implementation (Oogarah-Hanuman & Naicker, 2016).

## **METHODOLOGY**

The research is based on a survey carried on students and lecturers. The sample chosen for this study is 370, based on the matrix of a well-defined population by Krejcie and Morgan (1970). Stratified sampling technique was used for greater representativeness. Another survey with 30 staff (academic and non-academic) was carried out for purposes of triangulation. Interviews were also carried out but not included in this research report. A positivist research approach was adopted for higher generalisation at a larger scale. The Cronbach alpha for the different scales used was more than 0.7, therefore, highly reliable.

## **RESULTS AND DISCUSSION**

The key variables and indices were identified based on literature review and a pilot test with 70 students. Exploratory factor analysis was carried out to identify the key components/indices which may form

part of the proposed CRM framework. Subsequently, the different indices were compared based on a grand mean and reclassification based on the degree of importance.

Table 1  
*The variables/indices identified*

Index Name	Description of Variables	Purpose
SRM Communication Index	1. Provide students academic info 2. Creation of student university email 3. Use of website for communication 4. Meeting with student representatives	The purpose of this index is to measure the different ways in which universities can build relationships through different communication channels with students
SRM Academic Support Index	1. Provide tutorials and help sessions 2. Discuss academic problems	The index measures the academic support provided by academic staff in higher education
SRM Emotional Index	1. Psychological counselling by staff 2. Help from personal tutors 3. Peer group support 4. Stress management techniques	The index is about dealing with the emotional component of studying in higher education
SRM Complaint Handling Index	1. Formal student complaint procedure 2. Resolving student complaints 3. Communicate solutions to students	The index is about dealing with student problems and complaints
SRM Relationship Index	1. Appointment of a relationship officer 2. Empathise with students 3. Loyalty schemes for students	The relationship index is about caring and empathising with students in universities
SRM Technology Index	1. Purchase of CRM software 2. Training for CRM software 3. Enterprise Resource Planning 4. Application of e-CRM	The technology index measures the use of technology to enhance student experience
SRM Social Integration Index	1. Extra-curricular activities 2. Support from students' union 3. Community involvement activities	This index measures the extent of social integration of students in terms of adaptation to student life
SRM Financial Support Index	1. Facilities of payment 2. Simple payment systems	The index measures the extent of financial support provided to students
SRM Alumni Index	1. Creation of alumni 2. Alumni activities	The index provides the importance of alumni for relationship building

After the indices were computed by SPSS and created as new variables, a grand mean value and descriptive statistics were computed to analyse the degree of

importance of each of the components identified below:

Method of computation of index: Transform > compute variable> name the index > input formulae for computation based on the number of variables > complete

Table 2  
*Descriptive statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
SRM Academic Support Index	370	1.00	6.00	1.3824	.63253
SRM Financial Support Index	370	1.00	5.00	1.4108	.63129
SRM Communication Index	370	1.00	8.00	1.4791	.76403
SRM Administrative Support Index	370	1.00	10.50	1.5764	.86822
SRM Complaint Handling Index	370	1.00	5.00	1.5955	.70703
SRM Social Integration Index	370	1.00	10.00	1.6423	.81926
SRM Relationship Index	370	1.00	5.00	1.7730	.74199
SRM Technology Index	370	1.00	5.00	1.8000	.69657
SRM Emotional Index	370	1.00	7.00	1.8149	.82466
SRM Alumni Index	370	1.00	12.00	1.8959	1.02442
Valid N (listwise)	370				

For the selection of components to be included, a recoding was done as follows:

Table 3  
*Classification of mean values*

Mean Value	Classification
1.0-1.5	high importance
1.6-1.8	quite important
Greater than or equal to 1.8	less important

The recoding was done as follows – value between 1.0-1.5, high importance was given; value between 1.6-1.8 was accorded as quite important; value equal to or greater than 1.8 was classified as less important value. Based on the classification above, the different variables of importance in future CRM framework would be as follows:

Table 4  
*Classification results*

SRM Indexes	Mean	Classification
SRM Academic Support Index	1.3824	High Importance
SRM Financial Support Index	1.4108	High Importance
SRM Communication Index	1.4791	High Importance
SRM Administrative Support Index	1.5764	High Importance
SRM Complaint Handling	1.5955	Quite Important
SRM Social Integration Index	1.6423	Quite Important
SRM Relationship Index	1.7730	Quite Important
SRM Technology Index	1.8	Less Important
SRM Emotional Index	1.8149	Less Important
SRM Alumni Index	1.8959	Less Important

The most important variables selected based on the degree of importance are Academic Support, Financial Support, Communication and Administrative Support Index. **CRM Framework Development**

Table 5  
*CRM framework*

Component	Factors Retained	Basis and Justification
Main Drivers of CRM in higher education	<ul style="list-style-type: none"> <li>◆ Student expectations are increasing</li> <li>◆ Need to develop long term relationships</li> <li>◆ Need to increase student satisfaction</li> </ul>	Based on the analysis of the mean values and results of previous studies
Factors that affect student attrition and student loyalty	<ul style="list-style-type: none"> <li>◆ People integrity and trust in university services</li> <li>◆ Communication and adaptation</li> <li>◆ Student engagement satisfaction and commitment</li> <li>◆ Facilitation and support for students</li> </ul>	Based on the EFA grouping results
Student relationship management variables selected	<ul style="list-style-type: none"> <li>◆ SRM Academic Support</li> <li>◆ SRM Financial Support</li> <li>◆ SRM Administrative Support</li> <li>◆ SRM Technological Support</li> <li>◆ SRM Student Facilitation</li> </ul>	Computation of indices and ranking based on mean values and recoding + exploratory factor analysis

The CRM Framework Proposed for Public Universities

The results are highly significant as it will help relationship building in higher education. The most important variables selected based on the degree of importance are Academic Support, Financial Support, Communication and Administrative Support Index. These variables have been normal,

as shown in research conducted by Tinto (1975) and others. The study also confirms the growing importance of CRM in higher education (AACRAO, n.d.). In addition, the study identifies the key components that may affect student attrition in the Mauritian higher education. There is no prior research

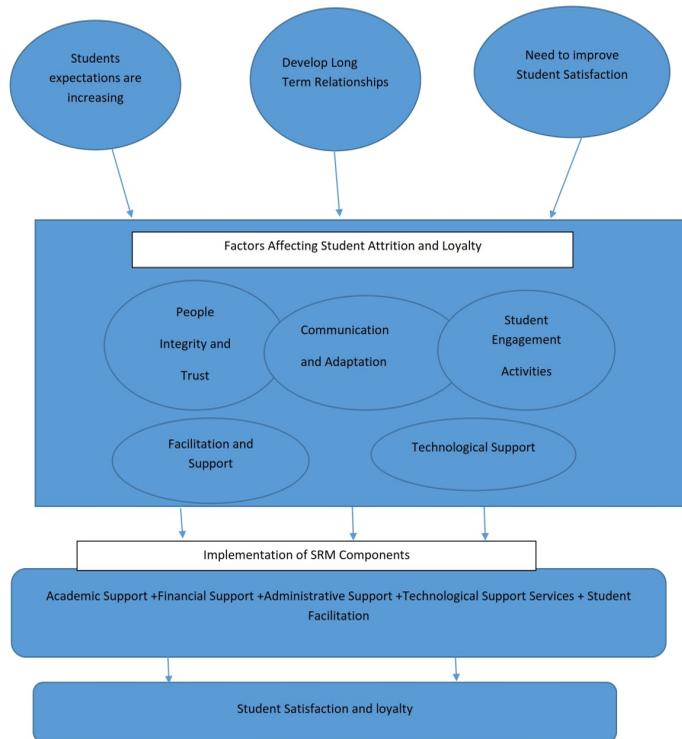


Figure 1. Model of CRM

in this field, hence, this represents the contribution to knowledge. In view of this, Jutton (2016) has considered student problems that may lead to alienation in distance education. Besides that, another interesting variable is the importance given by students to integrity and trust in higher education.

## CONCLUSION

This research paper has proposed a new framework for improving relationships with students. The importance of the research lies in the improvement of the overall student satisfaction. Many students have

complained about the current educational system in Mauritius. The CRM framework, if effectively implemented will surely help in improving the overall student experience.

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## **Business Model Innovations Transforming the Hotel Industry and Its Implications for Small and Medium Hotels in Mauritius**

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### **ABSTRACT**

With an average occupancy rate of 48% during peak season, small and medium hotels (SMHs) in Mauritius are no longer competitive as compared to large hotels (LHs). SMHs are challenged to survive in a market where competing solely on price no longer guarantees sustainability for the future. SMHs face the threat of closing down with job losses for both management and workers. In order to survive, SMHs have to relook into their strategy. The purpose of this study is to assess the business model of SMHs in order to highlight their weaknesses which are hindering them from expansion and innovation. This study used a mixed approach consisting of two phases. Phase 1 consisted of structured interviews, guided by the business model canvas (BMC), which were carried out among 30 SMHs. In phase 2, a self-assessment questionnaire based on BMC was administered to the SMHs. In order to assess the mechanisms of innovation within each building block of the BMC, responses from the questionnaire were further coded in SPSS. The result of phase 1 shows that BMC of SMHs differs mainly in value propositions for targeted customer segment. Results from data analysis in phase 2 confirmed that within each BMC building block, the three areas of innovation are customer relationship, customer segment and key resources. The knowledge obtained from this study will help SMHs to analyse their internal capability for business model innovation (BMI), hence, serve as a guide to institutions supporting SMHs to focus on priority areas.

*Keywords:* Business Model Innovation (BMI), Competitiveness, Mauritius, Small and Medium Hotels (SMHs), Sustainability

### **ARTICLE INFO**

*Article history:*

Received: 14 July 2017

Accepted: 30 November 2017

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### **INTRODUCTION**

In recent years, the disruptive business model of networked hospitality such as

Airbnb, has surpassed the major hotel chains in number of beds offered and in market valuation (Oskam & Boswijk, 2016). Disruptive business models are increasingly customer-centric and are offering services which never existed before. In confronting these competitors, SMHs need to embrace the challenge of transforming their business model in order to be relevant, competitive and sustainable in the long term. Several authors (Praničević, Alfirić, & Štemberger, 2011; Andersen & Andersen, 2012; Barney, 2015; Bertolini, Duncan, & Waldeck, 2015; Langviniene & Daunoraviciute, 2015) have developed frameworks to address the issues related to transformation of SMHs; however, little research has been done about how SMHs can redefine their future.

In Mauritius, SMHs comprising 3Star, 2Star, and hotels with No Star ratings, are lagging behind in performance compared to LHs of 4Star and 5Star ratings, which in turn create intensive competition for the same destination. It is claimed that the major fault lines of SMHs are: inability to serve the right set of customers, inappropriate performance metrics, being positioned out of its industry's ecosystem, having an outdated business model and lack of internal talent and capabilities (Bertolini et al., 2015). The SMHs need to address these challenges urgently as an influx in the tourism sector is expected to increase significantly by 2018. The forecast tourist arrival for the year 2017 is revised upwards from 1.27 million to 1.32 million, accompanied by expected earnings of Rs56.6 billion to Rs59

billion.. The vision of the government is to increase the number of tourist arrival to 2 million. Invariably, opportunities for hotels in general, have always been tremendous in terms of business development, foreign exchange earnings and job creation.

The difficulty faced by SMHs is their tendency to develop a preference for strategies involving 'more of the same' (mainly product or service) innovation, which keeps the businesses fixed on the same line of products, using the same, or somewhat similar, technologies, aimed at delivery to the same target customer (Christensen, Raynor, & McDonald, 2015). SMHs are still operating in a paradigm of low cost services without any guarantee for quality or innovative services. In contrast, the type of tourists travelling today are increasingly millennials - those born in the 1980s and 1990s. The millennial generation is characterised by a focus on technology-driven and personalised experiences, whereby, 85% of the millennial generation own a smartphone, which means that technology and innovation are the features that appeal to millennial travellers (Mandelbaum, 2016). When value propositions of hotels are compared for a specific budget by tourists, they prefer LHs compared to SMHs. The inability of SMHs to meet the exigencies of the customers has led to loss or even closing down of businesses along with loss of jobs (Weinz, Baum, Busquets, Curran, Servoz, Spainhower, & Myers, 2010).

In order to ensure customer satisfaction and sustainability in the long term, LHs have

adopted business model innovation (BMI), which in contrast is a major challenge for SMHs. BMI has attracted an increasing amount of attention in recent literature (Henriksen, Bjerre, Grann, Lindahl, Suortti, Friðriksson, Mühlbradt, & Sand, 2012; Mikhalkina & Cabantous, 2015; Osterwalder & Pigneur, 2010; Rajala & Westerlund, 2007). Different frameworks on business models and innovation from literature review are compared to select building blocks for BMI. Despite the emerging literature on business model innovation, (Andersen & Andersen, 2012; Christensen, Raynor, & McDonald, 2015; Henriksen et al., 2012; Saunders, 2016), how BMI should be adopted in SMHs has not been given sufficient attention. Given the opportunities for BMI in the hospitality industry, “the building blocks of the business model canvas” (BMC) (Osterwalder & Pigneur, 2010, p. 44) is analysed to identify areas for innovation by SMHs. Furthermore, the resolution of International Labour Office (ILO) for hospitality sector states that it should contribute to fair globalisation, a greener economy and development that more effectively creates jobs and sustainable enterprises (Weinz et al., 2010). Therefore, there is an urgency for providing SMHs with the right framework towards staying relevant, competitive and sustainable in the long term. In this paper, an analysis of internal capability of SMHs to innovate in the different building blocks of the business model canvas (Osterwalder & Pigneur, 2010) is compared with the objective of

roadmap to assist SMHs to adopt business model innovation as a tool for sustainability and competitiveness.

### Conceptual Framework

**Business models and innovation.** Literature on business models is recent and has surged increasingly in research papers since 1995 when the concept of business model became prevalent with the advent of the Internet (Zott, Amit, & Massa, 2011). Although there is no agreed definition of ‘business model’, most researchers agree that it describes how a company creates and captures value (Linder & Cantrell, 2000; Magretta, 2002; Rajala & Westerlund, 2007; Shafer, Smith, & Linder, 2005; Zott, Amit & Massa, 2011). The building blocks of the model define the customer value proposition and the pricing mechanism; indicate how the company organises itself and whom it partners with to produce value, and how it structures its supply chain (Kavadias, Ladas, & Loch, 2016). Visually, a business model depicts a system whose various building blocks interact to determine the company’s success. Since there is no common definition of business model to date, there is no agreement on business model visualisation. Beha, Göritz and Schildhauer (2005) propose seven categories for business model visualisation: (1) value networks; (2) cause-effect models; (3) value creation models; (4) component model; (5) timeline; (6) quantitative model; and (7) meta models. Furthermore, business model provides a simple framework to represent a complex system and is commonly used to address

or explain three phenomena: (1) e-business and the use of information technology in organisations; (2) strategic issues, such as value creation, competitive advantage, and firm performance; and (3) innovation and technology management (Zott et al., 2011).

A comparison of different variables used in each business model and the variables in innovation radar (Sawhney, Wolcott, & Arroniz, 2006) shows that the component model visualisation gives a better representation of a business model. Furthermore, the BMC tool of Osterwalder and Pigneur (2010) is based on the component model visualisation. BMC has seen a rapid increase in adoption recently for innovation purposes through generation of different scenarios (Strategyzer, n.d.). The building blocks of business model canvas (BMC) typically include strategic decisions on customer segmentation, products and services (or value propositions) to offer, business and research partners to engage with, resources to create and channels to deliver value, as well as the underlying cost structure and revenue streams to ensure economic visibility of the business (Osterwalder & Pigneur, 2010). The business model canvas in Figure 1 is shared under the creative common license and can be adapted by innovating any of the nine building blocks, with acknowledgement to the author (Strategyzer, n.d.).

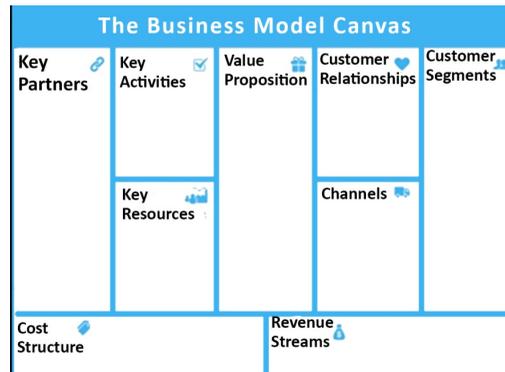


Figure 1. Business Model Canvas. from “The Business Model Canvas” by Strategyzer (<https://assets.strategyzer.com/assets/resources/the-business-model-canvas.pdf>), Adapted under Creative Commons (CC) License 3.0

#### **Airbnb and business model innovation.**

The case of Airbnb has been cited in more than 3,000 entries in EBSCO database as an example of disruption of the SMHs through the use of ordinary resources and new technology (Fréry, Lecocq, & Warn, 2015). Airbnb, an online market platform created in 2008, provides accommodation to customers who have difficulty in booking a hotel room in a crowded market. In the beginning, it was merely an alternative to hotels. But over time, Airbnb moved upmarket and provided better homes in wealthier areas. As a result, in 2011, its booking reached above US\$1 million and in 2015 it received funding of more than US\$1.5 billion (Akhan, 2015). It is expected that Airbnb will generate US\$10 billion in business profits by 2020. Airbnb business

model has raised questions about the relevance of Resource Based View (RBV) theory in strategic management. RBV stipulates that an organisation's strategy should focus on rare, imperfectly imitable, and non-substitutable resources (Barney, 2015), which they employ for developing distinctive competencies (Prahalad & Hamel, 1990). Based on RBV, the strategic value proposition of luxury hotels is archetypal capital intensive including a high degree of personalised service targeting a niche market. Moreover, hotels holding higher-value resources (people, technologies, reputation, partnerships) have gained competitive advantage over the years through effective management of resources portfolio (Barney, 2015). However, the RBV theory is challenged by Airbnb which has demonstrated that the strategic value of ordinary resources (empty rooms of homes) can even disrupt the business model of luxury hotels.

Nevertheless, Airbnb's business model has inspired other managers in the hotel industry and beyond, that is, it has become an iconic business model for the sharing economy (Mikhalkina & Cabantous, 2015). Airbnb is financed by charging both hosts and guests transaction commissions, and in exchange, provides services such as handling payments, a private messaging system, and insurance. In this model, the host and guest has a verified profile, which includes recommendations and reviews by previous users. The model has raised sufficient attention in the media, resulting in intense competition in the market with

digital start-ups such as Be Mate, AlterKey, Only-Apartments and others.

Recent literature has also shown that BMI can be a source of superior performance and competitive advantage for SMHs with ordinary resources ("Boutique hotels now", 2015; Saunders, 2016). For BMI, the definition of Lindgardt, Reeves, Stalk, and Deimler (2009) will be used in this paper, that is, business model innovation is more than a mere product, service, or technological innovation. It goes beyond single-function strategies, such as enhancing the sourcing approach or the sales model. Innovation becomes business model innovation (BMI) when two or more elements of a business model are reinvented to deliver value in a new way. Because it involves a multidimensional and orchestrated set of activities, BMI is both challenging to execute and difficult to imitate (Lindgard et al., 2009).

**Business model innovations by international and local hotels.** In view of the disruptions in business models, major international hotels have changed their respective business model. The strategy for change was either (1) to partner with the disruptor for new prospect or (2) to overwhelm the guest every step of the way or (3) to practise smarter pricing (Saunders, 2016). For instance, Hilton and Uber have partnered to provide seamless travel experience to guests. Hilton reservation provides access to the Hilton HHonors app to issue Uber 'Ride Reminders' online or on the guest's smartphone in advance of

the stay. With 'Ride Reminders', the guest gets an automated notification on the day of travel to seamlessly request an Uber ride to the hotel. It also includes top restaurants and nightlife spots in the United States, along with a 'Local Scene' feature, curated from the top destinations Uber riders in that city visit most (Uber, 2015).

In the same way, independent hoteliers in the US are also using Airbnb as a cheaper online travel agency (OTA) ("Boutique hotels now", 2015). In contrast, in 2013, Accor's business model innovation was to rebrand itself to AccorHotels while also opening up its booking platform to independent hoteliers ("Accor is now", 2015). The objective was to counter commissions to online travel agencies (OTAs) which accounted for approximately 10% to 20% of the booking cost. In 2016, AccorHotels declared net profit up to 8.1% to €266 million ("Strong growth in", 2017). In order to access China's middle class travellers, Marriott International operates its booking service through Alitrip, part of Alibaba ("Landmark Agreement Between Alitrip and Marriott International", 2015). Sherri Wu, chief strategy officer of Alitrip and head of international e-commerce business development at Alibaba has introduced "Post Post Pay" as an innovative program that allows qualified customers to reserve hotel rooms through Alitrip without paying a deposit and to enjoy express check-out service which further enhances the consumer experience and the operational

efficiency of hotels ("Wu on Alitrip", 2015).

In OECD (Organisation for Economic Co-operation and Development) countries, the trend is Green BMI (Henriksen et al., 2012) for hotels following requirements of Sustainable Development Goals (SDGs) as stipulated by the United Nations. Green BMI is promoted as a simple intuitive map to understand its business models so that it can be challenged for alternative ways of doing business.

As the business model takes a holistic approach towards explaining how firms do business, companies can use the tool to go through its business model and question each building block and its relationship with other building blocks and think through the consequences of changing its model (Bisgaard, Henriksen, & Bjerre, 2012). The same logic is applied to analyse the concept of reduction of environmental impact according to the method by which the change in the targeted business model block(s) takes place namely:

- 1) Modification through small and progressive adjustments
- 2) Redesign materialised in significant changes
- 3) Alternative building blocks, which can fulfill the same function or operate as substitutes for the original ones
- 4) Creation and introduction of entirely a new and innovative building block within the model.

## METHODOLOGY

### The Context for Research

In Mauritius, some large hotels have business model innovation at the core of their strategic plan. It includes focus on a new customer segment, re-branding of value propositions, new services including hotel management and asset management and growth of business, both at local and regional level ("Sun Limited annual", 2015). Sun Limited for example, has transformed its old business model which was based on increasing room occupancy rate to a new business model based on increasing tourist arrivals in Mauritius ("Sun Limited Annual", 2015). In its aim to become a focused, lean, agile and growth-oriented organisation, the group has invested in the implementation of enterprise resource planning (ERP) systems to enable the change in processes. The use of ICT is expected to improve many back office functions related to services, human resource, finance, operations, central procurement and others. The ever present challenge for the group is to be environmentally sustainable so as to be a brand of choice to customers and guests concerned about protecting the natural resources.

Following literature review on different categories of business model visualisation, the component business-model category popularised by Osterwalder and Pigneur (2010) was used as a means to structure the research on the dimensions of innovation in hotels in Mauritius. The research was conducted in two phases based on a mixed

methodological approach; the first phase was qualitative approach incorporating multiple case-studies and comprising structured interviews based on Yin (2014). Data captured were mapped on the BMC to understand the common business pattern among SMHs in Mauritius. Field work was conducted for five months during which semi-structured interviews were carried out with the senior management of 30 SMHs. For reasons of commercial confidentiality, the names of these hotels remain undisclosed. The sample included only hotels where permission for field visit was obtained and hotels classified as 3Star, 2Star and hotels with No Star rating, based on standard classification of hotels by the Mauritius Tourism Authority. A 5Star hotel was also researched using secondary data as a benchmark to compare SMHs.

Phase 2 involved understanding of the mechanisms of innovation in each building block of the business model canvas. This study used a quantitative research method where a questionnaire was developed and administered online to the 30 SMHs involved in the pilot phase to conduct a self-assessment.

The questionnaire consisted of two sections. Section 1 comprised general information regarding the property background information, number of rooms, occupancy rate, ownership and star rating. Section 2 of the questionnaire contained 99 questions with an average of 10 questions for each building block of the BMC used in phase 1. The variables used in the questionnaire were derived from the nine building blocks

of BMC, as defined by Osterwalder and Pigneur (2010), aligned with the mechanism of innovation (Henriksen et al., 2012), that is: (1) modification; (2) redesign; (3) alternatives, (4) creation; and (5) no alteration (the factors which do not cause any innovation results in the building block) and questions assessed the variables defined by the Danish Business Authority (DBA) (2012).

Table 1  
*Variables for Computing Mechanisms of Innovation*

Building Block	Mechanisms for Eco-Innovation (Dependent Variables)	Factors contributing to mechanisms of eco-innovation used as a basis for setting questions (Variables)
1. Customer segments	(1) Modification	Internal systems, prioritisation, information availability, growth
	(2) Re-design	user-functionality
	(3) Alternatives	Segment-Midscale, identification & targeting
	(4) Creation	Segment-Luxury, Loyalty
	(5) No Alteration	Segment-Economic, Service Delivery, Trends Monitoring
2. Value Propositions	(1) Modification	Continuous Improvement, Wi-fi, messaging
	(2) Re-design	Loyalty Programs, Unique User Experience, Streaming Entertainment, Smart Hotel, Data Driven
	(3) Alternatives	Digital Platform, Community Building, Craftmanship
	(4) Creation	Co-living facilities, Reinvention
	(5) No Alteration	-
3. Customer Channels	(1) Modification	Channel integration, economies of scope, sales, staff talent, staff empowerment
	(2) Re-design	Channels matching Customer-segment
	(3) Alternatives	Social Media, Direct Channel, Continuous Improvement
	(4) Creation	-
	(5) No Alteration	Channel Reach
4. Customer Relationship	(1) Modification	Integration of Customer relations, Establish Customer Relations, Maintain Customer Relations, Customer Expectations, Profitability
	(2) Re-design	Personalised Service
	(3) Alternatives	Social Media
	(4) Creation	Direct Customer Relationship, Types of Customer Relationship, Co-creation with Customers
	(5) No Alteration	-
5. Revenue Streams	(1) Modification	Payment Methods
	(2) Re-design	Dynamic Pricing

Table 1 (continue)

	(3) Alternatives	Diversified Revenue Streams, Sustainable Revenue Streams
	(4) Creation	-
	(5) No Alteration	Predictable Revenue, Recurring Revenue Streams, Revenue per Customer Segment, Percentage of Revenue Contribution per Segment, Value Proposition generating most Revenue, Price based on Value Addition to Customer
6. Key resources	(1) Modification	Supply of Resources, Economies of Scale, Sharing inhouse resources to partners, Adequate Financial Resources, Human Resources, Internal Talent to deliver unique service
	(2) Re-design	Unique Facilities
	(3) Alternatives	Digital means to pool unused resources
	(4) Creation	Resources Exceed Customer Expectations
	(5) No Alteration	Predictable Demands on Resources
7. Key activities	(1) Modification	In-hour talent development, Service expansion activities, Real-time and transparent information exchange, Lean services
	(2) Re-design	Unique hospitality experience, Standardised and Customisable activities
	(3) Alternatives	-
	(4) Creation	Innovate to deliver service excellence, Sustainable development and solidarity, Data driven decision making
	(5) No Alteration	Resource Requirements of Key Activities
8. Key Partnerships	(1) Modification	-
	(2) Re-design	-
	(3) Alternatives	Focused Partnership, Maximise on Tangible & Intangible Resources from Partners, Reduce Risk and Uncertainty, Partner adopts sustainable principles of operation
	(4) Creation	Creation
	(5) No Alteration	Good Relationship on Key Resources, Value Propositions, Channels, Customer
9. Cost Structure	(1) Modification	Cost efficient operations, Cost structure match business model, Cost connected to each business model block, Variable costs can be predicted, Investment in staff empowerment, Reduce Cost without Compromising Quality
	(2) Re-design	-
	(3) Alternatives	-
	(4) Creation	-
	(5) No Alteration	Predictable cost, Cost of Value Proposition, Activities, Resources are Known

For Green BMI, innovation in more than one business block is important; the research of phase 2 was based on the following hypotheses:

- H<sub>0</sub> – There is no relationship between the mechanism for eco-innovation and the star rating of the hotel.
- H<sub>1</sub> – There is a relationship between the mechanism of eco-innovation and the star rating of the hotel.

A Likert scale ranging from strongly disagree (representing 1) and strongly agree (representing 5) was used to assess the level of innovation in each enterprise. The Cronbach's alpha coefficient of 0.994 revealed that the data collected for the pilot sample questionnaire had a high degree of validity. In order to test the null hypothesis, "H<sub>0</sub> – There is no relationship between the mechanisms of innovation and the star rating of the hotel", the mechanisms of innovation was computed using the groups of variables listed in Table 1 for each building block. Variables were introduced for the computed data, for example, for customer segment block, the following variables were introduced: ModificationCS, ReDesignCS, AlternativesCS and CreationCS and NoAlterationCS. Since the star rating can influence whether the hotel has a higher level of innovation, three additional variable were introduced – No Star rating, 2Star and 3Star rating.

## RESULTS AND DISCUSSION

### Results Phase 1

The result obtained is a series of BMC (refer to Figure 1) for each of the 30 SMHs. For the case studies of 2Star hotels, the customer segment is usually tourists of economy class looking for low cost accommodation and services. The value propositions are basically a discounted stay with discounted food service at partner restaurants, spa centres and also discounted tours around the island. The customer relationship of tourists in this category is personal service relationship built with staff and the customer channels are usually the common forms of social media, such as Facebook, Tripadvisor and Twitter. The key activities are basic room service and administration of partner services such as restaurant, taxi and tour guides. The key resources are accommodation space, amenities and toiletries including beauty of the island and the community. The key partners are local restaurants for deals for guests and taxi drivers for trip around the island. Therefore, the cost structure is essentially the costs for staff, cleaning equipment, toiletries, food and amenities while the revenue is payment from guests and commission off restaurant or taxi requested by guests. The small hotels are successful as far as competition is non-existent but the disruptions created by BMIs such as Airbnb are a real challenge to SMHs (Mikhalkina & Cabantous, 2015). A summary of different value propositions as per the star rating of the hotels is given in Figure 2.



Figure 2. Different products and facilities offered by SMHs

The BMC of hotels of SMHs is similar except for the variation in customer segments and value propositions. It shows that BMC is an important tool to represent business models and enables finding gaps and areas of improvement visually.

**Results Phase 2**

In order to identify the BMIs supporting and transforming the business models in the hotel industry, mechanisms of eco-innovation in each building block of the BMC was used. Following interviews with hotel managers, a self-assessment questionnaire consisting of 99 questions

was developed. 12 questionnaires were responded online, while the rest were completed through telephone interview with the SMHs. The result of the self-assessment was cross-verified with secondary data. A summary of data collected for section 1 of the questionnaire used in phase 2 is shown in Table 2. A 5Star hotel listed on the stock exchange was referred to as the benchmark in this study. A quick analysis of the average occupancy rate indicateds that the 5Star hotel has twice the occupancy rate compared to SMHs. In ideal situations, taking the number of rooms into account SMHs should have higher average occupancy rates.

Table 2  
Profile of the sample under study

Hotel Rating	No. in Sample	Average No. of Rooms	Average Occupancy Rate
3 Star	9	54	66%
2 Star	8	14	34%
No Ratings	13	14	50%
Total (SMHs-3Star, 2Star and No Ratings)	30	25	48%
5 Star (Benchmark)	1	139	81%

### Descriptive Statistics, Estimation and Model Specification

In order to get a better understanding of the mechanisms of innovation in each building block and its relationship with the star rating of the hotel (Figure 3), the questions used during the survey were classified into four mechanisms of innovation. Where the question did not lead to any innovation, it was classified under no alteration. Altogether, 45 dependent variables computed. In order to determine the correlation between star rating of the hotel and the mechanisms of innovation, bivariate correlation matrix was used to determine Pearson's correlation coefficients for the 30 hotels in the sample,

including the significance of the relation. Pearson's correlation for 3Star hotels was found to be above 0.9 for most of the dependent variables with significance,  $p$ , less than 0.01, indicating that there is a strong relationship between 3Star rating and the different mechanisms of innovation. Pearson's correlation for 2Star hotels was below 0.5 with significance higher than 0.03 in most cases, showing a weak relationship for 2Star hotels. For No Star rating hotels, Pearson's correlation was highly negative - above -0.5 in most cases with significance less than 0.05, indicating a weak relationship.

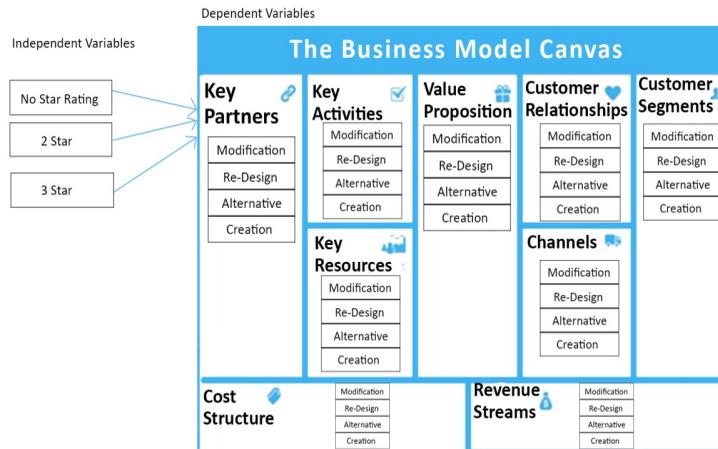


Figure 3. Model specification

For descriptive analysis of the data collected, the star ratings (3Star, 2Star and No Star) were the independent variables and the dependent variables were mechanisms of

innovation in each building block of BMC, that is, modification, redesign, alternatives and creation (Henriksen, et al., 2012).

**Top 3 BMI Focus Areas of 3Star Hotels**

Pearson’s correlation was used to prioritise focus areas for achieving BMI. The list of focus area for each innovation mechanism is as highlighted in Table 3. Customer

relationship, key resources and customer segment are found to be the focus areas for BMI. Compared to LHs, SMHs can quickly focus on these areas for BMI.

Table 3  
Top 3 BMI focus areas

	Pearson’s Correlation for Modification		Pearson’s Correlation for Redesign		Pearson’s Correlation for Alternatives		Pearson’s Correlation for Creation
CR	1.000**	CR	1.000**	KR	1.000**	CS	.992**
CC	.995**	CS	.969**	RS	1.000**	CR	.986**
KR	.994**	VP	.900**	CC	.950**	KA	.952**
KA	.968**	KR	.860**	CS	.892**	VP	.863**
CS	.948**	CC	.857**	VP	.890**	KR	.851**
CD	.942**	KA	.834**	KP	.842**	CD	0
VP	.843**	RS	.746**	CR	.694**	CC	0
KP	0	KP	0	KA	0	KP	0
RS	0	CD	0	CD	0	RS	0

Note: CS: customer segment; CR: customer relationship; CC: customer channel; VP: value propositions; RS: revenue streams; KR: key resources; KA: key activities; KP: key partners; CD: costs drivers

The literature review (Andersen & Andersen, 2012; Beha et al., 2005; Saunders, 2016; “Sun Limited Annual Report”, 2015) reveals that BMI has been the focus of international and local hotel groups to meet customer requirements and remain competitive in the market. This research study has demonstrated that the higher the star rating of the hotels, the more likelihood of innovation in each building block of BMC. In order to adopt BMI, lower star rating hotels have to re-think their business model, while the priority business blocks to be innovated are customer relationship, customer channel, customer segment, key

resources, value proposition, key activities and revenues.

Disruptors like Airbnb are challenging the RBV theory (Fréry et al., 2015), but it is also a fact that consumers are increasingly looking for a hotel experience which feels like an event. The advantage of SMHs over disruptors is that they can rethink their facilities and services to appeal to certain guest demographics, such as older travellers or long-stay business travellers (Saunders, 2016).

Furthermore, SMHs have direct relationships with their customers and the internal talent in the SMHs can be

upgraded to generate more revenue. They can also bring in new partners to plug in specific skills gap (Saunders, 2016). Collaboration is the key for SMHs to be competitive. Focusing on innovative offerings in the identified building blocks of the BMC provide an opportunity for SMHs to increase revenue. For example, targeting new customer segments like China by creating offerings that are unique may attract new clientele. SMHs cannot work in isolation; they can use their associations to get members to collaborate and innovate. These associations can also influence the government to support BMI by providing funding for SMHs to transform their existing business model.

## CONCLUSION

The literature for this study has shown that business model innovation is a reality in the hotel industry and is gaining momentum among LHs faster compared to SMHs. RBV which made SMHs attractive 10 years ago is no longer the only criterion for success. BMC was used to analyse the status of business model innovation among SMHs in Mauritius. The study reveals that there is a slow adoption of BMI by the hotels. Furthermore, the analysis demonstrates that 3Star hotels have a higher tendency towards innovation in selected building blocks compared to the other hotels. Willingness to innovate also demonstrates that SMHs are aware of the importance of business model innovation for sustainability and future growth.

It is hereby suggested that a further study be conducted with a larger sample of hotels including 4Star and 5Star hotels to confirm the results obtained and to identify other innovations being adopted by leading hotels in Mauritius. Barriers to innovation should also be analysed. SMHs have to create new business models by challenging themselves to identify specific customer segments, use digital platforms as new customer channels, establish strong customer relationships, optimise existing resources, develop talents to leverage technology and create unique experience for each customer at a minimum cost, besides generating revenue and becoming competitive in an increasingly technology-driven economy.

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## **Green Product and Consumer Behavior: An Analytical Study**

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### **ABSTRACT**

With growing markets and increasing consumer volumes, the production, as well as consumption patterns are degrading the environment drastically. The government, consumers and producers have realised the worth of this issue. The research and development department of industries are continuously working to develop products that are environment-friendly and cause less environmental destruction. Products which are capable of being recycled, and possess healthy disposal are often termed as green products. The manufacturing, marketing, and consumption of such products are being promoted by the government as well as non-governmental organisations. The present study aims to understand the concept of green product and consumer behavior towards it. The study also investigates the relationship of green product usage and purchase intention with demographic variables (age, gender, income and educational qualification). Primary data was collected using structured questionnaires and analysed using descriptive statistics as well as Pearson's chi-square test for independence. The results reveal an important insight concerning the factors that are majorly responsible for motivating as well as demotivating consumer behavior towards green products. Environmental sustainability and personal consciousness of consumers are found to be motivating factors while unavailability and unawareness are deemed demotivating factors along with the cost of installation / usage. Consumers are intended to purchase green products irrespective of their demographics.

However educational qualification is found to be the only demographic variable having a relationship with green product usage.

*Keywords:* Consumer Behaviour, Environment, Green Consumerism, Green Marketing, Green Product, Sustainability, Sustainable Development

### **ARTICLE INFO**

*Article history:*

Received: 14 July 2017

Accepted: 30 November 2017

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## INTRODUCTION

The current rapid growth in the economy and the pattern of consumption and behavior worldwide are the main causes of environmental degradation. Increasing consumption and production have burdened the environment with harmful and adversely affecting components. Grunert (1993) reported that the consumption patterns of private households account for around 40% of environmental degradation. This concern is being well addressed by the households, manufacturers, marketers as well as the government. Through research and development, new products and processes are being developed to decrease the adverse effects on the environment and build a sustainable future. Research done in the last decade (Boztepe, 2012; Chamorro, Rubio & Miranda, 2009; D'souza, 2004; Kiran, 2012; Lee, 2008; Lee, 2009; Maheshwari & Malhotra, 2011; Manaktola & Jauhari, 2007; Rahbar & Abdul Wahid, 2011) ) have indicated that consumers are aware and are willing to 'Go Green'. Green product refers to a product that incorporates the strategies of recycling or is manufactured using recycled or recycleable content and/or uses less toxic material to reduce the impact on the environment.

According to Dr. Prasad Modak, the Chairman of GNPI, "green products can be defined as products which have lesser or no adverse environmental impact throughout their life cycle, as compared to any other product performing a similar function."

Accordingly, the situation in which consumers want to buy products that have

been produced in a way that protects the natural environment is termed as green consumerism. Manian and Ashwin (2014, as cited in Kumar, 2015) have provided examples of green products and services in India. These include: Digital tickets by Indian Railways

- Green IT Project by State Bank of India
- Lead-free paints by Kansai Nerolac
- Wipro's green machines
- Energy-efficient light bulbs
- Energy-efficient cars
- Energy from renewable sources of energy such as windmills and solar power

## Literature Review

Cherian and Jacob (2012) studied consumer's attitude towards environment-friendly products. They presented a conceptual framework of green marketing and various ways in which different consumer attributes are related to the concept of green marketing. It was concluded that there is a need for green marketing and a need for a shift in consumer behavior and attitude towards an environmental friendly lifestyle. The researchers recommended exploring the factors that encourage consumers to cooperate with green marketing, that is, through green product usage.

D'souza, Taghian and Lamb (2006) attempted to empirically investigate how consumers who differ in terms of environmentalism respond to labels. The data was collected from 155 consumers through

telephone administered questionnaires and analysed it using descriptive measures and correlation. The findings suggest that there are consumers who would buy green products even if they are lower in quality but have environmental information on labels.

Kumar (2015) made an effort to know how we can create awareness among consumers about green marketing and to probe consumer attitude towards eco-friendly/green products. The study stressed that marketers need to emphasise on green marketing as consumers are ready to pay a premium price for green products. The major setback to green products in India is lack of education and insufficient research work in the field of eco-friendly products.

Gilbert (2007) examined the recent trends in green marketing and an offered insights into the future of green marketing. The study assessed the value that students and faculty members at the University of Wisconsin-La Crosse placed upon green marketing. It was found that UW-L does not place sufficient emphasis on green business practices. Thus, it was suggested that inclusion of green business topics in the curriculum would benefit students' attitude towards green business, ultimately benefitting the university.

Bhatia and Jain (2013) also provided a brief review of environmental issues, green products, green consumer practices and awareness level of consumers. Consumers' perceptions and preferences towards green products were analysed through structured questionnaires. The results showed that consumers are well aware of green marketing

practices and products. Green values among consumers were also found to be high.

Chen and Chai (2010) compared gender with the attitude towards green products and environment. The study also investigated the relationship between consumers' attitude towards the environment and green products. Findings suggested that there is no difference in attitude towards environment and green product on the basis of gender. It was also found that the government's role and personal norms towards the environment have an impact on their attitude towards green products.

Yazdanifard and Mercy (2011) presented a comprehensive literature review to analyse the impact of green marketing strategies on customer satisfaction and environmental safety. The study concluded that green marketing is a tool for protecting the environment for the future generation, having positive environmental safety impact. Consumers want to be associated with companies that are green compliant and are therefore, willing to pay more to adapt to green products.

Sheikh, Mirza, Aftab, and Asghar (2014) investigated the consumer behavior towards green products and how they will make their green purchase decision. The data was collected from 200 respondents through questionnaire and hypotheses were tested using Pearson correlation. It was found that brand and gender difference have a very weak relationship with consumer green behavior while price, quality and green marketing have a strongly positive one.

## Objectives

The present study was undertaken with the following objectives:

- To understand the concept of green product.
- To know consumers' buying intentions regarding green products.
- To know the relationship of green consumption behavior with consumer demographics.
- To know the factors motivating as well as demotivating green product usage/purchase.

## RESEARCH METHODOLOGY

The research design used for the study was a descriptive design that describes the concept of green product and the behavior of consumers with respect to it. The present study is based on primary data collected through questionnaires distributed to 170 consumers, out of which, 125 useful responses were received. The sampling was done using convenience sampling method in Aligarh and Bareilly districts of UP (West). Descriptive statistics were used to analyse the data and Pearson's chi-square test for independence was used to test the hypotheses.

## Hypotheses

- H<sub>01</sub>:** There is no significant relationship between green product usage and gender of the respondents.
- H<sub>02</sub>:** There is no significant relationship between green product usage and age of the respondents.
- H<sub>03</sub>:** There is no significant relationship between green product usage and educational qualification of the respondents.
- H<sub>04</sub>:** There is no significant relationship between green product usage and income of the respondents.
- H<sub>05</sub>:** There is no significant relationship between green product buying intention and gender of the respondents.
- H<sub>06</sub>:** There is no significant relationship between green product buying intention and age of the respondents.
- H<sub>07</sub>:** There is no significant relationship between green product buying intention and educational qualification of the respondents.
- H<sub>08</sub>:** There is no significant relationship between green product buying intention and income group of the respondents.

## RESULTS AND DISCUSSIONS

### Descriptive Statistics

Table 1  
*Demographic profile of the respondents*

Variable		Frequency	Percentage (%)
Gender	Male	57	45.6
	Female	68	54.4
Age	15-25	44	35.2
	25-35	69	55.2
	35-45	12	9.6
Educational Qualification	Intermediate	10	8
	Graduate	20	16
	Post graduate	69	55.2
	Doctorate	26	20.8
Income	Below Rs 2 lakhs p.a	58	46.4
	Rs 2 lakh-Rs 4 lakhs p.a	33	26.4
	Rs. 4 lakhs-Rs 6 lakhs p.a	18	14.4
	Above Rs. 6 lakhs p.a	16	12.8

Table 2  
*Factors motivating for green product usage/purchase*

Factor	Frequency	Percentage (%)
Social recognition	25	20
Government incentives/policies	15	12
Environment sustainability	101	80.8
Personal consciousness	85	68
Peer pressure	3	2.4
Cost of installation/usage	6	4.8

Table 2 shows the factors that usually motivate the respondents for buying/using green products. It is clearly seen that environment sustainability is the most effective factor followed by personal

consciousness of the respondents that persuaded them to buy a green product. The result is partially consistent with Chen and Chai (2010) in terms of personal norms as an impactful factor in affecting attitude towards green products.

Table 3  
*Factors demotivating green product usage*

Factor	Frequency	Percentage (%)
Unawareness	50	40
Unavailability	86	68.8
Resistance to change	13	10.4
Inefficiency perception	17	13.6
Peer/social pressure	3	2.4
Cost of installation/usage	39	31.2

Table 3 shows the main factors responsible for demotivating or hindering green product usage or purchase. Consumers mainly refrain from using green products due to their unavailability as well as unawareness about such products. However, 31.2% of the respondents feel that the cost of installation/

usage of green products is higher than regular products of the same category.

Table 4  
*Usage and purchase intention statistics*

Variable	Usage	Percentage (%)
Green product usage	82	65.6
Purchase intention	124	99.2

Table 4 shows that 65.6% of the sample is already using some or the other green products while 99.2% of them intend to purchase one of them in the near future. D'souza et al. (2006), Kumar (2015),

Yazdanifard and Mercy (2011) also argued that consumers do have green product purchase intention.

**Hypotheses Testing**

Table 5  
*Results of chi-square test*

Variables tested	Pearson chi-square value	Degree of freedom	Sig.
Gender X usage	0.022	1	0.882
Age X usage	1.49	2	0.475
Educational qualification X usage	10.888	3	0.012
Income X usage	1.121	3	0.772
Gender X purchase intention	1.203	1	0.273
Age X purchase intention	1.856	2	0.395
Educational qualification X purchase intention	5.292	3	0.152
Income X purchase intention	1.164	3	0.762

H<sub>01</sub>: There is no significant relationship between green product usage and gender of the respondents.

of their gender. The result is consistent with Chen and Chai (2010) while Sheikh et al. (2014) presented a weak relationship of gender and consumer green behavior.

Table 5 shows that significance of chi-square is 0.882, which is greater than 0.05 (5%). So, the null hypothesis cannot be rejected at 5% significance level, concluding that there is no significant relationship between the green product usage and gender of consumers. Consumers use green products irrespective

H<sub>02</sub>: There is no significant relationship between green product usage and age of the respondents.

Table 5 shows that significance of chi-square is 0.475 which is greater than 0.05 (5%).

So, the null hypothesis cannot be rejected at 5% significance level, concluding that there is no significant relationship between the green product usage and age of consumers. Consumers use green products irrespective of their age.

H<sub>03</sub>: There is no significant relationship between green product usage and

educational qualification of the respondents.

Table 5 shows that significance of chi-square is 0.012, which is less than 0.05 (5%). So, the null hypothesis cannot be accepted at 5% significance level, concluding that there is a significant relationship between green product usage and educational qualification of consumers.

Table 6  
Usage statistics based on educational qualification

Educational Qualification	Intermediate	Graduate	Post Graduate	Doctorate
Usage Percent	20%	65%	68%	77%

Table 6 shows individual breakdown of usage pattern among consumers based on their educational qualification. It shows that 77% of the respondents who are doctorates use green products followed by post graduates (68%), graduates (65%) and lastly intermediates (20%). A very important inference is drawn here stating that educational level has a direct relation on the green product usage.

H<sub>04</sub>: There is no significant relationship between green product usage and income of the respondents.

Table 5 shows that significance of chi-square is 0.772, which is greater than 0.05 (5%). So, the null hypothesis cannot be rejected at 5% significance level, concluding that there is

no significant relationship between the green product usage and income of consumers. Consumers use green products irrespective of their income.

H<sub>05</sub>: There is no significant relationship between green product buying intention and gender of the respondents.

Table 5 shows that significance of chi-square is 0.273 which is greater than 0.05 (5%). So the null hypothesis cannot be rejected at 5% significance level concluding that there is no significant relationship between the Green product buying intention and Gender of the consumer. The consumers intend to purchase Green products irrespective of their gender.

H<sub>06</sub>: There is no significant relationship between Green product buying intention and age of the respondents.

The table 5 shows that significance of chi-square is 0.395, which is greater than 0.05 (5%). So, the null hypothesis cannot be rejected at 5% significance level, concluding that there is no significant relationship between the green product buying intention and age of consumers. Consumers intend to purchase green products irrespective of their age.

H<sub>07</sub>: There is no significant relationship between green product buying intention and educational qualification of the respondents.

Table 5 shows that significance of chi-square is 0.152, which is greater than 0.05 (5%). So, the null hypothesis cannot be rejected at 5% significance level, concluding that there is no significant relationship between the green product buying intention and educational qualification of consumers. Consumers intend to purchase green products irrespective of their educational qualification.

H<sub>08</sub>: There is no significant relationship between green product buying intention and income of the respondents.

Table 5 shows that significance of chi-square is 0.762, which is greater than 0.05 (5%). So, the null hypothesis cannot be rejected at 5%

significance level, concluding that there is no significant relationship between the green product buying intention and income of consumers. Consumers intend to purchase green products irrespective of their income.

## CONCLUSION

In the present era of development and growth, environment is being degraded at a rapid rate. It is hence, necessary to worry now rather than regret later. Green products can lower the negative impact on environment and ensure a sustainable future for the coming generations. The study highlighted that except for educational qualification, other demographic variables such as age, gender and income have no relationship with consumers' purchase decision of green products. Moreover, irrespective of demographic variables, most consumers intend to purchase such products to safeguard the environment. Cherian and Jacob (2012) suggest that researchers need to explore factors that motivate consumers towards green product usage. The present study finds out that, consumers are motivated to use green products because of environmental sustainability and their personal consciousness towards the environment. However, unavailability of such products and unawareness refrain them from using such products.

## IMPLICATION

The results of the present study can be used by marketers, manufacturers as well as the government to promote green products efficiently. Unawareness and unavailability

of the green products should be countered so as to remove the obstacle in its usage. Advertisements and promotional activities must be taken to make people aware, focusing on the environmental aspect as it is found to be the most influential factor motivating green product purchase and usage. Moreover, personal consciousness of consumers must be given due consideration, besides promotion, as it is also found to be a motivating factor. Awareness programs of environmental degradation and benefits of green products must be launched along with the different types of such products that consumers can use.

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## **Emotional Intelligence: A Study on Academic Professionals**

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### **ABSTRACT**

As emotional intelligence competencies are seen as the key to personal and professional success, thus it becomes significant to study the relationship of experience and age of an individual on the level of emotional intelligence. This study aims at finding out the perception and the level of emotional intelligence in a person on the basis of his/her age group and gender. The study is exploratory in nature where quota sampling was used to collect data. This study attempts to study the level of emotional intelligence among faculty members of academic institutions (who are the institution's greatest asset), like Amity University, SRM University, Delhi University, Lucknow University, and Christ University. A 2x3 factorial design was prepared to compare emotional intelligence between age and gender of academic professionals. A self-designed questionnaire, prepared on Likert type scale was distributed among 200 academicians of India, out of which 165 were responded and eventually, 160 questionnaires were selected for analysis. Tools like item to total correlation, reliability, factor analysis, and Z-test were used to analyse the data. Various factors like proficiency, holistic wisdom, candidness, insight, sensibility, understanding situations, truth loving, being relaxed; matured, balanced, having optimism, sagaciousness, calmness and development were identified. Results of the Z-test shows that respondents

in different age groups differ in emotional intelligence except between age groups of 25-35 and above 55. Results further show that females have higher emotional intelligence than males.

### **ARTICLE INFO**

*Article history:*

Received: 14 July 2017

Accepted: 30 November 2017

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*Keywords:* Academicians, emotional intelligence, emotions, feelings, interpersonal skill

## INTRODUCTION

Academicians play a key role in disseminating knowledge in specific subjects and help students to grow build emotional intelligence in its fullest stature, develop suitable attitudes and unfold a personality, high in emotional intelligence. Education to be meaningful should not only aim at the physical and mental growth of the individual but also take into account the needs and the aspirations of developing societies. Emotions of teachers are vital in this regard. An academician not only instructs but also motivates students. Some teachers find teaching to be a stressful occupation; when compared to other occupations, teachers experience high levels of stress.

The concept of emotional intelligence has recently attracted a lot of interest from academicians all over the world (Bachman, Stein, Campbell, & Sitarenios, 2000). Emotional intelligence is considered to be important as it affects the academic achievement of students positively, not only during the years they are taught but also during the years to follow. Emotions are our responses to the world around us and they are created by the combination of thoughts, feelings and actions. Emotions, if properly used are an essential tool for a successful and fulfilling life. But if our emotions are out of control, it can be detrimental. In our day to day life, they affect our relations with people, our self-identity and our ability to complete a task. To be effective, the cognitive processes must be in control of emotions so that they work for rather than

against cognition, hence, the the importance of emotional intelligence.

The most important predictor of personal success and organisational performance is emotional intelligence (EI). EI is a dimension of human behaviours that can be significantly increased. An emotionally intelligent person accepts himself, acts with confidence, manages all emotions exceptionally well and makes wise and sensible decisions (Slaski & Cartwright, 2002). EI enables a person to establish meaningful relationships, which is manifested as perceptiveness and the ability to communicate empathy. Thus, an emotionally intelligent person is resilient and will thrive during times of adversity.

Cherniss (2000) considers the factors that influence the capacity of relationships to promote social and emotional learning. These factors include the level of emotional competence and psychological development that each person brings to the relationship and group memberships (especially race, ethnicity, and gender) bring to the societies. Also important are routine patterns of behavior that can facilitate learning through social interaction. Finally, two organisational factors can have a significant influence: formal human resource systems and leadership.

EI is a broad term used for our level of competence in our personal and interpersonal skills. In work environments research expresses mastery of these personal and interpersonal skills as the single most important factor of our performance success

(Krishnan & Choubey, 2014). It is also a crucial factor in how we believe, think and act. EI will determine how well you know and deal with yourself, how well you handle, how well you interact and handle others. EI includes a broad array of sub-skills including how we observe our own and others' feelings and emotions, how we differentiate and evaluate and how we use this knowledge to guide our thinking and actions. It includes assertiveness, impulse control, adaptability, motivation and optimism.

The importance of emotions to intellectual functioning was originally studied by researchers such as Thorndike (1920), Guilford (1967), and Gardner (1983). As such, contemporary theories propose that emotions play an important role in organising, motivating and directing human behaviours (Gardner, 1983; Salovey & Mayer, 1990). A trend is noticeable in that EI is becoming an important area of research in the educational and psychological spheres (Bajpai, 2013; El Hassan & El Sader, 2005; Locke, 2005; Tripathi, Chaturvedi, & Goel, 2016). The first and most promising description and theory of EI was conceptualised by Salovey and Mayer (1990).

According to them, EI involves the abilities to perceive, appraise, and express emotion; to access and/or generate feelings when they facilitate thought, to understand emotion and emotional knowledge, and to regulate emotions to promote emotional

and intellectual growth (Mayer & Salovey, 1997).

Salovey and Mayer (1990) categorised five domains of emotional intelligence:

- **Self Awareness:** It includes observations and recognising feelings as they happen. It is the key stone of emotional intelligence. The ability to monitor what we are feeling moment to moment is crucial to psychological insights and self understanding. Being aware of our emotion helps us to make better decisions as inappropriate emotional responses cloud out judgment.
- **Managing Emotions:** It relates to handling feelings so that they are appropriate, realising what is behind a feeling, finding ways to handling fears and anxieties, anger and sadness. It is managing one's internal states, impulses and resources.
- **Motivating Oneself:** This involves channeling emotions in the service of a goal, emotional self control, delaying gratification and stifling impulses. It is our emotional tendencies that guide or facilitate us in reaching goals.
- **Empathy:** Empathy is a fundamental human skill. Empathy forges emotional connection and tends to bind people together even more deeply than shared beliefs and ideas. Empathy underlies many interpersonal aptitudes like teamwork, persuasion and leadership. Empathy is also sensitivity to others'

feelings and concerns, taking their perspective, and appreciating the differences in how people feel about things. It is the awareness of others' feelings, needs and concerns.

- **Handling Relationships:** It includes managing emotions in others, social competencies and social skills. It is adeptness at inducing desirable responses in others.

Nelson, Low and Nelson (2005) presented in their research paper the critical role of EI in the success of students and is the most important factor in personal achievement, school success, leadership, and satisfaction in living. They also describe EI as a set of specific skills and concepts that are measurable, learnable and once acquired, can be utilised for success, not only in academics but in other aspects of life. Social and emotional competencies are potential predictors of leadership (Ashforth & Humphrey 1995; Cooper & Sawaf, 1997).

Cooper (1997) researched the positive correlation between age and emotional intelligence. Goleman (1995, 1996, 1998) further supported this research through the study that emotional intelligence increases with age, because of the fact that in most cases, maturity develops with increase in age. Emotional intelligence appears to be a measure of maturity or stability, hence, positively related to age irrespective of one's thinking orientation.

Abraham (1999) showed that EI has a positive effect on organisational outcomes of work, group cohesion, organisational

commitment, employee performance and organisational citizenship behaviour. Studies propose that people with high levels of EI practise more career success. Research shows that well developed emotional intelligence distinguishes individual 'star performers' and plays an important role in determining which organisation will outperform the competitors.

Further, Panda and Singhal (2009) studied primary school teachers' work behaviour in relation to emotional intelligence. Results indicated that emotional intelligence has positive effect on primary school teachers' work behavior. So, emotional intelligence of primary school teachers is given priority in educational situations for development of quality teachers.

O'Boyle, Humphrey, Pollack, Hawver, and Story (2011) studied the relation between emotional intelligence and job performance. The investigators classified emotional intelligence study into three streams: (i) ability-based models that use objective test items; (ii) self-report or peer-report measures based on the four branch models of emotional intelligence; and (iii) mixed models of emotional competencies. The three streams demonstrated correlations ranging from 0.24 to 0.30, with job performance. A model was also proposed by Mayer, Salovey and Caruso (2000) which became the base for further studies.

Abdolvahabi, Bagheri, Haghghi, and Karimi (2012) found a significant relationship between emotional awareness, empathy, and self-efficacy. The results of

variance analysis for regression research showed that self-efficacy was significant according to emotional intelligence components.

### Objectives of the Study

Objectives of the study are as follows:

- To find out the factors underlying emotional intelligence of faculty members in the institute.
- To find out the association between the determinants of EI and demographic factors of the respondents.
- To find out the difference in emotional intelligence among various age groups.
- To find out the difference in emotional intelligence based on gender.

## RESEARCH METHODOLOGY

### Sample

The study was conducted in different educational institutes like Amity University Noida, SRM University Sonapat, Delhi University, and Christ University Bangalore. For this purpose, 200 academic professionals were contacted – some personally and few through mails and were requested to fill in a questionnaire comprising measure of emotional intelligence. The 40-item questionnaire was on a 7-point Likert scale, where 1 indicated strongly disagree and 7 indicated strongly agree.

### Data Analysis

Reliability testing was applied to the items. Underlined factors were found through

factor analysis. Z-test was conducted to compare emotional intelligence of academic professionals. Hypotheses were formed for applying the Z-test between age groups:

**Ho<sub>1</sub>:** There is no significant difference between EI of academicians between the age groups of 25-35 and 40-55.

**Ho<sub>2</sub>:** There is no significant difference between EI of academicians between the age groups of 40-50 and 55 and above.

**Ho<sub>3</sub>:** There is no significant difference between EI of academicians between the age groups of 25-35 and 55 and above.

The following hypothesis was formed for applying Z-test between genders:

**Ho<sub>4</sub>:** There is no significant difference between gender and the EI of academic professionals.

Academic professionals were again compared on the basis of presence of different factors. Z-test was applied to compare these factors. Following hypotheses were formed:

**Ho<sub>5</sub>:** Male and female academicians have no significant difference on the basis of 'proficient' factor..

**Ho<sub>6</sub>:** Male and female academicians have no significant difference on the basis of 'holistic wisdom' factor. .

**Ho<sub>7</sub>:** Male and female academicians have no significant difference on the basis of 'candid' factor.

- Ho<sub>8</sub>:** Male and female academicians have no significant difference on the basis of ‘insightful’ factor. ’.
- Ho<sub>9</sub>:** Male and female academicians have no significant difference on the basis of ‘sensible’ factor.
- Ho<sub>10</sub>:** Male and female academicians have no significant difference on the basis of ‘understanding situations’ factor.
- Ho<sub>11</sub>:** Male and female academicians have no significant difference on the basis of ‘truth loving’ factor. .
- Ho<sub>12</sub>:** Male and female academicians have no significant difference on the basis of ‘relaxed’ factor.
- Ho<sub>13</sub>:** Male and female academicians have no significant difference on the basis of ‘mature’ factor.
- Ho<sub>14</sub>:** Male and female academicians have no significant difference on the basis of ‘balanced’ factor.
- Ho<sub>15</sub>:** Male and female academicians have no significant difference on the basis of ‘optimism’ factor.
- Ho<sub>16</sub>:** Male and female academicians have no significant difference on the basis of ‘sagacious’ factor.
- Ho<sub>17</sub>:** Male and female academicians have no significant difference on the basis of ‘calm’ factor. .
- Ho<sub>18</sub>:** Male and female academicians have no significant difference on the basis of ‘development’ factor.

## RESULTS AND DISCUSSION

### Consistency Measure

Firstly, consistency of all the items in the questionnaire was checked through item to total correlation. Correlation of every item with the total was measured and the computed value was compared with standard value, that is, 0.14. If the computed value was found less than the standard value, then the whole factor / statement was dropped and termed as inconsistent. Only one item having value of 0.03412 was dropped (Table 1).

Table 1  
Item to total correlation

Items	Computed Correlation Value	Consistency	Accepted/ Dropped
1. <i>I stay relaxed and composed under pressure.</i>	0.189896	Consistent	Accepted
2. <i>I can identify negative feelings.</i>	0.292770	Consistent	Accepted
3. <i>I put negative feelings out of the mind.</i>	0.251526	Consistent	Accepted
4. <i>I am sensitive to other people's emotions and moods.</i>	0.334131	Consistent	Accepted
5. <i>I receive feedback and criticism without being defensive.</i>	0.03412	Inconsistent	Dropped
6. <i>I calm myself quickly when I get angry or upset.</i>	0.298696	Consistent	Accepted

Table 1 (continue)

7.	<i>I freely admit to making mistakes.</i>	0.310848	Consistent	Accepted
8.	<i>I communicate my needs and feelings honestly.</i>	0.295624	Consistent	Accepted
9.	<i>I pull myself back easily after setback.</i>	0.307532	Consistent	Accepted
10.	<i>I am aware of how my behaviour impacts others.</i>	0.428632	Consistent	Accepted
11.	<i>I pay attention and listen without</i>	0.470371	Consistent	Accepted
12.	<i>I always tell the truth.</i>	0.201303	Consistent	Accepted
13.	<i>I maintain good eye contact.</i>	0.200673	Consistent	Accepted
14.	<i>I understand how people experience conflicting emotions.</i>	0.421023	Consistent	Accepted
15.	<i>I know how to manage myself under pressure.</i>	0.441437	Consistent	Accepted
16.	<i>I remain keen to find new challenges.</i>	0.467092	Consistent	Accepted
17.	<i>I can stay cheerful even when things go wrong.</i>	0.380904	Consistent	Accepted
18.	<i>I understand my developmental needs.</i>	0.514569	Consistent	Accepted
19.	<i>I show passion and commitment towards others.</i>	0.501104	Consistent	Accepted
20.	<i>I know how to cope with stress.</i>	0.494955	Consistent	Accepted
21.	<i>I can sense emotions of people around me.</i>	0.594989	Consistent	Accepted
22.	<i>I can use my instincts and feelings.</i>	0.464019	Consistent	Accepted
23.	<i>I stay focused on getting a job done.</i>	0.378609	Consistent	Accepted
24.	<i>I am reliable and genuine.</i>	0.578538	Consistent	Accepted
25.	<i>I adapt to change.</i>	0.348298	Consistent	Accepted
26.	<i>I learn from my mistakes.</i>	0.50289	Consistent	Accepted
27.	<i>I try to be sensitive and understanding.</i>	0.357061	Consistent	Accepted
28.	<i>I take criticism positively.</i>	0.345998	Consistent	Accepted
29.	<i>I maintain work and life balance.</i>	0.393176	Consistent	Accepted
30.	<i>I remain patient with people.</i>	0.511356	Consistent	Accepted
31.	<i>I respond to people's emotions.</i>	0.376078	Consistent	Accepted
32.	<i>I use different moods to enhance my thinking.</i>	0.454134	Consistent	Accepted
33.	<i>I understand how emotions lead to anger.</i>	0.518116	Consistent	Accepted
34.	<i>I can tell when a friend is embarrassed.</i>	0.343896	Consistent	Accepted
35.	<i>I can tell when a friend is happy.</i>	0.399301	Consistent	Accepted
36.	<i>I can usually de-escalate anger and conflict.</i>	0.334742	Consistent	Accepted
37.	<i>I know how emotions progress and develop.</i>	0.386314	Consistent	Accepted
38.	<i>I laugh when people around me are laughing.</i>	0.337612	Consistent	Accepted
39.	<i>People rarely consult me about their personal problems.</i>	0.240854	Consistent	Accepted
40.	<i>I rarely lose myself in thoughts.</i>	0.288867	Consistent	Accepted

### Reliability Measure

Reliability test was carried out by using SPSS software. The reliability value through Cronbach's alpha method was 0.842 for 39

items. As the reliability value is good, the questionnaire can be considered to be highly reliable.

### Factor Analysis

The factors were calculated with the help of total variance explained. The final 14 factors, which emerged were calculated from the rotated sum of squared value loading which was the outcome of SPSS software.

The factors identified were proficient, holistic wisdom, candid, insightful, sensible, understanding situations, truth loving, relaxed, mature, balanced, optimism, sagacious, calm and development.

Table 2  
*Factor analysis and convergence*

Factor Name	Eigen Value	Variable Convergence	Loadings
Proficient	6.357	19. Show passion and commitment	.718
		14. Understand how people experience conflicting emotions	.678
		15. Manage under pressure	.677
		17. Stay cheerful when things go wrong	.572
		25. Adapt to change	.452
Holistic wisdom	2.324	26. Learn from mistakes	.734
		22. Use instincts and feelings	.658
		24. Reliable and genuine	.591
Candid	2.290	21. Sense feelings and emotions of people	.583
		7. Freely admit to mistakes	.688
		9. Pull myself easily after a setback	.678
		8. Communicate needs and feelings honestly	.486
		16. Remain keen to find challenges	.455
Insightful	2.125	23. Stay focused in getting job done	.424
		27. Try to be sensitive and understanding	.807
		35. Tell when a friend is happy	.759
Sensible	2.063	10. Aware of how my behaviour impacts others	.732
		32. Use different moods to enhance my thinking	.572
		31. Respond to people's emotions	.558
Understanding situations	1.733	33. Understand how emotions lead to anger	.770
		34. Tell when a colleague is embarrassed	.764
Truth loving	1.611	13. Maintain good eye contact	.831
		12. Tell the truth	.602
		11. Pay attention and listen without jumping to conclusions	.391
Relaxed	1.550	38. I laugh when people around me are laughing	.768
		39. People rarely consult me about personal problems	.695
Mature	1.372	1. Stay relaxed and composed under pressure	.623
		28. Take criticisms positively	.771
		18. Understand my developmental needs	.510
		20. Know how to cope with stress	.388

Table 2 (continue)

Balanced	1.240	30. Remain patient with people	.765
Optimism		29. Maintain life and work balance	.615
Sagacious		3. I can put negative feelings out of my mind	.705
		36. Usually de-escalate negative thoughts	.615
	1.104	2. Identify negative feelings	.791
		4. Sensitive to other people's emotions and moods	.111
Calm	1.073	6. Calm myself quickly when I get angry	.646
Development	1.006	37. I know how emotions progress and develop	.722

### Z-Test

To compare the emotional intelligence of male and female academicians and between various age groups, Z-tests were applied (Table 3).

**Comparison of academicians between age groups 25-35 and 40-50.** The z value was 9.91 between age group of 25-35 and 40-50, which was more than standard value, 1.96, at 5% level of significance, therefore the null hypothesis was not accepted which states that there is no significant difference in the emotional intelligence of this age group. It can be observed that attitude towards things at work and towards life varies in these age groups. Young people generally take things lightly and react immediately without giving any thought whereas people at the age of 40-50 generally learn to manage their emotions and behaviour accordingly. In addition, they possess a sense of responsibility so they show consistent behaviour on their work.

It can be proven by comparing the mean values too (Table 3).

**Comparison of academicians between age groups 40-50 and 55 and above.** Since, the z value was 8.61 between age group of 40-50 and 55 and above, which is more than standard value 1.96, at 5% level of significance, therefore in this case too, the null hypothesis is not accepted and we can say that there is significant difference in the emotional intelligence of this age group. By comparing the mean values of both the groups we find that academicians in the age group show higher emotional intelligence in comparison to senior academicians. In our Indian context, people at the age above 55 start losing their potential for doing work and develop fear of getting neglected or being unheard which ultimately disturbs their emotional stability so they show inconsistent behaviour (Table 3).

Table 3  
*Comparison of emotional intelligence between different age groups*

Assumptions	Mean Value	Standard Error	Value Of Z	Difference
X1=25-35(Age group)	X1=5.50708	0.095781	9.91>1.96	Significant
X2=40-50(Age group)	X2=6.448745	0.1078	8.61>1.96	Significant
X2=40-50	X2=6.448745	0.0918	0.146<1.96	insignificant
X3=55 and above	X3=5.520513			
X1=25-35	X1=5.50708			
X3=55 and above	X3=5.520513			

**Comparison of academicians between age groups 40-50 and 55 and above.** In this case the z value was 0.0918 between age group of 25-35 and 55 and above, which was less than standard value, 1.96, at 5% level of significance, therefore the null hypothesis is accepted and it can be concluded that emotional intelligence of both groups is more or less the same. As it can be seen through earlier results, young people and old aged persons are low at handling their emotions, so there is no difference in their emotional intelligence. The results prove to be similar with the

results on emotional intelligence on school teachers in Malaysia as reported by Noriah, Iskandar and Ridzaudin (2010).

**Comparison of emotional intelligence between male and female academicians.**

Critical value for Z-test was 12.18, which is quite higher than table value, 1.96, so the null hypothesis is not accepted which states that there is no significant difference between emotional intelligence of male and female academicians and by comparing mean values, we can further conclude that EQ of females is higher than males (Table 4).

Table 4  
*Comparison of emotional intelligence between males and females*

Assumptions	Mean Value	S.E	Z-value (Standard value=1.96)	Difference
H <sub>04</sub> , X <sub>11</sub> =X <sub>12</sub>	X <sub>11</sub> =5.391523	0.0676683	12.18>1.96	Significant
X <sub>11</sub> = male	X <sub>12</sub> =5.475813			
X <sub>12</sub> =female				

### Z-Test between Factors

Further, Z-test was applied to evaluate the significant difference among the factors, explored during factor analysis (Table 5). Factors like proficient, holistic wisdom, insightful, understanding situations, truth loving and relaxed showed no difference between male and female respondents as their critical value was less than standard value. On the other hand, factors like candid, sensible, mature, balanced, optimism and sagacious showed that there is significant difference between factors whereas two

factors could not be compared as they had only one statement. Mayer and Salovey (1997) showed that emotional intelligence is the composition of different types of competence, which have the possibility to distinguish feelings within the person which affects productivity and increase an individual's performance. Studies indicate that teachers who have increased level of emotional intelligence can perform in a better way than those with less emotional intelligence (Mayer & Salovey, 1997; Mehmood, Qasim, & Azam, 2013).

Table 5

*Comparison of different factors of emotional intelligence between males and females*

Factors	Assumptions	Z-Value	Difference
1. Proficient	H <sub>05</sub> : X <sub>11</sub> =X <sub>12</sub> X <sub>11</sub> = male X <sub>12</sub> =female	0.320<1.96	Insignificant
2. Holistic wisdom	H <sub>06</sub> , X <sub>1</sub> =X <sub>2</sub>	0.15<1.96	Insignificant
3. Candid	H <sub>07</sub> , X <sub>1</sub> =X <sub>2</sub>	1.96>1.96	Significant
4. Insightful	H <sub>08</sub> , X <sub>1</sub> =X <sub>2</sub>	0.192<1.96	Insignificant
5. Sensible	H <sub>09</sub> , X <sub>1</sub> =X <sub>2</sub>	12.42>1.96	Significant
6. Understanding situations	H <sub>10</sub> , X <sub>1</sub> =X <sub>2</sub>	0.74<1.96	Insignificant
7. Truth loving	H <sub>11</sub> , X <sub>1</sub> =X <sub>2</sub>	0.34<1.96	Insignificant
8. Relaxed	H <sub>12</sub> , X <sub>1</sub> =X <sub>2</sub>	1.48<1.96	Insignificant
9. Mature	H <sub>13</sub> , X <sub>1</sub> =X <sub>2</sub>	4.021>1.96	Significant
10. Balanced	H <sub>14</sub> , X <sub>1</sub> =X <sub>2</sub>	18.542>1.96	Significant
11. Optimism	H <sub>15</sub> , X <sub>1</sub> =X <sub>2</sub>	18.546>1.96	Significant
12. Sagacious	H <sub>16</sub> , X <sub>1</sub> =X <sub>2</sub>	8.57>1.96	Significant

### CONCLUSION

The present study was attempted to examine the difference in emotional intelligence of various age groups and gender. The results of the data analyses revealed that out of

14 factors considered for this study, six have shown no difference between males and females while six show significant difference. Z-test was also applied to compare the difference in emotional

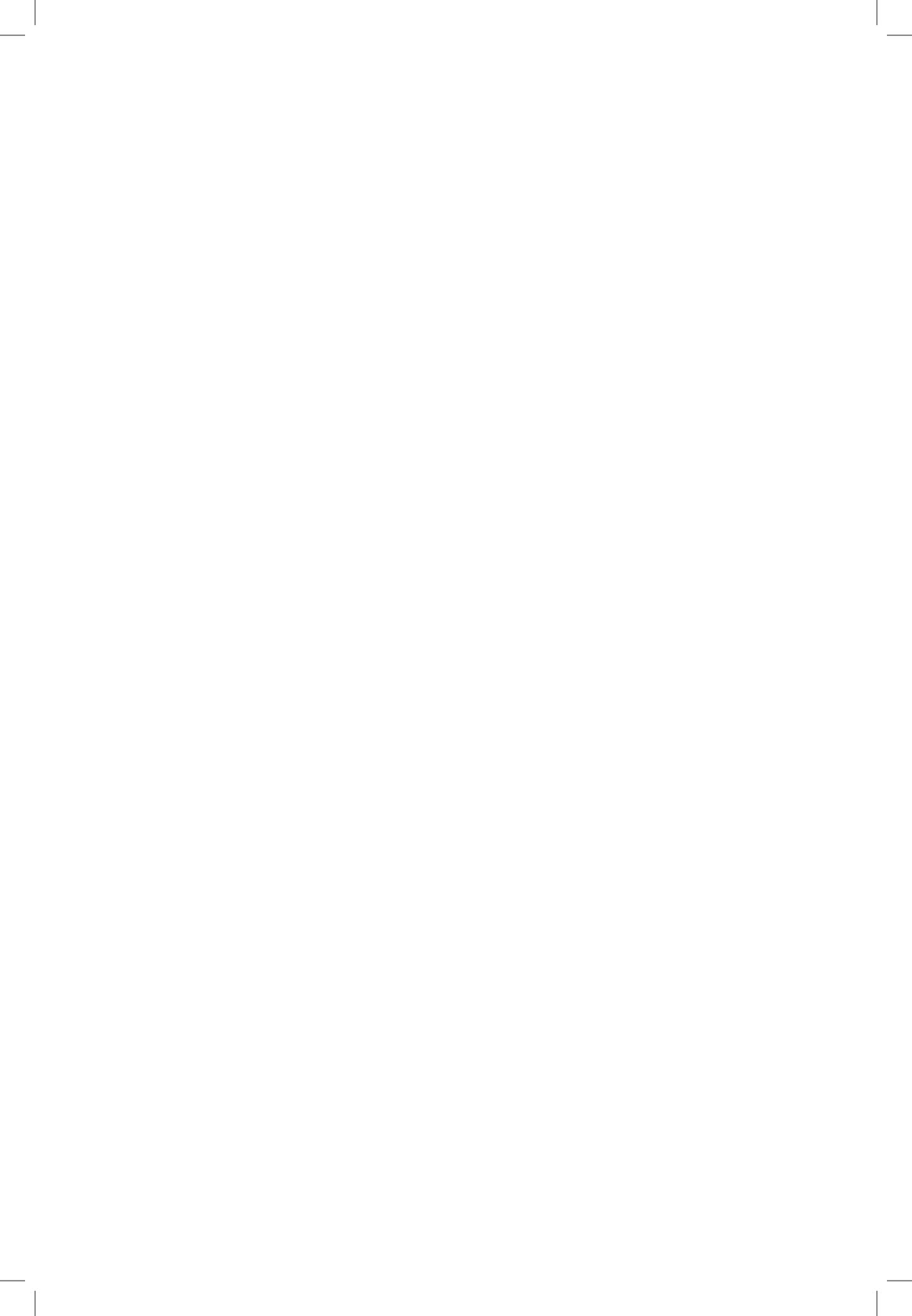
intelligence between age groups. Results show that EQ varies between age groups 25-35 and 40-50, 40-50 and 55 and above. For age groups of 25-35 and 55 and above, there is no difference as the young generation is at the starting phase of learning whereas old aged people have stopped learning.

The conclusion of the study reveals that emotional intelligence of employees is largely affected by the proficiency of a person on the work which has highest Eigen value and the next factor which affects the level of emotional intelligence is the holistic wisdom of the employees last factor is emotional development.

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## **An Empirical Study to Enquire the Effectiveness of Digital Marketing in the Challenging Age with Reference to Indian Economy**

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### **ABSTRACT**

Everyday marketers are facing challenges and getting many new opportunities within this digital age. Marketers are basically making use of electronic media to promote all the goods and services into the market. One of the major challenges the marketer has to deal with is to know how to persuade someone and how to come up with ways in order to attract and retain prospective customers. The issue could easily be solved by making or allowing customers to interact or talk about the brand through the use of digital media. Through this research the researcher would be focusing and talking about the importance of digital marketing for both customers and the marketers. This research is conducted to understand why digital marketing is more effective than traditional media and what are the major differences between digital and traditional media. The researcher made use of primary and secondary data, and a close ended questionnaires, where a sample of 105 respondents were selected. The data was collected through Google forms and analysed using the SPSS statistical tool to explore descriptive statistics like frequency, mean, standard deviation as well as cross-tabs and inferential statistics, comprising regression analysis and

ANOVA. Secondary resources were used to do review of literature through journals and articles. This research will also show the major factors that affect the effectiveness of digital marketing in the era of digitisation, where every marketer is opting for digital marketing to promote his brand(s).

*Keywords:* Customers, digital marketing, digitization, promotion, traditional marketing

### **ARTICLE INFO**

*Article history:*

Received: 14 July 2017

Accepted: 30 November 2017

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## INTRODUCTION

Digital marketing is one of the marketing strategies generally used to promote goods and services to customers by utilising different channels of distribution. Digital marketing reaches out beyond web promotion by including all the channels which do not require the need for the Internet. Through digital media, purchasers can obtain information whenever and wherever they need. With the presence of digital media, customers do not only depend on what the organisation says in regards to their brand or product, additionally, they can take after what the media, companions, affiliations, and peers are stating too. Digital marketing is a broad term where through the use of digital technologies, various techniques of promotion are being provided or deployed out to prospective customers. In today's technology driven world, social networking sites have become an avenue where retailers can extend their marketing campaigns to a wider range of consumers (Paquette, 2013).

Digital Marketing makes sure that the marketer approaches buyers in a relevant, sensible and cost-friendly manner. The digital marketing procedure is adequately utilised as part of the push and pull marketing strategies. Both push and pull marketing techniques are possible in digital marketing. Mark mindfulness has been demonstrated to work with more adequacy in nations that are high in vulnerability shirking, likewise for nations that have instability evasion, online networking advertising

works adequately. However, marketers need to be mindful so as not to be intemperate on the utilisation of this sort of showcasing, and also exclusively depending on it as it might have suggestions that could contrarily outfit their picture. Brands that speak for themselves in a humanising way will probably prevail in circumstances where a brand is promoted. Since online networking use can improve the information of the brand and consequently diminish the vulnerability, it is conceivable that individuals with high instability shirking, for example, the French, will especially value the high web-based social networking collaboration with a humanised mark. Moreover, computerised stage gives simplicity to the brand and its clients to cooperate specifically and trade their intentions for all intents and purposes.

Midde (2009) conducted a secondary research to compare the trust of consumers between traditional and digital marketing, the conclusion of which was that the major influence are family and relatives. Online advertising comes very late and digital marketing still has a long way to influence the buying decision of consumers (Clarke & Svanaes, 2012; Furrer & Sudharshan, 2001).

As markets are getting complex day by day, companies are trying to cope with such complexities. As rightly said by Fader and Winer (2012), e-commerce and social-commerce are the era of the 21<sup>st</sup> century. IBM Institute for Business Value (IIBV) has also highlighted the importance of digital marketing while having interviews with CEOs (IIBV, 2011).

While conducting primary research in one of the research papers on Indian consumer buying behavior through a survey on 250 respondents the author came to the conclusion that Indian buyers are high information seekers, that is, they research a lot before indulging into any buying. Indian market is a value-oriented market, that is, buyers would be ready to pay a certain price for product if they are getting value for their money. People have started bending towards online marketing to get information about the products. Word of mouth of friends, family and relative is given more preference than online reviews. The limitation of this research was that the research was conducted within the students of the college.

Pawar (2014), in his work, demonstrated the importance of integrated marketing communication and digital marketing in the changing scenario of the market. A survey on 250 respondents in the suburbs of Mumbai concluded that people do not think that digital marketing is the safest to use so they rely upon more than one medium to gather information about the product, thus one of the major reasons for this sudden importance of digital marketing is the increasing literacy rate.

Shammi (2015) also explored the importance of digital marketing in this competitive era and concluded that improved infrastructure and the presence of digital marketing are the key factors of success in digital marketing.

Banerjee (2012) concluded that the social media is majorly targeted on the

youths of the country. Social media is extremely effective due to its speed and the fact that it provides a platform for consumers to express their feelings, be it negative or positive.

Likewise, Pavlou (2003) examined the level of acceptance among customers towards e-commerce. From the survey, it was known that that customers are ready to accept e-commerce only if the companies are able to reduce or eliminate the perceived risk.

In the previous studies, e-marketing environment analysed the advantages and disadvantages of e-marketing, analysed the future of e-commerce and studied its growth. Research has shown that the future belongs to e-marketing but is not limited to it. Although e-commerce is advantageous in several ways, it also has some disadvantages which cannot be neglected at any cost.

Sait, Al-Tawil and Hussain (2004) sought to determine the factors that influence the adoption of e-commerce. The research showed that infrastructure, traditions, and cultural values play an important role in influencing the economy to adopt e-commerce.

Yasmin, Tasneem and Fatema (2015) also probed the various elements of digital marketing and understand the reasons why digital marketing is more effective than traditional marketing. They found that digital marketing would succeed only when it is a priority for the customer and that there can be many innovative ways in digital marketing like affiliate marketing, pay per click and text messaging.

Similarly, Merisavo (2006) studied digital marketing communication and how it helps in maintaining customer loyalty. It was found that digital marketing offers marketers cost-friendly options to maintain and improve customer loyalty.

Khan and Siddiqui (2013) surveyed the perception of Pakistani professionals towards digital marketing and how much it affects the customer's decision as a consumer. They found the respondents to be aware about the concept, but the concept is still in its beginning stage in Pakistan.

Finally, Stephen (2016) determined the extent the online word of mouth affect the perception of consumers. He found that consumers tend to seek enough information from various media about the product to come to a particular decision. The research showed that there is high degree of awareness about the concept in the targeted group and that digital media can play a vital role if the students take the word of mouth seriously. Consumers that engage with their favorite brands using social media have stronger relationships with those brands compared with consumers who do not interact with their favorite brands using social media (Hudson, Roth, & Madden, 2012).

According to Madni (2004), it is clear that nowadays, popular platforms of social media like Facebook and Twitter have attention on consumer markets.

Osewe (2013) stresses the positive relationship between Internet advertising and consumer purchase decisions, and further recommends that companies should

conduct market research on the different markets in various countries to ensure that the Internet advertising initiatives being implemented suit the targeted markets to improve product purchases.

### **SWOT Analysis: Digital Marketing**

- Strengths:
  1. Simple to target and tap the market at a cost-friendly manner.
  2. Campaigns can be effectively recreated and be made more focused according to the marketer's objectives and requirements.
  3. It helps the marketer to reach more and more people globally.
  4. It is cost effective.
  5. Small business promotion can be easily done.
- Weaknesses
  1. You need to keep up with the change in technology.
  2. You need to have a deep understanding of human nature, behaviour, taste and preferences.
  3. It becomes difficult to tap the market which does not use the Net.
  4. It can be almost impossible for damage control due to negative online review; its biggest strength becomes the problem.
  5. The more number of digital marketing options are available, the more confusion occurs to promote the brand.

- Opportunities
  1. It is helpful in making our government digitised.
  2. More employment opportunities for youths are created in this sector.
  3. The dream of “Digital India” can finally come true.
  4. Encourages growth of small business units.
  5. Government actions can be prompt, for example, people have complained through Twitter to Railway Ministry, and the government has responded and taken action to resolve their issues.
- Threats
  1. If the campaign doesn't work according to the plan, then it might adversely affect the brand name.
  2. Security of data is still a questionable issue.
  3. Once, something is put on the Web, it is impossible to take it off. For example, if a bad review or comment is posted on the Web against a brand, then it could adversely affect its future business.
  4. Investigating the information wrongly can cause harm, which is rampant in many organisations.

### **Traditional vs. Digital Marketing**

Traditional marketing is the most known and old way of promoting goods and services to

customers (Blythe, 2006). On the contrary, digital marketing is a form of promotion of the brand and the product through channels like phones, television and the Internet. This is the latest technique and has been recently taken by marketers as it's been showing them positive results.

**Size of competition.** In digital marketing, a marketer can compete with any other player in the market, irrespective of its size or the size of its operations. But in Traditional marketing if a small retailer would have to struggle to stand and compete against a market leader. But online, a simple and better service would do the trick.

**Cost reduction.** A marketer can build up its online promotion strategy with very little cost, which will easily replace the traditional channels like radio, printed ads, and newspaper ads.

**Ongoing outcomes.** You don't have to wait for weeks and months to see the boost in sales for your products; it can be seen by just one click and the number of items sold will appear on your screen.

Redefining the strategy. To refine your strategy in traditional marketing, it would require a lot of time and cost but not in digital marketing, as online marketing lets you refine your strategy at any point of time to get better results and see improvements.

**More exposure.** Your business can be seen any place on the planet from one campaign

only, the cost to do this through traditional marketing would be very high.

**More prominent engagement.** With computerised showcasing you can support your prospects, customers and followers to make a move, visit your site, read about your items and administration, rate them and give input which is obvious to your market. So, it doesn't take them years to create exposure for your brand.

**Difference in medium.** Traditional marketing includes print, broadcast, direct mail, and telephone while digital includes online advertising, email marketing, social media, text messaging, affiliate marketing, search engine optimisation, and pay per click.

**Factors affecting the effectiveness of digital marketing.** *Target market.* The most important factor is choosing the target market. It will involve a huge cost if you want to promote your product on every platform on the Internet and want to focus on millions of Internet users as your target market.

*Technology.* As we all know, technology is the backbone of digital marketing, so for a marketer it is very important to stay updated about technology. Your employees should know how to operate the technical equipment.

*Content.* This is the place where you'll be able to stand apart from other players in the

industry. Your site and messages must have language that is relatable and rational about your product. The content should be useful for the consumer, attractive and crisp at the same time.

*Budget.* Digital marketing is less expensive than traditional marketing, however it is certainly not free. Thus, there emerges a need to set up a very much characterised budget for it. An advertiser must choose suitable blend of natural and paid advancements.

*Social media.* How much the business is involved in social media matters a lot. Organisations today keep up dynamic and sound online networking records. The organisations also request that their workers do the same to connect with their clients. Many organisations do promotions through web-based social networking stages to draw in new clients and hold the current ones.

*Channels.* Based on the channel chosen, the business will be able to target its potential customers. The marketer has to analyse the various channels in terms of their cost effectiveness, speed, reach and other parameters.

*Infrastructure.* This is also important, as when you don't have the infrastructure to support your technology then no matter what, all your strategies, plans and techniques will be futile. Are your potential customers equipped enough? Is the bandwidth of the country in your support?

**Literacy.** In countries like India and Pakistan, literacy is one of the major factors as it determines how much the people are aware about the concept and whether they are educated enough to use the technology where you are present.

- To understand the various forms of digital marketing
- To understand why consumers prefer digital marketing
- To understand the SWOT analysis of digital marketing

### **Various Elements of Digital Marketing**

#### 1. Online advertising

It plays a crucial role for promoting digital marketing. It helps the marketers to place information online so that the customers can get complete information which saves a lot of time.

#### 2. Email Marketing

When the marketers send complete information through mail, a lot of time is saved.

#### 3. Text Messaging

Through SMS and MMS companies can create and disseminate information. They can also make use of questionnaires and get them filled through text messaging.

#### 4. Search Engine Optimisation (SEO)

SEO may target different kinds of search including image search, local search, video search, academic search, news search and industry-specific vertical search engines.

### **Research Objectives:**

- To understand the effectiveness of digital marketing
- To understand the difference between digital and traditional marketing

### **Research Hypothesis:**

#### *Hypothesis 1:*

H0: There is no significant relation between technology and digital marketing.

H1: There is significant relation between technology and digital marketing.

#### *Hypothesis 2:*

H0: There is no significant relation between social factors and digital marketing.

H1: There is significant relation between social factors and digital marketing.

### **METHODOLOGY**

The researcher made use of primary and secondary data where 105 samples were used. In this paper the researcher considered the perceptions of different age groups, genders, marital status, income and educational groups. Obtaining most or all of the perceptions will lead to saturation. Saturation occurs when adding more participants to the study does not result in additional perspective or information. Hence in the researcher's opinion the sample was sufficient to address all perspectives, whereby an increase in the sample size

would not give any major difference in the results.

Patton (1990) said that qualitative sample size may best be determined by the time allotted, resources available and study objectives. In this regard, the data was collected through Google forms. The researcher used convenience random sampling to carry out the study. The researcher used descriptive research design and a self administered close ended questionnaire which used Likert's scale, ranging from 1-5 where 1 stands for strongly agree and 5 stands for strongly disagree. Questions related to age, gender, marital status, educational qualification were asked and respondents were also requested to answer why they prefer digital marketing over the traditional mode and whether it is effective or not.

The data was processed through SPSS software and reliability test was measured by Cronbach's coefficient alpha model. The data analysis was done through SPSS statistical tool where the researcher used descriptive statistics like frequency, mean, standard deviation as well as cross-tabs and inferential statistics comprising regression analysis and ANOVA. Secondary resources were used to collect review of literature through journals and articles.

The research was conducted to find out the reasons why digital marketing is so effective. The questionnaire was distributed through family, relatives, friends and colleagues. The limitation of the survey was that the sampling was non-random

sampling. The questionnaire was sent across through several social media platforms like Gmail, WhatsApp and Facebook. The respondents were of Delhi NCR.

## RESULTS AND DISCUSSION

Table 1  
*Checking the response rate*

Total Questionnaires	Number of Respondents
No. of questionnaire filled correctly	105
No of questionnaire unreturned	15
No. of questionnaires filled incompletely	10
Total no. of questionnaire sent	130

Table 1 shows that the total number of questionnaires sent out were 130, out of which only 105 were filled by the respondents, while 25 respondents did not fill in the questionnaires.

### Reliability Test

**Cronbach's alpha reliability analysis test.** Cronbach's alpha is a measure of internal consistency, that is, to know how far a set of items are closely related as a group. It is considered to be a measure of scale reliability.

Table 2  
*Reliability statistics*

Cronbach's Alpha	N of Items
.795	21

Table 2 shows that all the scales were reliable, having an alpha above the prescribed threshold of 0.6. The reliability is 0.795, that is, the data is reliable and the hypothesis can be tested on data. The total number of variables is 21.

**Descriptive Findings**

This study analysed respondents’ demographic profiles and various objectives of the study using various descriptive statistics such as frequencies, percentages, mean, standard deviation and central tendencies measurement such as mean and median at length.

Table 3  
*Demographic aspects of the data collected*

Items	Frequency	Percentage
Male	50	47.6
Female	55	52.4
Age: 0-15	3	2.9
Age: 15-30	62	59.0
Age: 30-45	19	18.1
Age: 45-60	17	16.2
Age: 60 and above	4	3.8
Single	69	65.7
Married	36	34.3
Education: Certificate	8	7.6
Education: Diploma	1	1.0
Education: Graduate	43	41.0
Education: Post graduate	23	21.9
Education: Undergraduate	30	28.6

Table 3 shows the frequencies of the demographic aspects of the data collected. The total number of respondents is 105. The demographic categories include gender, age, education, and marital status. The frequency shown in the table is through number and percentage. The majority of the respondents lie within the age group of 15-30 and are single. 90% of the sample has tertiary (graduate) level education. The gender ratio of the sample is almost equal.

Table 4  
*Mean and standard deviation*

Items	N	Mean	Std. Deviation
W1	105	2.33	.987
W2	105	2.71	1.026
W3	105	2.24	1.033
W4	105	2.69	1.138
W5	105	2.23	1.085
W6	105	2.55	1.135
W7	105	2.28	1.061
W8	105	3.44	1.134

Table 4 shows n, mean and std. deviation of the data collected. The data shows primarily, the respondents are towards agreement, which means the respondents are positive towards the use of digital marketing over traditional marketing. Although both are in parallel direction, the advancement in technology has made digital marketing ahead of traditional marketing.

**Hypothesis Testing**

H0: There is no significant relation between technology and digital marketing.

H1: There is significant relation between technology and digital marketing.

Criteria: Age of the respondents

Table 5  
ANOVA results for age of respondents

		Sum of Squares	Df	Mean Square	F	Sig.
Do you prefer digital marketing over traditional marketing?	Between Groups	5.631	4	1.408	9.757	.000
	Within Groups	14.427	100	.144		
	Total	20.057	104			
Do you feel digital marketing is more effective than traditional marketing?	Between Groups	28.107	4	7.027	9.596	.000
	Within Groups	73.226	100	.732		
	Total	101.333	104			
Do you think the present infrastructure in our country supports digital marketing?	Between Groups	28.447	4	7.112	6.698	.000
	Within Groups	106.182	100	1.062		
	Total	134.629	104			
Do you think the infrastructure should be improved so as to support digital marketing?	Between Groups	34.934	4	8.734	9.972	.000
	Within Groups	87.580	100	.876		
	Total	122.514	104			
Do you think improving the infrastructure is one of the major reasons why digital marketing is a success?	Between Groups	29.884	4	7.471	7.178	.000
	Within Groups	104.078	100	1.041		
	Total	133.962	104			

Based on Table 5, H0 is rejected as technology does affect digital marketing. as the level of significance is less than

0.05, which means that there is a relation between technology and digital marketing with reference to age groups.

Criteria: Marital status of the respondents

Table 6  
ANOVA results for marital status of respondents

		Sum of Squares	Df	Mean Square	F	Sig.
Do you prefer digital marketing over traditional marketing?	Between Groups	2.534	1	2.534	14.896	.000
	Within Groups	17.523	103	.170		
	Total	20.057	104			
Do you feel digital marketing is more effective than traditional marketing?	Between Groups	10.821	1	10.821	12.314	.001
	Within Groups	90.512	103	.879		
	Total	101.333	104			
Do you think the present infrastructure in our country supports digital marketing?	Between Groups	24.990	1	24.990	23.476	.000
	Within Groups	109.639	103	1.064		
	Total	134.629	104			
Do you think the infrastructure should be improved so as to support digital marketing?	Between Groups	9.223	1	9.223	8.385	.005
	Within Groups	113.291	103	1.100		
	Total	122.514	104			
Do you think improving the infrastructure is one of the major reasons why digital marketing is a success?	Between Groups	9.656	1	9.656	8.001	.006
	Within Groups	124.306	103	1.207		
	Total	133.962	104			

In Table 6, H0 is rejected. Technology does affect digital marketing, as the level of significance is less than 0.05 which means that there is relation between technology and digital marketing irrespective of their marital status.

**Using Cross Tabs to Support Hypothesis**

Gender of the respondents \*Do you prefer digital marketing over traditional marketing?

Table 7  
Cross tabulation count

	Do you prefer digital marketing over traditional marketing?			
	1	2	Total	
Gender of respondents	1	31	19	50
	2	47	8	55
Total		78	27	105

Table 7 shows that both males and females prefer digital over traditional marketing. Out of 105 respondents, 78 people prefer digital marketing which is almost 75% of the sample.

Hence, null hypothesis is rejected as it's been proven that there is a significant relationship between technology and digital marketing.

**Hypothesis 2:**

H0: There is no significant relation between social factors and digital marketing.

H1: There is significant relation between social factors and digital marketing.

Criteria: Age

**ANOVA**

Do you think digital marketing has made the life of working women and husbands easier?

Table 8  
*Relation of digital marketing with social factors*

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	46.188	4	11.547	16.309	.000
Within Groups	70.802	100	.708		
Total	116.990	104			

In Table 8, H0 is rejected as the significance level is less than 0.05. This proves that digital marketing is related to social factors like age of the prospective customers.

**ANOVA**

Do you think digital marketing has made the life of working women and husbands easier?

Criteria: Marital status

Table 9  
*ANOVA of digital marketing with social factors*

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5.168	1	5.168	4.760	.031
Within Groups	111.822	103	1.086		
Total	116.990	104			

In Table 9, H0 is rejected as the significance level is less than 0.05, which proves that digital marketing is related to marital status of the prospective customers.

**Using Cross Tabs to Support Hypothesis**

Do you think digital marketing has made the life of working women and husbands easier?\*

Table 10  
*Gender of the respondents cross tabulation count*

	Gender of the respondents			Total
	1	2		
Do you think digital marketing has made the life of working women and house husbands easier?	1	8	13	21
	2	23	31	54
	3	12	5	17
	4	4	2	6
	5	3	4	7
Total	50	55		105

Table 10 shows that 31 out of 50 males think that digital marketing has been helpful to working women and house husbands in running their homes. Among females, 44 out of 55 feel positive about this.

the respondents agree to the statement that digital marketing has helped working women and house husbands.

Here, H0 is rejected through cross tabulation; male or female majority of

Do you think digital marketing has made the life of working women and house husbands easier?\*

Table 11  
*Age of respondents cross tabulation count*

	Age of respondents					Total	
	1	2	3	4	5		
Do you think digital marketing has made the life of working women and house husbands easier?	1	0	15	5	1	0	21
	2	1	37	11	5	0	54
	3	0	8	2	6	1	17
	4	0	2	1	3	0	6
	5	2	0	0	2	3	7
Total	3	62	19	17	4		105

Here too, H0 is rejected as cross tabulation shows that within the age group of 15-45, the majority agree with the statement that was asked in the question.

Do you think digital marketing has made the life of working women and house husbands easier?\*

Table 12  
Cross tabulation count of marital status of respondents

		Marital status of the respondent?		
		1	2	Total
Do you think digital marketing has made the life of working women and house husbands easier?	1	16	5	21
	2	38	16	54
	3	9	8	17
	4	3	3	6
	5	3	4	7
Total		69	36	105

Here in Table 12, H0 is rejected, as both married or single groups feel that digital marketing has helped house husbands and working women. Therefore, there is a relation between social factors and digital marketing.

Gender of the respondents \* Do you feel digital marketing is more effective than traditional marketing?

Table 13  
Cross tabulation count of effectiveness

		Do you feel digital marketing is more effective than traditional marketing?					Total
		1	2	3	4	5	
Gender of respondents	1	8	18	15	5	4	50
	2	11	30	11	3	0	55
Total		19	48	26	8	4	105

Here H0 is rejected as majority of the sample agrees with the statement.

rejected as there is a significant relation between social factors and digital marketing.

Hence, through Anova and cross tabulation analysis, the null hypothesis is

## CONCLUSION

From the analysis of the data collected, it is clear that there is a relation between technology and digital marketing and social factors and digital marketing. Majority of the respondents are aware about the concept of digital marketing, which has proven helpful during the demonetization phase. However, respondents are still a little apprehensive about digital marketing. They have accepted digital marketing because of its ease, mobility, variety of products available and competitive prices that it offers.

The majority of the respondents have their presence on social media platforms like Facebook, Instagram, and Youtube, which are a useful consumer base. More than 50% of the sample spend more than two hours surfing the Internet. The sample mainly rely on online media to gather information about the products which they are interested in buying. The data shows that the respondents prefer both online and offline shopping, instead of just one. Respondents still give less preference to online reviews about products. The major factors that affect digital marketing are technology, target market, content, budget, and channels of medium.

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## **Consumer Awareness of Digital Payment with Special Reference to the Village Area**

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### **ABSTRACT**

The paper bargains the customers' recognition towards digital payment identified with customers' mindfulness towards digital payment with unique reference to the area of South Delhi. This research paper begins with the prospect of expanding the pattern of digital payment to the general public. The investigation found that 58% of the aggregate respondents need to utilise computerised installment choice in future too. Added to that, it turned out that 47% of the aggregate respondents said that they have a dread of spillage of certifications while utilising diverse installment modes. The research report depends on essential information. Hence, it is inferred that the vast majority of bank clients know about the benefits of saving money benefits in the zone of PulPehladpur, South Delhi.

*Keywords:* Consumer awareness, digital payment, respondents

### **INTRODUCTION**

Technological achievements and administrative changes of the previous decades have conveyed installment media

to the cutting edge of business, social and political intrigue. There is proof to trust that money is gradually leaving. The time of 2015 checked yet abatement in the measure of banknotes and coins available for use worldwide. In any case, the fame of Electronic Money Transfer Systems (EMTS) is not the same in all nations. Though electronic payment options are becoming more popular day by day due to advancements in security and introduction of electronic wallets (Katis, 2003, Shin, 2009), there are social orders which think that it is

#### **ARTICLE INFO**

*Article history:*

Received: 14 July 2017

Accepted: 30 November 2017

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difficult to grasp the better approaches for installment and resort to money for their everyday exchanges. The popularity of debit and credit card has completely changed the way individuals pay for products and ventures. New installment instruments, for example, smart cards and those implanted in cell phones, are entering the business, which are more computerised and less tangible. The new payment media additionally hold a guarantee to improve the entrance of the poorest to fundamental money related administrations. Be that as it may, the improvement is not free of concerns. Regardless of the extent of advantages and worries from the digitalisation of cash, it appears to rely upon the dissemination of new payment media. Monetary history is loaded with cases where new payment media have taken off just gradually if by any means. It is not known what hampers the reception of these monetary developments, quite on account of an absence of precise proof.

According to Mantel (2000), there are two general, correlative theories of how new products are embraced. The first theory, the new product diffusion model, assumes that the essential determinant of new item reception is the time it takes shoppers to find out about an item, to explore different avenues regarding it, and to utilise it. This theory assumes that customers see another item or administration as a reasonable and significant substitute for past items or administrations and that dangers related with trial can be overseen by some mix of customers, merchants, and makers. As

indicated by the new item dissemination display, if customers see the new item to be a substitute for an item they are currently utilising and can comprehend it, suppliers can all the more effectively use existing conveyance and correspondences channels to produce mindfulness and interest for advancement.

The second theory, new market development model, proposes that another item without anyone else's input will have constrained market potential. With the specific end goal to achieve mass shopper markets, firms need to offer extra item components, improve the potential framework, fit the item to new client fragments and additionally to new uses, hence, making items interoperable. Under this theory, new items are presented and advance, new elements are included, and after some time the item achieves a mass and develop the phase of acknowledgment.

The first recommends an overwhelming spotlight on building mindfulness and trial while the second proposes organised acquaintance of new item highlights with new and diverse client fragments. Accordingly, it is fundamental to survey whether shoppers see new installment developments to be substitutes for past items or whether new advancements are seen on a very basic level where new items require altogether more assets to advance reception.

Customer mindfulness was focused in the utilisation of advanced installment. The motivation behind this paper is to explore buyer demeanors towards both trade and cashless payments in South Delhi (in the

state of Delhi, India). Thusly, the author might want to recognize what the principle difficulties of receiving the alternative payment techniques among local individuals are.

### **Review of Literature**

Howard and Moore (1982) stressed that for appropriation of an item or to know its benefits, buyers must become aware of the new brand. Subsequently, a vital specification for any adoption of inventive services or goods is to maintain mindfulness among purchasers about the services or products.

Gefen and Straub (1997) clarified that gender has not been found to directly affect reception of innovation when all is said in general (yet men and women seem to have distinctive acknowledgment rates of particular PC technology, with men more inclined to embrace technology).

Lee and Lee (2000) found that for direct bill payment, minorities were less inclined to effectively receive the innovation. Increments in pay and instruction have a tendency to be emphatically identified with the selection of advancement.

Barnes and Corbitt (2003), and Brown, Cajee, Davies, and Stroebel (2003) said that the knowledge levels did not influence the utilisation of mobile or online banking. A research was also conducted by Karjaluoto, Mattila, and Pentto (2002) in Finland to find out the attitude of consumers towards online banking.

Calisir and Gumussoy (2008) recognised that Internet banking, ATM, and phone

banking can substitute each other. There is a probability that organisations may give more importance to one of these choices, and less significance to the others in light of the fact that the client profile of the channels is comparatively similar. Internet banking can make high progress rates through coordination with brick and mortar and bank offices in stores. brick and mortar, as Internet banking is a strong saving money channel.

Poon (2007) explored the client's reception of e-saving money benefits in Malaysia in which protection, security and accommodation components assume an imperative part in deciding the clients' acknowledgment of e-banking administrations on factors of age, training level and salary level. E-banking gives higher level of accommodation that empowers clients to get to web bank at all circumstances and spots. Aside from that, the availability of PCs is seen as a measure of relative preferred standpoint.

Hyytinen and Takalo (2009) discussed that shoppers regularly utilise various installment media and that this conduct is firmly identified with the utilisation of check cards, other than money. In addition, incidentally the usage of various payment media is specifically identified with customer mindfulness, yet, not being aware can cause its impact to slide downwards.

Amutha (2016) found that the vast majority of bank customers know about all the banking benefits in Tuticorin District of Tamil Nadu. The banks additionally need to find a way to teach the customers with

respect to the new innovation and different services that are offered.

Mantel (2000) recommended that customers should not adopt any new innovative services or products as have been proposed in the past by the banks.

Shende and Khursange (2014) expressed that a noteworthy gathering of individuals is uninformed about the services and banks need to take care of its promotional activities.

Teoh, Chong, Lin, and Chua (2013), Hoffman, Novak, and Peralta (1999) discussed that advantages, self-adequacy, and ease of use apply huge impacts on buyers' recognition towards e-installment. Nonetheless, the irrelevant outcomes acquired for trust and security ask for further examination.

Muthaiyah, Ernest, and Wai (2011) expressed that there is a prerequisite to instruct the customers of the banks, so they can have access to the services given to them and they can accomplish their satisfaction level.

## Objectives

- 1) To find out the opinion of respondents regarding the various problems of digital payment.
- 2) To study the factors that influence consumers in adoption of digital payment.
- 3) To study the challenges faced by consumers in the use of digital payment.

## Hypotheses

- H1:** There is a relationship between gender and the use of digital payment.
- H2:** There is a significant difference between age and frequency of usage.
- H3:** There is a relationship between occupation and frequency of using digital payment modes.
- H4:** There is a relationship between payment service provider and satisfaction level.
- H5:** There is a relationship between the payment service provider and the choice of using digital payment for future use.

## METHODOLOGY

### Sampling Method

This study targeted 108 respondents based on the convenience sampling technique.

### Data Used

For primary data, 108 responses were collected through sample survey. Secondary data included reading and analysing relevant research papers.

**Survey Instrument:** The survey was carried out using a self-constructed questionnaire, which is divided into two major sections. Section A comprises four questions intended to collect demographic information. Section B contains 17 statements, meant to measure the independent and dependent variables.

**Survey Location:** Pulphladpur, (a village in South Delhi)

3) Educational Qualification

**RESULTS AND DISCUSSION**

1) Age

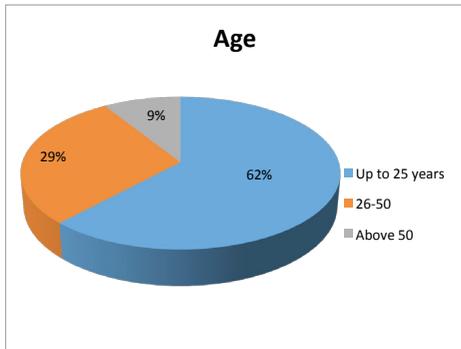


Figure 1. Age of Respondents

More responses were obtained from people under the age of 25 years. Only 9% of the respondents were above 50 years.

2) Gender

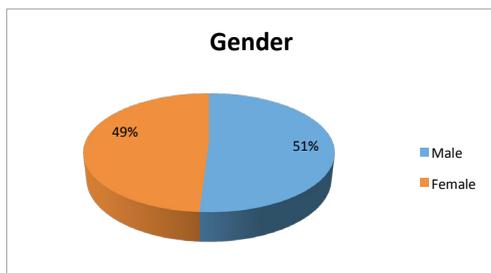


Figure 2. Gender of Respondents

Male and female respondent ratio was given equal consideration, approximately 51% and 49% respectively.

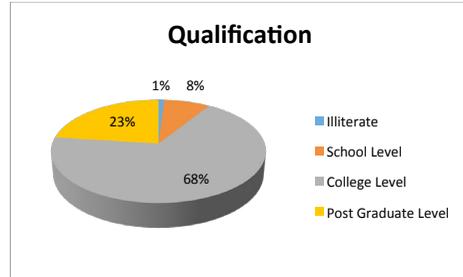


Figure 3. Qualification of Respondents

College level respondents made up 68%, the highest majority in the pie chart. PG level respondents covered 23% of the whole pie chart.

4) Occupation

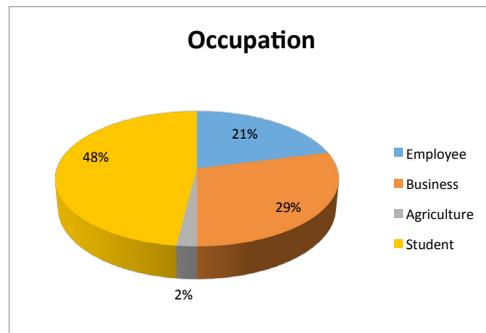


Figure 4. Profession of Respondents

Students accounted for a large percentage of 48%, while business people took 29% share of in the pie chart.

5) Do you use digital payment option for your bill payment and recharge?

Table 1  
*Usage of digital payment option*

	Numbers	Percentage (%)
Yes	102	94
No	6	6

94% of the total respondents said that they do their bill payments and recharges through digital payment options.

Table 2  
*Relation between gender and digital payment*

	Correlations	Gender	Do you use digital payment option for your bill payment and recharge
Gender	Pearson Correlation	1	.085
	Sig. (2-tailed)		.380
	N	108	108
Do you use digital payment option for your bill payment and recharge	Pearson Correlation	.085	1
	Sig. (2-tailed)	.380	
	N	108	108

The correlation between the two variables is 0.085, which is very close to 0, which means that there is a weak relationship between both variables; the significance level assumed is 0.05, while the resulted significance level is 0.380 which is greater than 0.05. This means there is no statistically significant relationship between both the variables. So the null hypothesis is accepted which says that there is no relationship between gender and the use of digital payment option. This suggests that there is no restriction of gender upon the use of digital payment. Any gender can use any digital payment mode, it is upon them to use. It is their choice to use digital payment

**Hypothesis**

H1o- There is no relationship between gender and the use of digital payment.

H1a- There is a relationship between gender and the use of digital payment.

or not. They do not take it as compulsion to use digital payment. Hence, there is no relationship between gender and types of digital payment.

- 6) Which digital payment service provider do you prefer most? (which do you use the most)

Table 3  
*Preferred service provider by respondents*

	Numbers	Percentage (%)
Free charge	17	16
Pay tm	71	66
BHIM app	14	13
UPI	6	5

66% of the total users use Paytm for their online payments such as recharges, bill payments, and others. 16% users use Freecharge for the digital payments.

32% of the respondents say that they regularly use digital payment options, 29% of the respondents say that they sometimes use it in a month.

7) What is your frequency to use digital payment option?

**Hypothesis**

H2o- There is no significant difference between age and frequency of usage.

H2a- There is a significant difference between age and frequency of usage.

Table 4  
*Frequency of usage of digital payment option*

	Numbers	Percentage (%)
Once in a week	15	14
Once in a month	27	25
Sometimes in a month	31	29
Regular in using	35	32

Table 5  
*Relationship between age and frequency of usage*

		What is your frequency to use digital payment option?			
		Once a week	Once a month	Sometimes in a month	Regular usage
Age	Up to 25 years	28	0	16	23
	26-50	10	0	10	11
	Above 50	4	0	5	1

The chi-square test is being performed between age and frequency of using digital payment option. The results are as follows:  $X^2=4.474$ ,  $df=4$ ,  $p=0.346$ . Since  $0.346 > 0.05$ , so,  $H^0$  is accepted and  $H^1$  is rejected. It can be concluded that at 5% level of significance, there is no association between age and frequency of using digital payment option. This means that age is not the basic factor for frequency of using digital payment. This explains a situation that age is does not act as a discriminating factor for the use of

digital payment. The age group of less than 25 years are more regular on digital payment modes as compared to all.

**Hypothesis**

H3o- There is no relationship between occupation and frequency of using digital payment modes.

H3a- There is a relationship between occupation and frequency of using digital payment modes.

Table 6  
*Relationship between occupation and frequency of usage*

Correlations		Occupation	What is your frequency to use digital payment option
Occupation	Pearson Correlation	1	-.002
	Sig. (2-tailed)		.984
	N	108	108
What is your frequency to use digital payment option	Pearson Correlation	-.002	1
	Sig. (2-tailed)	.984	
	N	108	108

The *r* value of the correlation is -0.002 and the resulted significance level is 0.984, which is more than the assumed significance level, 0.05. This means that there is a negative correlation between both variables. So, the null hypothesis is accepted, that is, there is no relationship between occupation and frequency of using digital payment modes; the alternative hypothesis is rejected. This statement logically means that if the level of occupation of any person rises, then the usage rate of digital payment will simultaneously decrease. This could be the reason for the level of work burden upon them.

8) Are you aware of the digital payment services provided by the bank?

Table 7  
*Awareness of digital payment services among respondents*

	Numbers	Percentage (%)
Yes	94	87
No	14	13

94% of the respondents say that they are aware of the services given by service providers.

9a) Time saving

Table 8  
*Time saving for respondents*

	Numbers	Percentage (%)
Mobile banking	38	35
Debit card	21	19
Digital wallets	11	10
Credit card	4	4
Internet banking	34	32

35% users say they feel that mobile banking is best for time saving, 32% say that Internet banking is best for time saving.

9b) Cost saving

Table 9  
*Cost saving for respondents*

	Numbers	Percentage (%)
Mobile banking	24	22
Debit card	26	24
Digital wallets	12	11
Credit card	16	15
Internet banking	30	28

28% users say that Internet banking is cost saving, 24% users say that debit card is cost saving.

9c) Easy and convenient

Table 10  
*Easy and convenient to use*

	Numbers	Percentage (%)
Mobile banking	29	27
Debit card	21	19
Digital wallets	30	28
Credit card	17	16
Internet banking	11	10

28% say that digital wallet is easy and convenient and 27% say that mobile banking is easy and convenient.

9d) Confidentiality

Table 11  
*Confidentiality in digital payment*

	Numbers	Percentage (%)
Mobile banking	30	28
Debit card	25	23
Digital wallets	29	27
Credit card	10	9
Internet banking	14	13

28% users say that mobile banking is best for confidentiality. Meanwhile, 27% users say that digital wallets are best for confidentiality.

9e) Speed

Table 12  
*Speed of processing in digital payment*

	Numbers	Percentage (%)
Mobile banking	19	18
Debit card	29	27
Digital wallets	23	21
Credit card	11	10
Internet banking	26	24

27% respondents say that debit card is the best on the factor of speed while credit card is the least on this list.

9f) Transparency

Table 13  
*Transparency in digital payment*

	Numbers	Percentage (%)
Mobile banking	26	24
Debit card	31	30
Digital wallets	7	6
Credit card	9	8
Internet banking	35	32

32% respondents say that Internet banking is good for transparency; 30% say that debit card is good for transparency.

10) What is your satisfaction level with the use of digital payment?

47% users say that they are neither satisfied nor dissatisfied.

Table 14  
*Satisfaction level with the usage of digital payment*

	Numbers	Percentage (%)
Highly dissatisfied	12	11
Dissatisfied	3	3
Neither satisfied nor dissatisfied	51	47
Highly satisfied	42	39

Table 15  
*Relationship between service provider and digital payment services*

Correlations		Which digital payment service provider you prefer most	What is your satisfaction level with the use of digital payment
Which digital payment service provider you prefer most	Pearson Correlation	1	-.103
	Sig. (2-tailed)		.288
	N	108	108
What is your satisfaction level with the use of digital payment	Pearson Correlation	-.103	1
	Sig. (2-tailed)	.288	
		108	108

The *r* value of this correlation is -0.103 and the resulted significance level is 0.288, which is more than assumed significance level, 0.05. This means that there is a negative correlation between both variables. As the number of service providers increases, the satisfaction level decreases. So, the null hypothesis is accepted, that is, there is no relationship between payment service provider and satisfaction level; alternative

**Hypothesis**

H4o- There is no relationship between payment service provider and satisfaction level.

H4a- There is a relationship between payment service provider and satisfaction level.

hypothesis is rejected. This suggests the situation that if the number of service providers increases, the level of satisfaction will automatically reduce. This could be the reason why people are not at all loyal to service providers. They are more concerned about the offers and lucrative marketing techniques, placing their own interests before the interests of the service providers.

11) Do you agree with the statement - Shopping offers and discounts provided by different merchants are effective to encourage customers to use digital payments?

Table 16  
*Offers and discounts encourage the usage of Digital payment*

	Numbers	Percentage (%)
Never	4	3
Sometimes	37	34
Depends	33	31
Yes, definitely	34	32

34% users say that some offers encourage them to use digital payment. 32% users say that every offer encourages them to use digital payment options.

12) Do you think that using digital payment option is a safe and secure option?

Table 17  
*Safety and security of digital payment*

	Numbers	Percentage (%)
Never	1	1
Sometimes	29	27
Depends	38	35
Yes, definitely	40	37

37% users say that digital payment options are safe and secure options, while 35% users believe that safety and security depend on the type of payment they are doing on any

website. The concern for security was also raised by Bürk and Pfitzmann(1989).

13) Do you think you can have access to digital payment option anywhere and anytime?

Table 18  
*Availability of digital payment*

	Numbers	Percentage (%)
Yes	84	78
No	24	22

78% respondents say that they can have access to digital payment options anywhere and anytime.

14) What factor is the most critical while using digital payment services? (choose one which is most important to you)

Table 19  
*Difficulties in using digital payment*

	Numbers	Percentage (%)
Risky	24	22
Less knowledge	31	29
High fees	15	14
Complex to use	38	35

35% respondents say that while using digital payment options, they face difficulty of complexity. 29% respondents say that less knowledge about that option is also the most important difficulty they face.

15) To what extent do you agree with each of the following statements?

Table 20  
*Digital payment vs cash payment*

	Numbers	Percentage (%)
Digital payment is one of best methods of payment	23	21
Digital payment can substitute cash based system	75	71
Digital payment is not necessary	10	8

71% respondents say that digital payment system can be the best substitute for cash based system.

16) What is your opinion on the following options?

Table 21  
*Cost effectiveness of digital payment*

	Numbers	Percentage (%)
Digital payment option is costly	13	12
Digital payment option is cost effective	95	88

88% respondents say that digital payment option is a cost effective option for doing online payment.

17) Do you think that data connection is a barrier for the use of digital payment?

Table 22  
*Role of data connection in using digital payment*

	Numbers	Percentage (%)
Yes	39	36
No	8	7
Maybe	61	57

57% respondents say that data connection can be a barrier in the usage of digital payment option. 36% respondents say that data connection is a hurdle for usage of digital payment.

18) What are the challenges you face when using digital payment mode? (choose one which is most important to you)

Table 23  
*Challenges while using digital payment*

	Numbers	Percentage (%)
Not secure and safe	5	5
Fear of leakage of credentials	51	47
Internet connection is a must	30	28
May not get reimbursement if I cancel the order	22	20

47% of the respondents say that while using digital payment option they have fear of

leakage of credentials and 28% respondents say that Internet connection is a challenge for them to use digital payment.

19) Are security and safety of funds the bases for preference for digital payment system?

Table 24  
*Role of safety and security in using digital payment*

	Numbers	Percentage (%)
Yes	91	84
No	17	16

84% respondents say that security and safety of funds while transacting the funds are the bases of preference for digital payment system.

20) Do you think the failure of digital payment system affects the usability of digital system?

Table 25  
*Role of failure in using digital payment*

	Numbers	Percentage (%)
Never	4	4
Sometimes	26	24
Depends	50	46
Always	28	26

46% say that usability of digital payment system is dependent upon the type of failures of digital payment system.

21) What is your choice for using digital payment system for future use?

Table 26  
*Choice of using digital payment for future*

	Numbers	Percentage (%)
Definitely no	4	4
Not likely	12	11
Very likely	29	27
Yes definitely	63	58

58% respondents say that they will definitely continue to use the digital payment options in future.

**Hypothesis**

H5o- There is no relationship between the payment service provider and the choice of using digital payment for future use.

H5a- There is a relationship between the payment service provider and the choice of using digital payment for future use.

Table 27  
*Relationship between service provider and digital payment*

Correlations		Which digital payment service provider you prefer most	What is your choice for using the digital payment system for future use
Which digital payment service provider you prefer most	Pearson Correlation	1	.133
	Sig. (2-tailed)		.170
	N	108	108
What is your choice for using the digital payment system for future use	Pearson Correlation	.133	1
	Sig. (2-tailed)	.170	
	N	108	108

The correlation between the two variables is 0.133, which is very close to 0, which means that there is a weak relationship between both variables. The significance level assumed is 0.05 and the resulted significance level is 0.170, which is greater than 0.0. This proves that there is no statistically significant relationship between these two variables. So, the null hypotheses is accepted, that is, there is no relationship between the payment service provider and the choice of using digital payment for future use. This suggests that an increase in the number of service providers will increase usage rate in future, but at a comparatively slow rate. This could be the reason for the fact that when the number of service providers increases, the usage rate will also increase but gets distributed in various parts into numbers of service providers.

**CONCLUSION**

This paper was initially motivated by the thought of cashless society. The review started with an examination of the current literature, with a specific accentuation on

the inductions of customer recognitions and socio economic variables. The examination upon this exploration led to quantitative research, which helped to gather data from various respondents with regard to the statistical questions and enquiries identified. The respondents’ thoughts towards advanced payment framework were probed. The end goal was to know customer mindfulness towards advanced payment framework and alongside the variables that influence the use of computerised payment framework.

The respondents were requested to rank the distinctive computerised payment system techniques’ correlation with diverse elements, for example, time or cost, which gave respondents the most ideal alternative for advanced payment, that is mobile banking.

With a specific end goal to accomplish the objectives of this research, author assumed some of the hypotheses. In an effort of gathering responses from all the 108 respondents, the hypotheses were tested. Chi-square and correlation strategy tests were used to test the various hypotheses.

In this review, the author assumed some hypotheses. For example in the hypothesis that there is a significant relationship between the age and frequency of usage, the results showed that there is no relationship between age and frequency of usage. This could be the reason that age is not the discriminating factor for usage of digital payment and people of different age groups can use any of the digital payment options with more trust.

Another hypothesis was that there is a connection between gender and frequency of usage. However, results indicate that there is no association between gender and frequency of usage. This says that different genders are not loyal to the usage of different digital payment modes.

Another hypothesis that the author took is that there is a connection between the payment service provider and the choice of using digital payment for future use. In this regard, it was found that there is no connection between the payment service provider and the choice of using digital payment for future use. This could be the reason for the fact that as the number of service providers increases, the choice of usage gets distributed among all service providers.

Finally, another hypothesis which was assumed is that there is a connection between occupation and frequency of using digital payment modes. In this analysis, it was found that there is no connection between occupation and frequency of using digital payment modes. This could be the

reason that occupation does not show the level of usage of digital payment modes. The level of usage can be attained by different service providers by building trust in their hearts.

In conclusion, it can be said that the scope of cashless society is expanding in today's reality and digital payment is one the segments of cashless society whose degree is expanding progressively.

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## **Intercultural Communication among the Local Elites in Indonesia (A Study in Banten Province)**

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### **ABSTRACT**

Research on intercultural communication with respect to cultural differences in an ethnic group has rarely been undertaken. Thus, this study is proposes a communication model among elites (namely ulamaks) in Menes district, Banten province, Indonesia using Goffman's (1974) dramaturgy theory. Data was obtained from 24 informants from the district of Menes-Banten based on interviews, observation and documents. Findings show that Goffman's *impression management* theory cannot be fully accepted, particularly ulama's impression management model.

*Keywords:* Intercultural communication, local elites, impression management, Indonesia

### **INTRODUCTION**

#### **Background**

Intercultural communication includes interracial, interethnic, and international communication (Rich, 1974; Samovar, Porter, & Jain, 1981). Numerous studies have explored patterns of interracial, interethnic, and international communication (Lu

& Hsu, 2008; Chitty, 2010; Sharifian, 2010; Panggabean, Murniatia & Tjitra, 2012). For instance, Lu and Hsu, (2008) studied interracial communication between Chinese and Americans in relation to their willingness to communicate. Sharifian (2010) studied interethnic communication between aboriginals and non-aboriginals in Australia ethnic groups while Panggabean, Murniatia and Tjitra (2012) examined interracial communication among Chinese, Indonesian, and Singaporeans in relation to work competencies. Chitty (2010) on the other hand, did the mapping of international communication in Asia.

#### **ARTICLE INFO**

*Article history:*

Received: 01 March 2016

Accepted: 08 September 2017

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However, very few studies focused on intercultural communication between different cultures within the same ethnic groups. Saied, Reza, Ameli, and Hamideh Molaei (2010) studied intra ethnic communication between Syiah and Sunnis in Iran. Ma (1999) examined intra-ethnic non-verbal communication and found that non-verbal communication plays an important role in intra-ethnic communication. This study was therefore, intended to examine intra-ethnic or intra-cultural communication among the Sundanese in South Banten, Indonesia with particular attention on verbal and non-verbal communication among *jawara* (powerful free men), *ulama* (Moslem clerics) and *umaro* (government officers). The study was based on impression management theory of Erving Goffman.

*Jawara*, *ulama*, and *umaro* in Banten (Indonesia) are local elites who have significant influence in the society. *Ulama* refers to an individual with adequate Islamic knowledge and is regarded as the primary source of society regarding various social problems. *Jawara* is acknowledged as having knowledge in community martial arts (*silat*). His role is to prevent chaos and disharmony among the Banten ethnic group while *Umaro* is a government officer whose major role is to oversee the community in the region of Banten. The *ulama*, *jawara* and *umaro* are mutually dependent on each other namely having a symbiotic relationship in the social construct and culture of Bantenesese ethnic groups (Dewi, 2003: 243).

Although *ulama*, *jawara*, and *umaro* support each other, they often live in less harmonious situation mainly due to their different roles and interests. *Ulamas* are very strict in their religious tradition *Jawara* (who is not *jawara-ulama* type) has long been much influenced by a feudal system of indigenous leadership. This often leads to a serious conflict of interests among the *jawara* and *ulama*. On one hand, *jawara* is concerned with customs or feudal traditions which are influenced by Hindu culture. On the other hand, *ulama*, tries to erode the influence of Hindu teaching (Sunatra, 1997: 125). According to Nugraha (2006):

*In the next development, especially ulamas, they became separate groups, and as if it has different schools. As the time goes by further change the image of jawara who used called as patriot to be people who simply sell muscle. Crime and hugger even attached. Even at local politics as direct elections of regional heads are rampant, jawara are mobilized by certain candidate as pollsters.*

The *Umaro* is often viewed by other elites, *ulama* and *jawara*, as a source of potential conflict in society as their mission or message are sometimes considered as not in line with the expectations of society.

Sunatra (1997: 124) states that *ulama*, *jawara*, and *umaro* in Menes-Banten have become an important feature of

complementary leadership, but, they also lead to potential conflicts. The conflict is also due to communication problem between them, such as perceptions, prejudices, and so forth. In addition, the differences in cultural backgrounds, values, norms, attitudes, and ways of life among them can lead to potential conflicts.

Menes was chosen as the study area of the current research because it is known for its Islamic education as well as being the home town for famous. Menes, since the turn of the 19<sup>th</sup> century, has become one of the centres of Islamic education and for protesting against colonialism.

### Research Framework

The communication pattern or the impression management between ulama, jawara, and umaro in Menes, Banten, the focus of this study, was explored on the basis of Goffman's theory of Dramaturgis. The impression management, the process by which people control communications with others, plays an important role in interpersonal behaviour (Leary & Kowalski, 1990:34). Goffman (1974:32) believes that human social life can be divided into "front area" and the "back area". The front area refers to social events that allow individuals play a formal role as an actor, in front of an audience. The front area is described by Goffman as the following:

*that part of individual's performance which regularly functions in a general and fixed fashion to define the situation for those who observe*

*the performance. Front, then, is the expressive equipment of a standard kind intentionally or unwittingly employed by the individual during his performance (Goffman, 1974: 32).*

The back area refers to places and events that allow people to prepare for their role in the front area. This area is like a player behind the stage (back stage) or a dressing room where performers relax, prepare or practise to play a role in front of the stage (front stage) (Goffman, 1974: 114). The front stage is different from the back stage. Behind the stage is a place that contains discussion dealing with human behaviour in terms of whether to use harsh or vulgar words, sexual comments, sitting and standing recklessly, smoking and dressing casually, using regional dialect or language, ranting or screaming, acting aggressive and joking, humming, whistling, chewing gum, burping, etc. (Mulyana, 2001: 115). The front stage is an area where the actors manipulate or use masks in their appearance, while the back of the stage is where the actors behave like themselves without feeling the need to portray a front. Goffman says that the front stage must be set in the form of physical landscape such as chairs, decorations, and a variety of other backgrounds based on the interests of actors (Goffman, 1974:32). In relation to a setting, the front manifests in appearance and style (manner). Appearances include various types of good values that we introduce to the social status of actors (e.g., white robes for

doctors). The style on the other hand relates to what kind role the actors are expected to play in certain situations such as using physical force and having a certain attitude., Goffman explain:

*Appearance may be taken to refer to those stimuli which function at the time to tell us of the performer's social statuses. These stimuli also tell us of the individual's temporary ritual state: that is, whether he is engaging in formal social activity, work, or informal recreation; whether or not he is celebrating a new phase in the season cycle or in his life-cycle. Manner may be taken to refer to those stimuli which functions at the time to warn us of the interactions role the performer will expect to play in the oncoming situation (Goffman, 1974: 34-35).*

Communication behaviour or impression management is coloured by perceptions and prejudices of local *ulama* elites, *jawara* and *umaro* based on Goffman's theory. The theory describes how they interact, view, manage prejudices and communicate with each other.

**METHODS**

**Approaches and Methods**

The research approach of the current study is interpretive, phenomenological and naturalistic. It focuses on the meaning,

motives, background, rationality, and interrelationships(Creswell, 2002:136; 1997; 14) and its meaning is based on a social phenomenon (Verstehen).

**Data Collection Procedures**

The subjects were determined using purposive sampling. There were 24 informants, comprising three ethnic groups: *Ulama*, *Jawara*, and *Umaro*, each represented by 8 informants. Data was collected through interviews, observation and literature review related to the research problem. Triangulation technique was used to examine data based on the inter-subjective interpretation among *jawara*, *ulama*, and *umaro*.

Creswell's "a data collection circle" (Creswell, 1988:110) was adopted; the Creswell Model is outlined below:

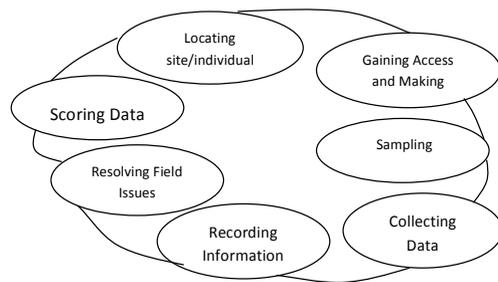


Figure 1. A data collection circle  
Source. Creswell, 1988:110

The circle model of data collection as shown in Figure 1 indicates that the steps support each other. Creswell suggests determination of the place or the individual (*Locating site or an individual*) is the first step.

**Method of Data Analysis**

The qualitative data in this study are statements, symptoms and non-verbal actions. Data analysis is performed simultaneously, namely data reduction, data display, and drawing conclusion or verification.

The researcher used a matrix of texts, graphs, and charts on the network side of the narrative text. Conclusions made in this study are verified during the research process. Verification in the form of a review or re-think of the field notes was done carefully and it took a long time to develop inter-subjective agreement. Validity test confirmed the reliability of data (Alwasilah, 2003:169).

To test the validity (credibility or validity of data), this research followed procedures as suggested by Alwasilah (2003:175-190)

To maintain reliability or trustworthiness, an audit trail was also done so the results of the study are valid.

**RESULTS AND DISCUSSION**

In this section Impression Management among the elites, *ulama*, *jawara*, and *umaro* in Menes, is discussed.

**Impression Management Model**

The communication of *jawara* with their community members and outsiders as well as with other elites such as *ulama* and *umaro* can be viewed as two different communication events. The first is back stage, while the second is front stage. When *jawara* communicates both with *ulama* and *umaro* it is classified as the front stage because of what they display when communicating with others is different compared with members of their own which can be seen as back stage. Based on participants' observation and references to Gofman's theory, the communication management model of communication of *jawara* with *ulama* and *umaro* can be described as below:

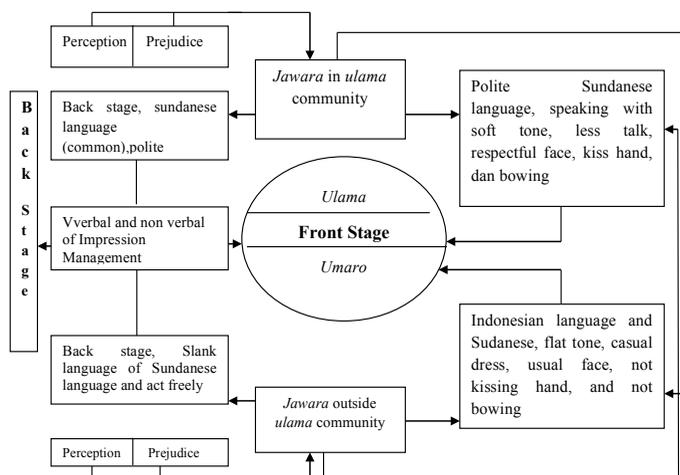


Figure 2. Impression Management Model of *Jawara*'s Communication with *Ulama* and *Umoro*

The model illustrates *jawara*'s communication with the *ulama* community, and outside both verbally and nonverbally. They speak the dialect of Sundanese Banten relatively "smooth with soft tones and a little talk with facial expression indicating respect (bending the face and body), and kiss the hands of *ulama*. However, they communicate with *umaro* in the Indonesian language, which is occasionally mixed with Sundanese language especially in official places such as village offices or district offices. They speak in a flat tone, and a facial expression indicating less respect. They neither kiss the hand nor bow. Interview with three *jawara* informants showed that the *Jawara* tended to speak more politely with *ulama* than they did with *umaro*. They regard the *ulama* as a role model in terms of attitude. This is an excerpt of their interview.

*Jawara* say to *ulama*: "Kumaha damang abah?"

*Jawara* say to *umaro*: "Apa kabar pak?"

The dialogue above indicates that the first greeting (in Sundanese) by *jawara* to *ulama* is more polite rather than second greeting (in Indonesian). (Interview 2015).

Impression management by *jawara* and *ulama* differ significantly from that initiated by *jawara* with a village head or a district head. This is due mainly to the *jawara*'s different perceptions and prejudice of the two groups of elites, *ulama* and *umaro*. *Ulama* were perceived by *jawara* as higher than both *jawara* and *umaro* as having higher social status, roles, and position in the

society. (Goffman, 1951: 294). The *jawara* regard *ulama* as a community builder and being a honourable person, while they perceive *umaro* as being venal. As a result, *jawara* generally speak politely using Sundanese language and sometimes switch to the Indonesian language with an ordinary tone of voice, not flat intonation, and speak slowly when they talk to the *ulama*. Unlike when speaking with *ulama*, *jawara* tended to speak with a patronizing tone, and with a lot of interruptions when talking with *umaro*, i.e., a village leader. However, they speak with more respect to *umaro*, particularly with those high ranking officers with a higher level of education such as when speaking with district heads compared with a village head. Fisher (1994: 57-60) suggests that experience, and socio-cultural factors, such as, educational level, occupation, social status and even psychological factors such as motivation, expectation, emotion affect social perceptions and behaviours are at play in this kind of situations. Even the nostalgia factor, a social emotion, has relevance to intergroup perception, in particular to prejudicial reactions (Cheung, Sedikides, Wildschut, 2017:96). This has coloured the communication behaviour of *jawara* both verbally and nonverbally. According to Moss and Tubb (2001: 56) and Rich (1974: 34), perception colours the behaviour of one's communication. Kartika (2016) explains that perception greatly influences personal or community behaviour in Indonesian society.

Communication events between *jawara* and the *ulama* and *umaro* indicate a different

ways communication between the different elite groups. They communicate using harsh language that is abusive (impolite Sudanese language), with a high intonation of voice or in a high pitch, interrupting each other, pointing their fists, hands on their hips, and sometimes even talking indecently. They also often a gossip about each other, irrespective of their social status or position in the society.

Although the *jawara* is perceived as not having good manners, the senior *jawara* is always respected by the junior. This is seen in the way they speak with each other. Juniors tend not to speak too roughly, loudly, or in a high pitch voice, and do not interject each other during a conversation. They avoid sitting before their senior *jawara*, particularly those with higher position in society, such as the head of the association of swordsman or another chairman of *Jawara*. They kiss the hand of the senior *jawara* as they do with the

*ulama*. *Jawara* who are subordinates tend to perform Impression Management when communicating with their seniors.

**Model of Impression Management in Communications of *Umaro* Against *Jawara* and *Ulama***

The communication between *umaro* and outsiders and communication with other elites, both *ulama* and *jawara*, has two different components, namely back stage and front stage.

When the *umaro* is communicating with *ulama* and *Jawara* it considered as the second stage, because of what is shown (the performance) them when communicating with other parties. This is in contrast with the *umaro* communicating among themselves, which in this study, is considered as back stage. Thus, the impression management model of communication of *umaro* vis a vis the *jawara* and *ulama* can be described below:

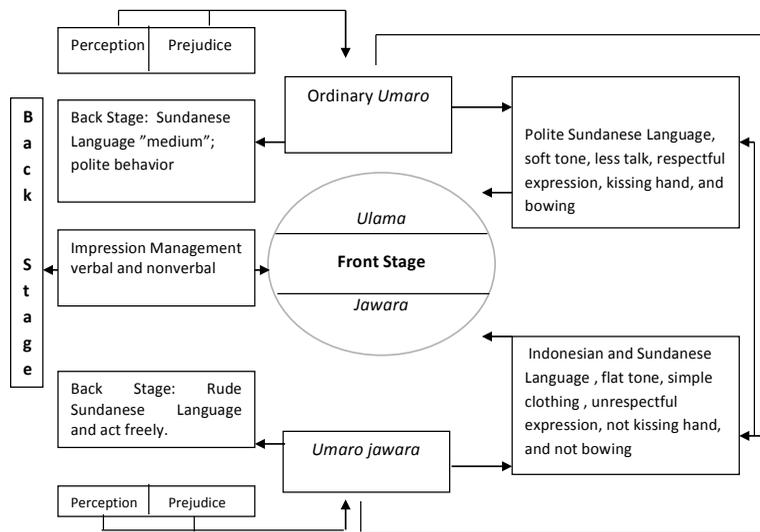


Figure 3. Impression Management Model of Communication of *Umaro* against *Jawara* and *Ulama*

Among the *ulama*, *umaro* as well as *jawara* - as depicted in the model, they speak politely in informal situations. In their homes, *ulama*, *umaro* and *jawara* generally use Sundanese Banten dialect and with respectful expression, bowed action, and kissing the hand of the *ulama*, especially a senior *ulama*. While in formal situations, such as meetings at the village or the district, the *umaro* generally speak in Indonesian, although sometimes he occasionally mixes it with Sundanese language. Like the *jawara*, the *umaro* speaks in Sundanese language instead of Indonesian when communicating with *ulama*. This is a reflection of their closeness and respect.

The reason for different communication style with regards to the *ulama* is that in the perception of *umaro*, they are more respectable than *jawara*. *Ulama*, especially senior or elderly *ulama*, must be respected. Their homage to *ulama* is coloured by their beliefs and worldview of *umaro*. The *Ulama* is considered as *Warosatul Anbiya* (heir to the prophet). This is the reason that is why they must be respected. When meeting with *ulama* such as, a in religious ceremony, *umaro* generally wearing black kopiah or a pilgrimage kopiah, in order to be presentable.

*Umaro* has different communication behaviour or impression management when they meet the *jawara* and *ulama*. They wear plain Indonesian clothes and speak in Sundanese in a monotone, and use expressions of disrespect, without kissing hand, and bowing when meeting with *jawara*. On the other, *umaro* do not

use Indonesian but rather Sundanese as mother tongue. It is supported by data from interview with two informants (*umaro*). Using Sundanese as mother tongue to *ulama* is intended to be more polite and presentable (interview 2015). This points to the distinction of treatment between *ulama* and *jawara* by *umaro*, that is, the *jawara* is viewed by *umaro* as someone who is potentially violent and commits petty crimes.

*Umaro* do not appear to respect the *jawara* because of their "bad manners or behaviours" such as, sitting and standing carelessly, long-haired, ranting, joking, teasing each other with harsh and bad language, throwing food or cigarettes, and casually dressed. The *umaro* is regarded as having a better conduct and better ethics than the ordinary Indonesians. When the *umaro* talk to each other, especially with those whose position or social status is equal such as, communication between district heads or a village head with a village head, their communication seems to be on familiar terms, far from feeling shy or awkward, as opposed to talking with outsiders. They respect not only the *ulama*, but also people in *umaro* community who have higher positions or ranks. *Umaro* is expected to be more respectful and polite when communicating with their seniors or higher government officers as they are aware of their inferior position. Under certain circumstances, the *umaro* performs Impression Management vis a vis their superiors.

### Impression Management Model in the Communication of *Ulama* With *Umaro* and *Jawara*

As with the other elites, the communication between *ulama* and their fellows, and communication with outsiders and other elites, both *umaro* and *jawara*, are considered different. Communication in the first event is classified as a back stage, while the second communication event is called

front stage. When the *ulama* communicate with both *umaro* and *jawara*, it is considered as the second stage because of what is shown (the performance). When a *ulama* communicates with others, it is characterised by unobtrusive communication. The Impression Management model in the communication of *ulama* with *umaro* and *jawara* can be described as below:

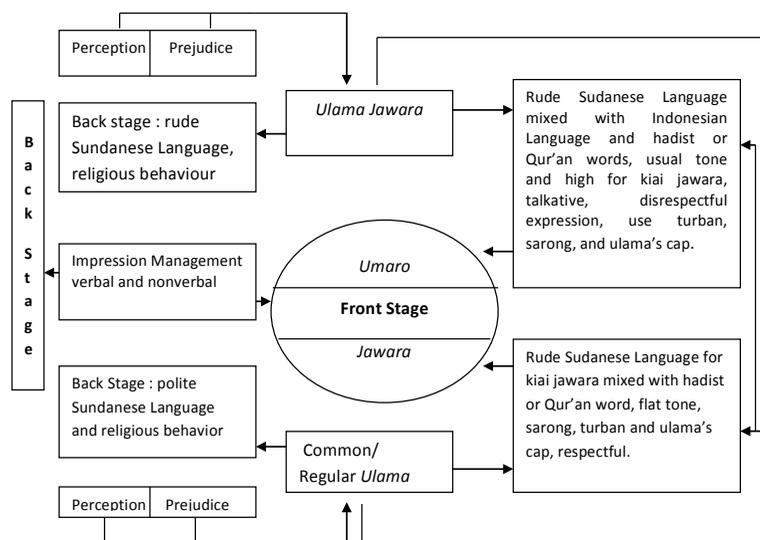


Figure 4. Impression Management Model of Communication of *Ulama* against *Jawara* and *Umaro*

With the *umaro*, as well as with other guests, generally in informal settings, such as at home, *ulama* tend to speak using the dialect of Sundanese Banten relatively “smooth”, but *ulama jawara* still use Sundanese language which is regarded as being rude. In formal situations at work, such as in an official ceremony in village or in district or other events, such as religious holidays commemoration, take

place formally where *ulama* generally communicate with *umaro* using Indonesian language, although sometimes remain intermingled with Sundanese language. When an *ulama* talk to *umaro*, he frequently cites or intersperses his speech with *Qoranic* verses or *Alhadist* for the purpose of preaching and advising *umaro*.

The *Ulama* when communicating with *umaro* and *jawara* tend to use same

management of communications. Based on the interview with three *ulama*, it was found they use Sundanese to both of two groups, *umaro* and *jawara*, in formal settings (Interview 2015). In certain circumstances, there is a different treatment of Impression Management between *umaro* and *jawara*. When an *ulama* meets either *umaro* or *jawara*, they are accustomed to wearing *koko* (moslem dress) or a long-sleeved shirt, with a *kopiah* (cap) or a pilgrim cap, and a turban. The turban is not viewed as the symbol of an *ulama* or a *Hajj*, rather, it is regarded as *Sunnah*. When the *ulama* communicate with both *umaro* and even *jawara*, they do not show respect to other groups of elites as they are used to doing that to the *ulama*. This indicates that men though regarded as equals, the treatment also varies based on their religious status .

Communication by *ulama* with other groups of elites as previously described is slightly different from that with others in their community. On the back of stage, *ulama* communicates differently with the *jawara* who has “bad” manners within their community. *Ulama* in their community appear to have better etiquette and conduct than the *jawara*. When *ulama* talk to each other, their communication is warm and pleasant and they often joke among themselves, with occasional arguments on matters related to religion. However, the jokes and debate are done respectfully, using “polite” language, This is different from the communication among the *jawara* characterised by harsh language. Under certain circumstances, on the back stage,

when students meet with their *ulama*, they use Impression Management such as, bowing and kissing their hand.

As discussed, the Impression Management of *ulama* vis a vis the *umaro* and *jawara* is similar. The difference is simply a matter of verbal Impression Management. The *Ulama* is often called *jawara baragajul*, that is, an individual with bad manners. They refer to the *umaro* as educated people. The nonverbal communication between *ulama* and *jawara* is characterised by the use of a personal space. For example, *ulama* is always seated in the front row along with *umaro* in every single social or religious event. This allows *ulama* to get closer to *umaro*. This form of familiarity suggests differences in Impression Management both verbally and nonverbally by *ulama* with regards to *umaro* and *jawara*. The differences are coloured by perceptions and prejudices of *ulama* against *umaro* and *jawara*. The *Ulama* generally has a more negative perception and prejudice against *jawara* in contrast with *umaro*. *Jawara*, in the eyes of *ulama*, is identical with those who commit violence and often breach religious rules or teachings.

## CONCLUSION

This study has shown the impression management of *jawara* vis a vis the *ulama* is more respectful than that of *jawara* towards *umaro*. The *Jawara* generally perceives *ulama* as an individual that needs to be totally respected, while *umaro* is often seen by *jawara* as a person who tends to abuse his position or power for a personal gain.

Similarly, impression management by umaro to *ulama* and *jawara* is different. On one hand, the *umaro* gives more respect to the *ulama* than to *jawara*. They perceive *ulamas* as leaders who are a role model for society and therefore, they need to be respected by the members of the ethnic group. On the other hand, *jawara* is often regarded as one who is willing to commit violence.

Impression management by *ulama* is not special in the sense that the *ulama* does not show respect to both elites of ethnic groups, *umaro* and *jawara*. In addition, quoting *Qur'an* verses and *Alhadist* is not intended to build an image that they need to be respected as *ulama*; rather, it is for the sake of missionary endeavour in order to seek blessings from God. This suggests that Goffman's theory cannot be accepted fully, as this study has proven communication is loaded with pragmatism and idealism.

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## **Estimation of Future Paddy Production and Sustainable Land Allocation in Malaysia: A Polynomial Approach**

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### **ABSTRACT**

This study examines the trend of paddy production and allocation of land for between 2014 and 2030 based on polynomial function. In order to gauge the time variance effect on sustainable land allocation for paddy production, short-term and long-term scenarios were used in estimating future paddy production and average yield. This study finds that with successive increases in the intensity of the long-term paddy productivity, the land required for paddy plantation in the future will be diminished. Additionally, the average yield per hectare explains the difference between long-term and short-term projection and emphasises the crucial need for improvement in research and development (R&D) and discovering alternative measures for domestic paddy production. Therefore, due to its increasing population, Malaysia has to ensure an efficient allocation of land for development and paddy plantation to cater to both current and future needs.

*Keywords:* Average yield per hectare, Future paddy land requirement, Food security, Paddy production, Polynomial approach, Rice demand, Sustainable paddy farming, Self-sufficiency level

### **ARTICLE INFO**

*Article history:*

Received: 07 April 2016

Accepted: 27 July 2017

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### **INTRODUCTION**

The Food and Agriculture Organization (FAO) defines food security as fulfilling the following criteria: food availability, food access, utilisation, and stability. First, food availability is defined as having sufficient quantities of food supplied through domestic production and importation. Second, food

access refers to accessibility by individuals to good quality of food. Third, utilisation means an efficient allocation of food consumption. Fourth, stability e.g. securing food for a population, households, and individuals at all times. However, the first criterion that emphasises food supply through domestic production is the main focus of this study because it directly influences the self-sufficiency level (SSL) of rice in Malaysia. This study forecasts future paddy production and land between 2014 and 2030 both short-term and long-term using the polynomial function with a high confidence level of R square compared with the traditional linear approach.

### **Paddy Production and Food Security**

Self-sufficiency level for rice refers to the ratio of rice production to rice requirements (Bala et al., 2014). However, the government's concerns over food security for the country's self-sufficiency programme focuses on paddy production. The agriculture sector was given priority in the 3<sup>rd</sup> Malaysia Plan, during which the New Economic Policy was launched. Under this policy, more land was allocated for paddy production and this led to an increase in the self-sufficient level (SSL) from 80% to 92% (Dano & Samonte, 2005). The 4<sup>th</sup> Malaysia Plan (1981-1985) emphasised on strategies and a long-term policy to develop the agriculture sector, which caused SSL to drop in 1984. However, in the 5<sup>th</sup> and 6<sup>th</sup> Malaysia Plans, the focus was on the agricultural sector in terms of modernising, urbanising, commercialising,

industrialising, and increasing participation of the private sector, which caused the SSL for paddy to slightly increase. In the 7<sup>th</sup> Malaysia Plan, the agriculture sector focused on competitive agriculture economy and Malaysia's accession to the World Trade Organisation (WTO), which gave importance to high value crops and this caused SSL for paddies to drop. In 2005, in conjunction with the 8<sup>th</sup> Malaysia Plan, the agricultural sector became modern, dynamic and competitive. Under this plan, the agriculture sector placed an importance on food production in order to meet increasing demand and achieve higher growth. In the 9<sup>th</sup> Malaysia plan, paddy production recorded higher SSL after the 1980s, whereby the agricultural sector was based on agro processing activities and increasing agriculture entrepreneurs. In the 10<sup>th</sup> Malaysia Plan, the SSL declined once again because the agriculture sector gave importance to commercial scale farming as well as farming new crops and livestock. Beside this, Malaysia lacks comparative advantage in paddy production compared with neighbouring countries, such as Thailand and Vietnam, which means the nation had to rely on imported rice to meet its' SSL (Arshad et al., 2011).

Figure 1 shows that Malaysia's population grew from 13% between 1965-1970 to 23% between 2011 and 2013 (Bala et al., 2014). However, SSL for the period between 1963 and 2013 appears to be lower than the population growth, especially during the negative period of 4<sup>th</sup> (-16.85%), 5<sup>th</sup> (-1.96%), 7<sup>th</sup> (-6.95%), and

10<sup>th</sup> (-22.22%) Malaysian Plans, with the exception of the 9<sup>th</sup> Malaysia Plan. Statistics show that despite the decline in the number of rice fields, production grew positively during the 6<sup>th</sup> (-1.15% vs 12.85%), 8<sup>th</sup> (-4.57 vs 8.10%), and 10<sup>th</sup> (-1.98% vs 6.13%) Malaysia Plans respectively. This was mainly due to increased subsidy in the form of fertiliser (Arshad et al., 2011). Arshad et al also highlighted that it was possible for Malaysia to achieve the desired 70% SSL by 2020. However, how much of the land that is required for future paddy production in regards to short-term and a long-term measure has not been addressed thus far. This knowledge is crucial in determining if Malaysia would be able to achieve the revised benchmark level of 100% SSL

by 2020 as promised by the Ministry of Agriculture, Agro-based Industry Malaysia (Bernama, May, 2015). Because SSL is the major driving force of the paddy industry in Malaysia, it places greater pressure on discovering future knowledge on paddy production both in terms of short-term and long-term measures.

The future estimation of paddy production renders most important knowledge of the required land that shall be set aside for paddy production. Since land is a finite resource, without sustainable land allocation, the increasing modernisation and agricultural land conversions appear to pose a serious threat to future paddy production and food security (Arshad et al., 2011).

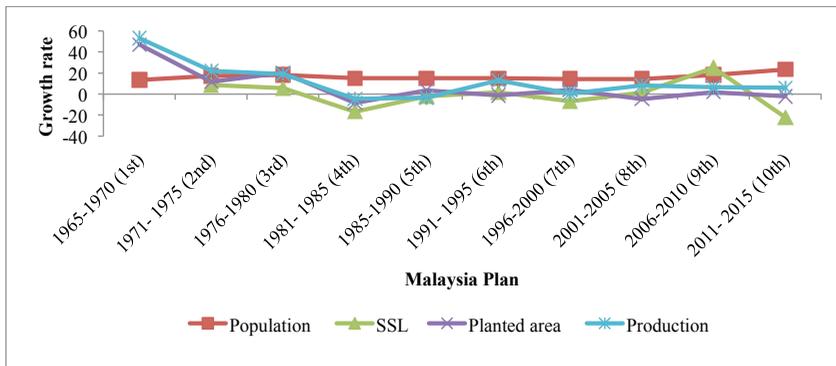


Figure 1. Self-sufficiency level of paddy and average population growth in Malaysia  
 Source. Adapted from Malaysia Plan and World Bank

Figure 2 indicates that although the average paddy yield per hectare of the paddy planted areas appeared to increase from 2500 kg/ha to 4000 kg/ha from 1963 to 2011, the 4<sup>th</sup>

Malaysian plan indicated that due to drought conditions, yield growth rate declined drastically in 1977.

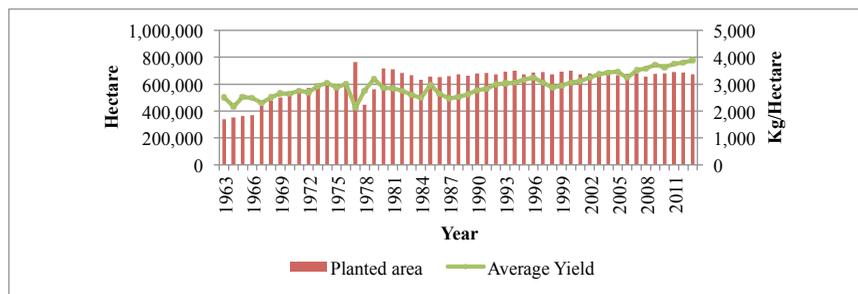


Figure 2. Paddy planted area and average yield of paddies  
Source. Department of Statistics Malaysia

The average yields per hectare were negative compared with areas planted with paddy between 1977 and 2002. The positive yield growth rate was only apparent from 1963 to 1969, 1978 to 1979, and 2007 to 2011. Nevertheless, the positive yield growth rates between 2007 and 2011 (Figure 2) were still unable to accommodate the rapid need of the population during that same period (Figure 1). However, achieving self-sufficiency level is not easy due to several external factors, such as the use of fertiliser technology, labour resources, climate change, and other macroeconomic factors (Arshad et al., 2011, Ismail & Omar, 2008). Since paddy production is related to SSL, a simulation projection is essential to plan for future sustainability of rice production and food safety in Malaysia. Therefore, the main aim of this study was to estimate the future land requirement for paddy production by forecasting future production and average yield per hectare.

## MATERIALS AND METHOD

The polynomial approach is generally an alternative to regression model, which is

highly useful in predicting the unknown non-linear value of dependent variable in response to the known value of the independent variable. Regression models are usually used to study the relationship between variables and not specifically related to forecasting. However, the polynomial models with successive power terms are often the best flexible curve fitting technique (Ostertagova, 2012). The application of polynomial forecast was used in petroleum production to forecast oil and gas consumption in Malaysia (Rahim & Liwan, 2012).

This study also employs the same method and uses second degree polynomial as an appropriate alternative measurement tool in estimating paddy production trend between 1963 and 2013. Indeed, not many focused on forecasting future paddy production growth, except for several studies on population growth and food security (Arshad et al., 2007; Paul, 2013). Using population growth data, Paul (2013) estimated that by 2050, the demand for rice in Malaysia would increase to 825%. In another study, the policy implication on

rice production was discussed using a linear trend analysis from 1985 to 2006 (Arshad et al., 2007). A study by Sivapathasundram and Bogahawatte (2012) used Autoregressive Integrated Moving Average (ARIMA) to forecast paddy production in Sri Lanka. Although they had pointed to the importance of meeting growing demand, they did not address the fundamental requirement in sustainable land allocation for future production. Using time series data provided by the Department of Statistic, this study utilised paddy production data from 1963 to 2013 to predict future paddy production for the short-term and long-term. This study shows that the time effect plays an important role in the sustainable land allocation for paddy production as agricultural output is often time-dependant. McConnel and Dillon (1997) argued that agricultural output is often dependent on the flexibility effect and decision-making options available for a farmer in the long-term compared with the short-term. Maidin et al. (2015) note that natural disasters such as flood and droughts often affect short-term paddy yield in Malaysia. The Malaysian government support in terms of production subsidy transmits larger positive acreage effect in the long-term (Tey et al., 2010). Therefore, time effect plays an important role in addressing variation in the future estimation of paddy production.

The estimated required land for paddy production between 2014 and 2030 is based on conventional domestic production calculation, which, according to Emy et al. (2015), is the alternative approach for

estimating future ‘desired’ productivity with ‘desired paddy production’. Therefore, the physical accounting of domestic paddy production is expressed below (Emy et al., 2015):

$$PRO_p = AYIELD_h \times PLANT_a \quad (1)$$

where,

$PRO_p$  = Production of paddy

$AYIELD_h$  = Average yield per hectare

$PLANT_a$  = Paddy planted area

Since paddy production and average yield per hectare is estimated using polynomial regression, paddy planted area is estimated by rearranging equation (1).

Therefore, paddy planted area is represented in equation (2):

$$PLANT_a = PRO_p \div AYIELD_h \quad (2)$$

Equation (1) implies that generally, the change in the domestic production is only possible with an improvement in land allocation and/or average yield per hectare. However, since land is a finite resource with severe restrictions, required sustainable land allocation is subjected to the proportion of domestic production and average yield per hectare (equation 2). Therefore, the selection of strategy to influence domestic production depends on the alternative measures between land allocation and paddy productivity.

## RESULT AND DISCUSSION

Based on the computed trend equations between 1963 and 2013, the forecasted paddy production and average yields were

generated using a polynomial function. The long-term trend was estimated using data between 1963 and 2013 with the prevalence assumption of long term effect of historical crop management, seed and fertiliser quality, seasonal factor and climate change effect. In contrast, the short-term estimation involved the period between 2000 and 2013 to gauge the prevalence effect of the most recent consistent trend in paddy production. All the estimated polynomial trends of paddy production for both long-term and short-term exhibit a very high degree of the

goodness of fit, as shown by the respective R-squares. However, the second-degree polynomial (dotted line) estimation of paddy production for both scenarios (Figures 3 and 4) seems to fit the actual data trend with R square 0.86 and 0.90 respectively. Although the long-term polynomial estimation of average yield trend (Figure 5) demonstrates a slightly lower R square compared with the short-term scenario (Figure 6), the second-degree polynomial appears to be the best fit for the actual trend with R square 0.76 and 0.90 respectively.

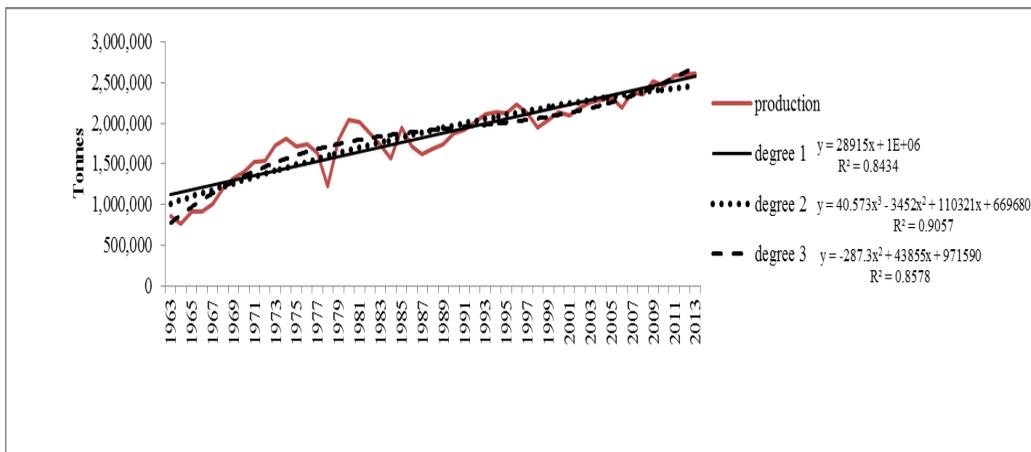


Figure 3. Long-term paddy production polynomial trends, 1963-2013

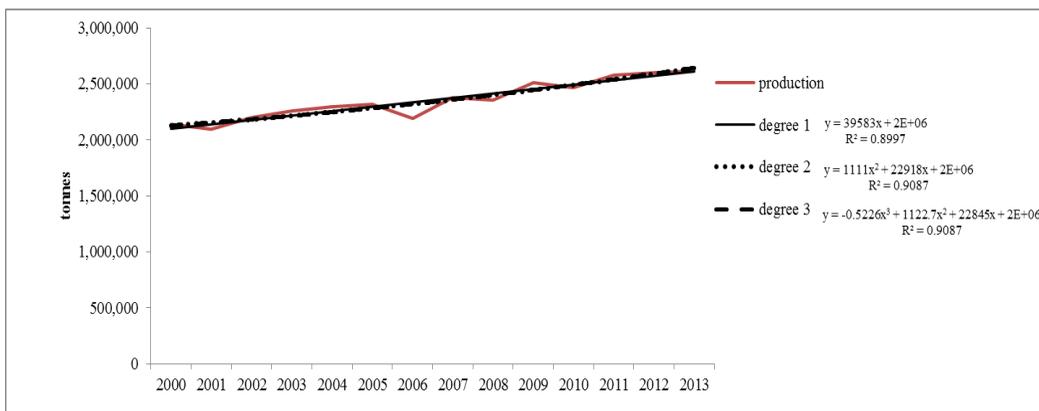


Figure 4. Short-term paddy production polynomial trends, 2000 – 2013

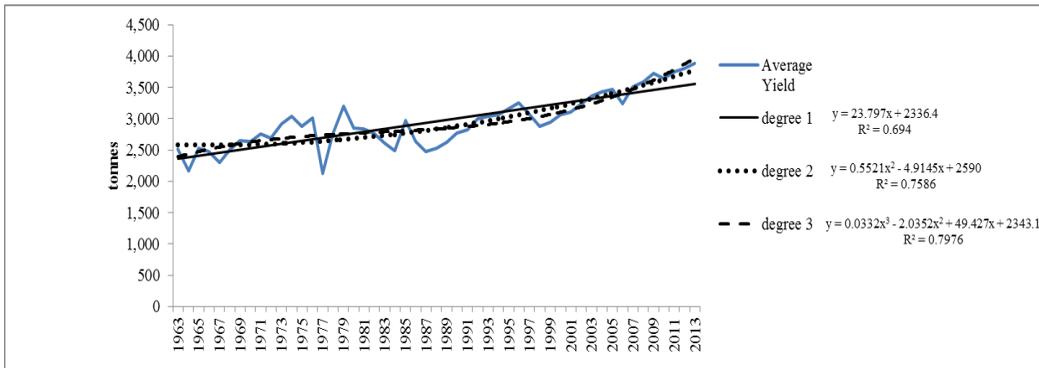


Figure 5. Long-term average yield polynomial trends, 1963-2013

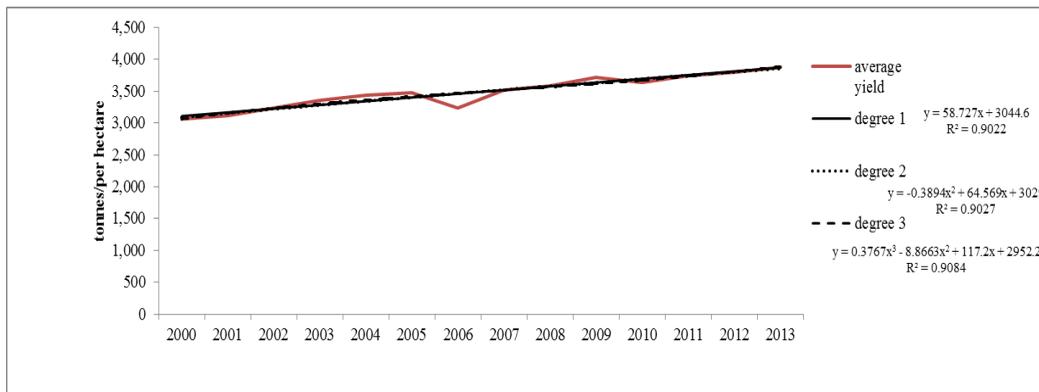


Figure 6. Short-term average yield polynomial trend, 2000-2013

### Estimation fitness

The accuracy of the polynomial model was further tested using both graphical and root-mean-square error (RMSE). The RMSE is not an unbiased estimator of variance ( $\sigma$ ) and is generally regarded as a good estimator of the size of the errors

in regression (Ostertagova, 2012). The estimated paddy production closely fitted with the actual data in the both long-term and short-term (Figures 7 and 8). Similarly, the estimated average yield per hectare also seems to closely fit to the actual figures in the both scenarios (Figures 9 and 10).

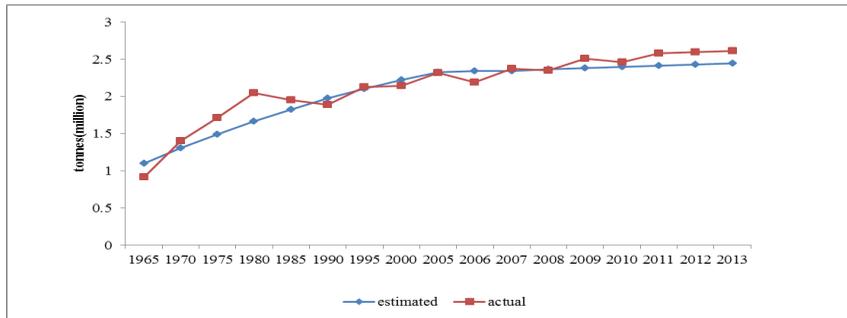


Figure 7. Long term estimated and actual paddy production trends

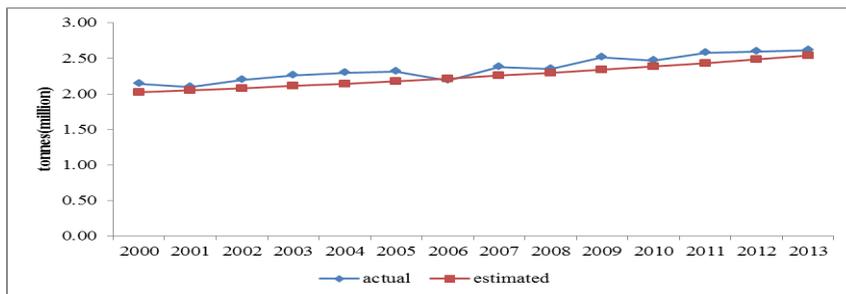


Figure 8. Short-term estimated and actual paddy production trends

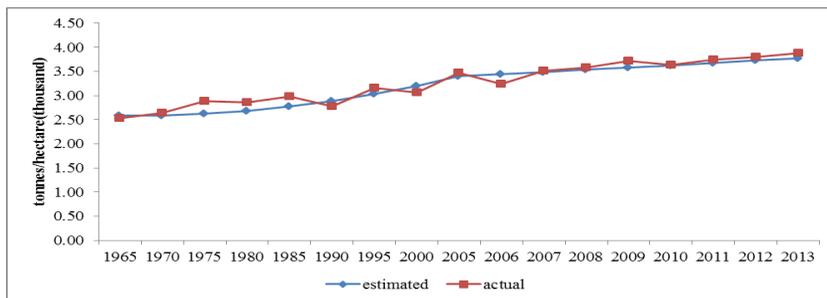


Figure 9. Long-term estimated and actual average yields per hectare

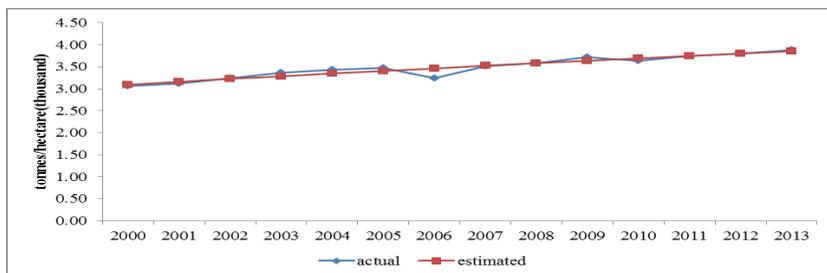


Figure 10. Short-term estimated and actual average yields per hectare

Table 1 shows the polynomial regression result for the variable paddy production and average yield per hectare for both scenarios. The low RMSE with a high R square in the overall findings indicate the selected estimation method render greater accuracy by minimising possible uncertainty in estimation and natural variation in the projection (Ostertagova, 2012).

Table 1  
Polynomial regression result

	Paddy Production		Average yield/hectare	
	Long-term estimation	Short-Term estimation	Long-term estimation	Short-Term estimation
RMSE	0.09	0.43	0.08	0.29
R <sup>2</sup>	0.86	0.91	0.76	0.90

**Forecast Result**

The forecasted long-term paddy production and the average yield (Table 2) shows that paddy production would increase only by 6% from 2.48 million tonnes in 2014 to 2.62 million tonnes in 2030, while the paddy

Table 2  
Forecasted paddy production, average yield and planted area for short-term and long-term, 2014-2030

Year	Paddy production (Metric Tonnes)		Average Yield (Kg/Hec)		Planted Area (required Hec)	
	Long-term	Short-term	Long-term	Short-term	Long-term	Short-term
	$y = 971590 + 43855x - 287.3x^2$	$y = 2000000 + 22918x + 1111x^2$	$y = 2590 - 4.9145x + 0.5521x^2$	$y = 3029 + 64.569x - 0.3894x^2$	$PLANT_t = PRO_t + AYIELD_t$	
2014	2,475,191	2,593,745	3,827	3,910	646771	663362
2015	2,488,879	2,651,104	3,880	3,962	641464	669133
2016	2,501,993	2,710,685	3,935	4,014	635830	675308
2017	2,514,533	2,772,488	3,990	4,065	630209	682039
2018	2,526,497	2,836,513	4,046	4,115	624443	689311
2019	2,537,887	2,902,760	4,104	4,165	618394	696941
2020	2,548,944	2,971,229	4,162	4,213	612432	705253
2021	2,558,944	3,041,920	4,222	4,261	606098	713898
2022	2,568,610	3,114,833	4,283	4,308	599722	723035
2023	2,577,702	3,189,968	4,345	4,354	593257	732652
2024	2,586,219	3,267,325	4,408	4,400	586710	742574
2025	2,594,161	3,346,904	4,472	4,445	580090	752959
2026	2,601,529	3,428,705	4,537	4,488	573403	763972
2027	2,608,323	3,512,728	4,603	4,532	566657	775094
2028	2,614,541	3,598,973	4,671	4,574	559739	786833
2029	2,620,185	3,687,440	4,739	4,616	552898	798839
2030	2,625,255	3,778,129	4,809	4,656	545905	811454

production growth rate tends to decrease from 0.55% to 0.19% during the same period. The short-term paddy production forecast tends to be a little higher than the long-term during the observation period, compared with short-term average yield up to 2024. Despite a consistent trend in the short-term average yield per hectare, the average long-term yield forecast tends to surpass short-term scenario after 2024. This has implication on the land requirement for paddy production in the future.

Figure 11 indicates a diverging trend between long-term and short-term land requirements for paddy production between 2014 and 2030. This finding is consistent with the underlying assumption for long-term and short-term measurements. The long-term forecast indicates that Malaysia needs less land compared with the short-term at the forecasted production level. This study found that the average yield per hectare is the main determinant for long-term and short-term projection.

The average yield or paddy productivity is dependent on several factors such as crop management, land fertility, seed quality, type of fertiliser, irrigation, climate change, natural calamity and government intervention policy (Arshad et al., 2011; Ohta & Kimura, 2007; Dano & Samonte, 2005). Thus, long-term paddy productivity estimation takes into account essential factors that influence paddy productivity with greater flexibility level. With increase in the intensity of long-term paddy productivity, the land required to produce paddy will be reduced. In contrast, short-term paddy productivity will require a larger land area to maintain the given production level in the future. Although the findings of the short-term scenario differ from Arshad (2011), they are consistent with Maidin et al. (2015), Tey et.al. (2010) and McConnel and Dillon, (1997) where short-term output was time-dependant due to inflexibility of resources and other external factors.

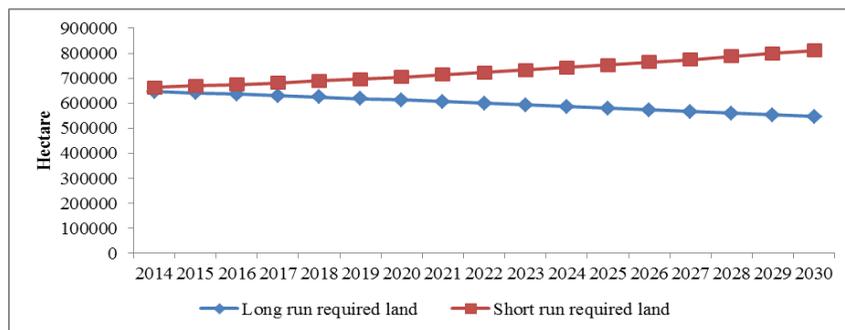


Figure 11. Long-term and short-term required land for paddy production

## CONCLUSION

The objective of this study was to forecast paddy production and sustainable land requirements for future paddy production in Malaysia. Using polynomial functions, this study found a robust indication that long-term paddy production would increase by only about 6% from 2.48 million tonnes in 2014 to 2.62 million tonnes by 2030 with an increasing growth in average yield per hectare. Therefore, the required land for paddy production tends to fall from 647,000 hectares in 2014 to 546,000 hectares in 2030. In 2024, the short run production was estimated to be higher than in the long run. However, the average yield was estimated to be higher (4408 kg/hectare) in the long run than in the short run (4400 kg/hectare), with less planted area required (586710 hectares) for the long run compared with the short run (742574 hectares). This shows that the long run trend with less required land and a higher average yield is more productive compared with the short-term trend. Thus, based on increase in the intensity of long-term paddy productivity, there will be reduced demand for land required for paddy production in the future. The findings of this study point to the crucial need for improvement in the research and development (R&D) and discovering alternative measures on domestic paddy production. As a developing country and with its increasing demand for rice, Malaysia has to ensure an efficient allocation of land between development and paddy farming

in order to cater to the need for both current and future consumption. Sustainability of paddy farming is essentially the key factor that will determine the nation's food security and influence economic growth.

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## **Islamic Background of Thai Muslim Youth with Islamic Ethical Behaviour: A study of Muslim Youth in Three Southern Border Provinces of Thailand**

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### **ABSTRACT**

The purpose of this research was to explore Islamic background of Thai Muslim youth in the three Southern border provinces of Thailand in terms of their upbringing, studying, performing religious duties, and participating in activities. Data was obtained through discussions and in-depth interviews with 54 informants: 18 youths who displayed Islamic ethical behaviour, 18 Muslim leaders, and 18 parents and guardians. The study found that the Thai youths displayed ethical behaviour as they had good Islamic background in terms of upbringing, education, performing religious duties and participating in religious-related activities.

*Keywords:* Islamic upbringing, studying Islam, performance of religious duties, Islamic ethical behaviour, muslim youth

### **INTRODUCTION**

Thai society has been exposed to modern technologies and internet-based communication which have mainly influenced youths leading to social problems and lack of ethics in society (Juajan, 2005;

Suramethee, 2007). Globalisation has weakened Thai society which is facing crises on all fronts including political, educational, religious, economic and social, in particular moral and ethical (Wonglakha, 2012).

A lack of ethics is a chronic problem in Thai society as well as worrying. It is getting more complex and severe and grows in tandem with technological development (Suramethee, 2007). Muslims in Thailand also face problems as changing social conditions affect their way of life. For

#### **ARTICLE INFO**

*Article history:*

Received: 07 April 2016

Accepted: 18 July 2017

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example, parents do not have time to teach and closely monitor their children who pay no attention to religious activities and regularly violate Islamic ethics and taboo by committing (Anmunajid, 2010; Annadwee, 2004). Most Muslim youths in Thailand do not lead their way of life in accordance with Islamic principles. This is a result of their parents having no time to control over them and to inculcate good attitude and values in their children. Most youths are not interested in Islamic activities and do not practise the religion (Laeheem & Baka, 2010).

Having a good Islamic behaviour is the main goal of Islamic teaching and is the foundation of being a Muslim. Only when the individual has good ethics, he or she will be a perfect Muslim who is happy. To be a perfect Muslim, there are pre-requisites such as believe in 6 principles of Imam and practising 5 principles of Islam (having good ethics is one of them). Muslims are encouraged to adhere to their daily practices consisting of four components: faith, interaction with people of different faith, Islamic socialising, and the moral self (Rimpeng, 2008; Bungatayong, 2009; Kaypan, 2012). One important factor that is important and can affect inculcation of Islamic ethical behaviour among youth is the socialisation process through family institutions. Islamic upbringing, Islamic studies, performance of religious duties, and participation in Islamic activities are the key. Studies have found that upbringing is a process that enables youth to understand and accept social values and norms, and it can influence their present and future behaviour

(Sears, Maccoby, & Levin, 1957; Grusec, 1992; Laeheem & Baka, 2010). All these help to develop personality, habits, ethics, and mannerism for youths to lead their life in accordance with religious principles and Islamic morality and ethics (Khagphong, 2004; Laeheem, 2014).

Islamic background is important for Muslim youths to have Islamic way of life that correspond with social norms and Islamic principles. This process of socialisation is the focus of this study: Islamic upbringing, knowledge of the religion (studying), performing religious duties (practice of Islamic principles), and participation in Islamic activities. These affect Muslim youth's Islamic behaviours. Islamic socialisation is a process that encourages youth to conduct themselves in accordance with Islamic principles. Most Muslim youths whose behaviour is in accordance with Islamic ethical principles are usually those who have been brought up in a strict Islamic way, have acquired good Islamic knowledge through studying, performing religion duties strictly, and participating in religious activities regularly (Mahama, 2009; Laeheem & Baka, 2010; Laeheem, 2014). One way to ensure Muslim youth to have a good behaviour is to ensure they acquire knowledge and understanding of Islamic teachings and principles, to strictly practice the religion, to have Islamic upbringing and regularly participate in Islamic activities training (Chaiprasit, Chansawang, & Pergmark, 2005; Mahamad, Thongkum, & Damcha-om, 2008; Laeheem, 2014). Thus, socialisation

process is essential which entails transfer of knowledge, thinking, attitude, ideology, culture and personality as desired by society (Broom & Selznick, 1958; Cohen & Orbuch, 1990). Thus, Islamic background is a factor that enables Muslim youth to have morals and ethics, to distinguish between what is good and bad, right and wrong. This leads to personality and moral development that is congruent with Islamic practices.

Therefore, the focus of this study is on Muslim ethical behaviour among Thai Muslim youths in the three Southern border provinces. The findings of this study are useful for formulating a policy to ensure good Islamic ethical behaviour among Thai Muslim youth.

## **METHODOLOGY**

### **Research Design**

This is a qualitative study which used a phenomenological research design. It is conducted as part of mixed method design using sequential explanatory design, through which qualitative data is collected to complement the quantitative data.

### **Key Informants**

There were 54 key informants who were divided into three groups: 18 Thai Muslim youth who had a high score in the Islamic ethical behaviour scale and those who were chosen by religious leaders; 18 Muslim leaders consisting of those who had experience in promoting Islamic ethics among Thai Muslim youth; and 18 parents and guardians of Thai Muslim youths.

This sample informants was recruited with cooperation from the Sub-District Mosque Committee in the target areas.

### **Data Collection**

Data was collected from in-depth interviews with the three groups of informants from November 2015 to January 2016. The researcher interviewed the key informants by probing them and simultaneously the researcher observed the informants' physical and verbal personalities, manners, and behaviours. The researcher reviewed the questions and answers for confirmation.

### **Research Instruments**

A set of structured interview questions with specified time and places for interviews was used. However, the sequence of the questions was flexible depending on contexts of the answers given by each informant, and thus unstructured interview questions were allowed in addition to structured questions for the interviewer to keep the interviewee focused on one particular topic at a time. The content validity test of instrument was measured using subject-matter experts to help determine the structured interview questions.

### **Protection of Informants' Rights**

Before the interview, the researcher informed the target group about their rights to decide whether or not to participate in the project, and that their refusal to give any information will in no way affect any assistance they should receive from the Mosque Committee and the religious

leaders. They were also informed that they have the right to change their mind and stop participating at any time without being affected; their personal information will be kept confidential; information about their background related to their Islamic upbringing, studies, performance of religious duties, and participation in religious activities will be presented as overall information, and pseudonyms will be used.

### **Data Analysis**

In data analysis of this study, emphasis was placed on Islamic background in upbringing, religious studies, performance of religious duties, and participation in religious activities. Conversations and in-depth interviews were analysed based on related concepts and theories in order to decode the data according to the research objectives, and finally data was presented using a descriptive method. In short, in data analysis of this study, the data collected was categorised according to study issues, then content analysis was performed with the data by comparing them using principles of logic, concepts, theories and research reports coupled with the contexts.

## **RESULTS AND DISCUSSION**

The results of the in-depth interviews with 18 Thai Muslim youth who had Islamic ethical behaviour, 18 Muslim leaders, and 18 parents and guardians emphasizing Islamic background among Thai Muslim youth

who had Islamic ethical behaviour in their upbringing, studying, performing religious duties, and participating in religious activities are as follows.

### **Islamic Background in Upbringing of Thai Muslim Youth**

Family is the first institution that instil Islamic ethical behaviour by socialising children's mind, building values, inculcating awareness, and creating good role models that are important in helping children to learn social value, norms, culture, and good social behaviour. This study found that training and upbringing by the family institution is considered an important factor directly and indirectly affecting Thai Muslim youth's Islamic ethical behaviour. Following are excerpts of the interview in relation to having a good Islamic upbringing:

*"...My parents usually control me strictly to practice my daily religious routines and advise me to do good things for Allah only....."*

(Mr. Anwa, Miss Robiyah, Miss Yameelah)

*"...My parents emphasize that I practice strictly according to Islamic principles both the dos and don'ts..."*

(Mr. Muhammad, Mr. Nawawee, Miss Rohanee)

*“...My parents always punish me if I don't pray, don't fast, and do tattoos according to Islamic principles...”*

(Mr. Paosan, Mr. Zakariya, Miss Yaowaree).

*“...My parents forbid me from being involved in all vices, and tell me to dress according to the principles and eat halal food...”*

(Mr. Ahmad, Miss Nureeyah, Miss Adilah).

These correspond with what Muslim leaders, parents and guardians said.

*“...Training and upbringing by family are important factors that make youth behave with good Islamic ethics, especially families that are strict with their children to behave and practice strictly according to Islamic principles...”*

(Mr. Sofee, Mr. Abdullah, Mrs. Solihah)

*“...Most youth who have good Islamic ethical behaviour have been trained, their minds have been socialized, and they have their parents as their good role models...”*

(Mr. Sobree, Miss Padiyah, Mrs. Nureeda).

*“...Parents who give advice, train, teach, suggest, and care for their children closely usually have influence on their children directly and indirectly in the way they behave, especially according to Islamic ethical principles...”*

(Mr. Usoh, Mr. Maroning, Mr. Mahmud).

The results of the study above show that Thai Muslim youth who uphold Islamic ethics were those who had been trained and brought up according to the Islamic way which was an important factor that influences Islamic ethical behaviour. This is because upbringing is a method that parents use in socializing the mind of their children, instilling value, stimulating awareness, teaching social norms, culture, social behaviour, controlling and looking after their children so that they behave in a desirable way. Thus, it was found that instilling and training children according to Islamic principles are ways for promoting children to behave in a desirable way (Yaljin, 2007; Touthern, 2010; Laeheem, 2012). Upbringing using socialisation of the mind to instil value, culture, traditions, social norms, and social behaviour is to support children to behave well according to Islamic principles, and upbringing is a factor (Umarahm, 2000; Abdullah al-Malikiy, 2005; Laeheem, 2013; Laeheem, 2014). Promoting strict Islamic upbringing, and application of religious principles by instilling right attitudes and ideologies can

influence reinforcement of Islamic ethics among Muslim youth (Khagphong, 2004; Laeheem & Baka, 2012). Hence, it can be said that Islamic upbringing is important to have desirable personality, characteristics, and behaviour. Muslim youth who have good Islamic will eventually develop good behaviour.

### **Islamic Background in Islamic Studies**

Studying Islam is considered very important and a way of life for Muslims because Muslims must seek knowledge to understand Islamic teachings and conduct themselves according to Islamic principles. Moreover, Islamic knowledge promotes and reminds Muslims to seek knowledge all the time without separating secular knowledge from religious knowledge but with emphasis on continuous seeking for knowledge that is well-balanced and useful for living. However, seeking Islamic knowledge is an important factor that enables youth to have good social behaviour according to social norms and they will become persons with good Islamic ethical behaviour as evidenced from the following interviews:

*“...My parents sent me to study the religion at Mosque based Islamic Education Centre since I was very young (to the Tadika), then to a private Islamic school for my primary to high school education so that I have foundation knowledge*

*for religious practice and to be a good member of Muslim society...”*

(Mr. Ismael, Mr. Ameen, Miss Rukayah)

*“...My parents always emphasize seeking knowledge about Islamic faith, practice, and ethics; they usually buy books and VCDs on Islam and they always attend sermons...”*

(Mr. Ruyanee, Miss Laila, Miss Hasanah)

*“...I'm interested in studying Islam and do it regularly and continuously, I enjoy finding books to read by myself and listen to sermons so I understand the principles that Muslims must follow and practice and I also understand what Muslims must not do. This is for me to lead my life in accordance with Islamic principles...”*

(Mr. Sofeen, Mr. Zakariya, Miss Hamidah)

*“...My family gives special importance to religious studies and sends children to study the religion and the Quran at an Institute of*

*Quran Memorization because they want their children to be good and complete Muslims who practice the religion strictly and can memorize the entire Quran very well...*

(Mr. Apendee, Mr. Lukman, and Mr. Abdulrohim)

This corresponds with reflections by Muslim leaders and parents and guardians who said

*“...Studying and seeking knowledge to practice and conduct oneself correctly according to Islamic principles is a duty of every Muslim, and it is not different from praying, fasting, and paying Zakat. It is an important factor that enables Muslim youth to have good Islamic ethical behaviour as expected by society...”*

(Mrs. Sobeerah, Miss Kareemah, Mrs. Nureen)

*“...Studying Islam is part of living that influences behavioural changes physically, mentally, and intelligently. The important target is to build responsible Muslims who are good servants to Allah, and who can conduct religious activities correctly and live as good members of society and good citizens of the humankind...”*

(Miss Aseeyah, Mr. Sulaiman, Mrs. Mareeni)

*“...Studying Islam is related to living a complete life to upgrade being humans and perfect servants, especially studying the teachings in the dimensions of religion, beliefs, ethical principles, occupation, and interactions that is related to social condition, and for practice in accordance with what ones have learned...”*

(Mr. Jaruwut, Mrs. Habibah, Mrs. Mulimah)

Thus, Thai Muslim youth with good Islamic ethical behaviour are those who seek knowledge of Islam which directly and indirectly influences their Islamic ethical behaviour. This is because studying Islam is a process of training, knowledge transfer, experience, skill, and nurturing of intelligence, body, and soul to promote youth to being perfect Muslims. Particularly, this is a process of habit training and socialisation of the mind to make youth ethical persons and well-disciplined corresponding with the concept of Islamic ethics emphasising a process of socialisation of the mind, emotion, intelligence, and Islamic spirit among Muslim youth. The emphasis is also on a process of establishing knowledge, understanding, and instilling social norms in youth for them to adhere to and practice it in their everyday life correctly according to Islam. Moreover, it is for youth to learn about values and regulations to be able to live with others in society (Mahama, 2009; Laeheem & Baka, 2010; Laeheem & Madreh, 2014; Laeheem, Baka, Tahe,

& Walee, 2015). Promoting youth to learn and understand Islamic principles is to promote Islamic ethics for them to adhere to an Islamic way of life and to practise correctly in everyday life (Narongraksakhet, 1997; Mahama, 2009; Laeheem, 2015). Promoting youth regularly and continuously to have knowledge of the religion and using it in performing religious duties and in living daily can have influence directly and indirectly on reinforcement and inculcation of Islamic ethical behaviour in Muslim youth (Khagphong, 2004; Mahama, 2009; Laeheem, 2013; Laeheem & Baka, 2012). Thus, it can be said that seeking and studying Islam, a duty for all Muslims, to adhere to and take it as the system of life for everyday life practice as required by Islam is an important factor that will eventually result in good Islamic ethical behaviour.

### **Islamic Background in Performing Religious Duties**

Islam is a religion based on faith and performing religious duties and remembrance of Allah. All Muslims must perform religious duties adhering to the five pillars which are: declaring Syahadah that is to believe in the oneness of God (tawhid) and accept Muhammad as God's messenger, praying five times a day, alms-giving, fasting during the Ramadan month, and pilgrimage to Mecca. Islam teaches all Muslims to adhere strictly to Islamic

teachings. This is reflected in the results of the interviews.

*"...I adhere to performing the religious duties strictly, especially the daily praying; I go to pray at the mosque regularly as it is very important to follow sincerely reciting the Muslim confession of faith. It is a religious pillar that helps wash away sins and cleanse our hearts as well as protect us from sins..."*

(Mr. Yusree, Mr. Praty, Miss Rinlada).

*"...My friends and I give much importance to performing the Islamic religious duties that makes us remember Allah all the time and makes us determined to do good deeds, always conduct ourselves according to the religious principles and social norms because it protects us and prevents us from doing wrong or violating religious principles..."*

(Mr. Afifi, Miss Yumaila, Miss Nuttaya)

*"...performing religious duties regularly and continuously makes me spend my daily life with*

*awareness as I have something to hold on to that reminds me to do good deeds and not doing bad deeds, and to avoid doing improper actions. These result in my behaviour that is in accordance with Islamic principles and ethics...*"

(Mr. Sukree, Mr. Mayutee, Miss Fareeda)

*"...My strict performance of religious duties calms me down amidst chaotic ways of life, and it prevents me from doing bad deeds, makes me humble, and it also makes us unite, especially when we perform religious duties together which gives us sense of brotherhood and equality..."*

(Mr. Adinan, Mr. Anuwat, Mr. Sarawut)

This corresponds with Muslim leaders and parents who said

*"...Performing religious duties has one important aim which is to instil Islamic ethical behaviour because it is to follow the order of Allah and the Prophet Muhammad. It is socialisation of the mind of Muslims to purify their hearts, to instil good characteristics in them, to eliminate*

*bad spirits, and to seek favour from Allah to make society peaceful..."*

(Mr. Amadidaris, Mr. Khodafee, Mrs. Nushayatee)

*"...doing good deeds is to follow the order given by Allah because Islamic ethical principles come from Islamic teachings which include orders what to do and what not to do..."*

(Mrs. Suwannee, Miss Aida, Mrs. Nureemah)

*"...Practicing Islamic teachings in everyday life is the highest goal for Muslims; it influences development of Islamic ethical behaviour among Muslim youth because it shows their loyalty only for Allah. It instils in Muslims the way they are to conduct themselves strictly according to the principles and to avoid what the principles forbid..."*

(Miss Areenun, Mr. Amree, Mrs. Maryam)

*"...Muslims' performance of religious duties indicates that they are loyal servants who follow commands given by Allah who*

*controls Muslims' behaviour. Emphasis is placed on using Islamic teachings as guidelines for living to do only good things that are accepted by society and to conduct themselves with good morals and according to social norms which are qualifications of persons who have perfect Islamic behaviour..."*

(Mr. Makoree, Mrs. Solihah, Mrs. Aminah)

The above results show that performing religious duties directly and indirectly influences youth's good Islamic ethical behaviour because performing religious duties lead to correct and proper behaviour, adherence to good deeds and prevent them from violating religious principles. This is in agreement with the concept that performing religious duties is socializing the mind to do only good things, to adhere to good deeds, morals, ethics, knowing right from wrong, and feeling embarrassed to commit sins (Laeheem, 2012; Laeheem & Madreh, 2014). Performing religious duties is a process that can socialise, nurture, and creates youth to be Muslims who have perfect Islamic ethical behaviour which enable them to do good deeds and protect them from bad things and to eventually become highly ethical persons (Abdul al alim Mursiy, 2000; Hamid al-Hazimiy, 2000; Yaljan, 2007; Touthern, 2010). Conducting oneself under protection of Allah and behaving in a way that keeps oneself away from all sins by adhering

to taboos, and doing only good things define Islamic ethical behaviour Ahmad Ibn al-Husain, 2003; Bungatayong, 2009; Sayyid Ibn al-Wadi'iy, 2010). Furthermore, instilling and developing youth to have Islamic ethical behaviour continuously and consistently in congruence with Islamic principles is considered a method of promoting behaviour through Islam using socialisation of the mind with regular and consistent performance of religious duties (Yaljan, 2007; Touthern, 2010). The youth is encouraged to practise daily religious activities correctly according to Islamic principles to learn about values, rules and regulations, and traditions to become persons with good Islamic ethical behaviour (Mahama, 2009; Laeheem, & Madreh, 2014; Laeheem, Baka, Tahe, & Walee, 2015). Moreover, promoting youth to perform religious duties continuously can reinforce Islamic ethical behaviour among Muslim youth (Laeheem, 2013; Laeheem & Baka, 2012). Therefore, it can be said that Muslim youth who perform daily religious duties focus on only doing good things according to Islamic teachings and social norms.

### **Islamic Activities of Thai Muslim Youth**

Participating in Islamic activities is another key factor affecting development of Islamic ethical behaviour among Muslim youth because it is a knowledge exchange process that makes youth understand current circumstances and keep up with the rapidly changing world, know what alternatives to take, how to solve problems, develop skills, and want to learn unceasingly. As a

result, they will have life skills that enable them to live intelligently and happily in congruence with Islamic principles. Besides, participating in Islamic activities promotes knowledge and understanding, instil good attitudes, reinforces correct teachings, and makes youth not only to have good Islamic ethical behaviour desired by society but also adapt their behaviour to social norms. It can be seen from the interviews below.

*“...My friends and I usually spend our free time participating in Islamic activities to seek religious knowledge, especially activities related to knowledge and understanding of Islamic religious practice because we want to practice our religion correctly and perfectly. Moreover, we enjoy participating in activities of annual ethical camps organized by different organizations to get new knowledge, and update our attitudes and viewpoints...”*

(Mr. Dawood, Mr. Rafal, Miss Rattana).

*“...Since the time I grew up enough to remember things, my parents have always allowed me to participate in Islamic activities for me to truly learn Islamic principles and practice religious activities. I’ve absorbed true Islamic principles*

*and never miss practicing religious activities, and I’ve always adhered to Islamic ethics and morals...”*

(Mr. Amal, Miss Nutlee, Mrs. Khodeeyah)

*“...Participating in Islamic activities allows me to discover myself, know myself better, gives me opportunities to do self-evaluation to know why performing religious duties is necessary; what my behaviour and characteristics are like; what my good points are and how to maintain them; and what my weak points are and how to improve them. All of these can improve my behaviour in general and my Islamic ethical behaviour, too...”*

(Mr. Somsak, Mrs. Sapita, Miss Nurhakeema)

*“...Participating in Islamic activities gives us unity, makes us love each other, promotes our human relationship and team working. Group activities help us express ourselves better and blend ourselves with group members better in addition to making us see importance of society and living together happily. Moreover, group activities help reduce selfishness, promote unity and understanding*

*among group members. They also promote participants to be good citizens, reduce problems concerning misbehaviour or crime as they help participants to spend free time in useful ways. They help us to learn about duties and responsibilities, social values, and they help us reduce selfishness, build value and ethics, to be generous, give services to others, volunteer to help the public, to be able to adapt ourselves to the environment and they promote us to know how to control our emotion and improve our personality...*

(Mr. Kamaruddin, Mrs. Rosidah, Mrs. Nurlaila).

These statements are in agreement with those made by Muslim leaders, parents and guardians as follows.

*“...The Mosque Committee emphasizes youth’s participation in group activities to establish a youth club of the mosque to do activities useful for society and in accordance with Islamic principles such as calling for and inviting youth to participate and understand Islam, to improve religious sites, to promote studying the Quran, learning and practicing religious duties, to do group activities to*

*develop and organize morals and ethical camps, and to teach at a Tadika...”*

(Mr. Natsarun, Mr. Surading, Mrs. Roseleena)

*“...There’re promotion and support to make youth good persons with morals and ethics as well as to instil in them value of work for the public and development of their community to be prosperous, to progress and to have security; and development is to be carried out according to Islamic principles at the same time as to raise the spirit of sacrifice for society, and awareness of helping others and do activities that are useful for the public...”*

(Mrs. Katini, Miss Pranee, Mrs. Metta)

*“...Youth cooperate in participating in Islamic activities in the community because they think it is their duty to cooperate and give importance to such activities for benefit in developing themselves to perform religious activities correctly to become youth who have good Islamic ethical behaviour...”*

(Miss Arree, Mr. Abbas, Mrs. Halemoh)

*“...Experiences received from participation in Islamic activities are necessary and beneficial to life in the future for Muslim youth because they widen the perspective of youth making them free to think and decide for themselves and able to get along better with different types of people. As a result, their personalities are improved; they can control their emotion better, have more social skills, and know how to accept other people’s opinions...”*

(Mr. Yabbas, Mrs. Pantipa, Mrs. Kangsada).

The results of the study indicate that Thai Muslim youth who have good Islamic ethical behaviour are those who participate consistently in religious activities. Such participation is associated with good Islamic behaviour which is also associated with socialisation to allow youth to exchange knowledge and to perform religious duties, and to instil in them good deeds, adherence to good things, morals, ethics, knowing right from wrong, correct behaviours in accordance with Islamic principles. All of these correspond with the concept specifying that participation in Islamic activities is associated with Islamic ethical behaviour because it promotes youth to develop themselves by applying religious principles in enhancing knowledge and having good attitudes in line with societal expectations and social norms (Narongraksakhet, 1997; Khagphong, 2004; Mahama, 2009;

Laeheem, 2013). The process of promoting activities related to religious principles for people who have behavioural problems is a process of socializing the mind and nurturing intelligence, body and soul to ensure good behaviour made up of sound morals, ethics, discipline, and are recognized in society (Laeheem & Baka, 2012; Laeheem, 2013). Participation in religious activities influences directly and indirectly youth’s behaviour. Individuals who participate in religious activities very frequently are those whose behaviours are in accordance with social norms because religion allows one to conduct oneself with morals and ethics. In addition, participation in religious activities promotes good behaviour, prevent violating religious principles, morals, and traditions, and they are determined to perform religious duties and activities in accordance with what the teachings specify clearly (Thepsitha, 1998; Laeheem, 2012; Laeheem & Madreh, 2014). One way to promote and support Muslim youth to behave according to social norms is promoting them to participate in religious activities regularly to instil in them faith that purifies their heart and leads them to true happiness. Thus, participation in religious activities is an important factor influencing Islamic ethical behaviour (Nabil al-Samalutiy, 1986; Nahlawiy, 2003; Bungatayong, 2009; Touthern, 2010). Furthermore, participation in religious activities enables them to be complete or perfect humans in accordance with principles, beliefs and Islamic methods that emphasise individuals must have Muslim characteristics and behaviour.

## **CONCLUSION AND RECOMMENDATIONS**

The results indicate that Muslim youth in the three Southern border provinces who have good Islamic ethical behaviour are those who have had Islamic upbringing, studied the religion, performed their religious duties as well as participate in religious activities. It can be said that Islamic upbringing, seeking knowledge of Islam, performing religious duties, and participating in Islamic activities are variables influencing Islamic ethical behaviour of Muslim youth. Youth who have had a strict Islamic upbringing, studying Islam earnestly, performing religious duties solemnly, and participating in Islamic activities intently have a high level of Islamic ethical behaviour. Thus, if related individuals and organizations wish to instil Islamic ethical behaviour among the Muslim youth, they should promote an Islamic upbringing as well encourage them to study the religion, perform religious duties and participate in Islamic activities. These are associated with socialisation through the religious institution and family institution with the goal of equipping youth with desirable behaviour in accordance with social norms by advising them to adhere to morals, ethics, knowing right from wrong, and not violating religious principles, morals, and traditions. Furthermore, it is a process that focuses on building knowledge, understanding, transferring of experiences or skills, training and nurturing intelligence, body and mind, and instilling faith. Focus should also be on Islamic education from very young because it is a duty for every

Muslim to study and seek knowledge about Islamic faith, practice, and ethics .

The results of this study can help individuals and organizations involved in promotion of Islamic ethical behaviour among youths to form concrete policies and strategies for promotion and good Islamic behaviour among the youth. Islamic and state organisations in particular should utilise the findings of this research concretely such as promoting parents to ensure their children have good Islamic upbringing by strengthening the family institution and monitor their children's activities so that they operate within the Islamic framework. This is by exposing their children to Islamic education from young age and by continuously developing the Muslim educational system so that it has better standards and quality. In addition, the findings of this study also indicate the youth should have religious training and practices, and to perform religious duties correctly according to Islamic principles by instilling in them good Islamic values and developing their mind, emotion, intelligence, and social awareness. The research results should also be used in promoting youth to participate in Islamic activities regularly by providing support to religious units and organizations in doing activities that are suitable, modern and which meet the needs of youth, for instance. Additionally, the results of this study are important for promotion and support of the family institution, the educational institution, and the religious institution to look after and encourage at risk Muslim

youths to change their behaviours to be more Islamic and more ethical, especially by socialising them in the Islamic way, for example, encouraging youth to perform religious duties strictly, provide knowledge and understanding of Islamic teachings to youth and encouraging families to focus on Islamic upbringing. Thus, this will be in tandem with what is desired by society as well as being in congruent with social norms and Islamic principles.

### ACKNOWLEDGEMENT

This author gratefully acknowledges financial support from the Prince of Songkla University (contract No. LIA580740S).

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## Enhancing Learners' Sentence Constructions via "Wheel of Grammar"

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### ABSTRACT

The purpose of this research was to strengthen students' foundation of grammar in sentence construction. The problem statement is that students are unable to perform well in the English language classes, particularly in constructing simple sentences. Thus, this research examined whether 'Wheel Of Grammar' (WOG) is able to help students in constructing grammatically correct simple sentences. The rationale is to ensure students' confidence in the use of basic rules of Subject-Verb Agreement in sentence construction. Fifteen Form 5 students were chosen as sample based on their diagnostic test and first middle-semester examination results to avoid any biasness. The research used mixed-method design where quantitative data from pre- and post-tests were used to measure the outcome. To triangulate data findings, responses from the informal interviews and classroom observations were taken into consideration. The students' response reflects the improvement in sentence construction. They were able to apply correct basic rules of Subject-Verb Agreement, the right usage of tenses and Verbs-To-Be in the tasks. Grammar lessons became less stressful as they could easily search for answers in a fun and creative way.

*Keywords:* Grammar, simple sentences, Wheel of Grammar, Subject-Verb Agreement, tenses

### INTRODUCTION

In Malaysia, English Language is taught as a second language and every child is given a guarantee that he or she will master it within a certain period of time (Malaysia Education Blueprint 2013-2025, 2012). Education in Malaysia emphasises on an individual's academic achievements as

#### ARTICLE INFO

##### *Article history:*

Received: 14 July 2016

Accepted: 08 September 2017

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important for his or her success in life. The country's education philosophy is aimed at developing an individual's potential holistically and integratively apart from being knowledgeable and able to contribute to the harmony of the family, society and the nation (Malaysia Education Blueprint 2013-2025, 2012). In order to be at par with the others and to keep pace in an increasingly competitive world, it is essential for learners to have a firm foundation in grammar. Crystal (2012) claimed that English language will certainly connect one with more people compared with any other languages, thus, serving as a motivation to learn it but it takes a great effort to master it. Having a good foundation in basic grammar is the biggest challenge for today's learners. In fact, lack of knowledge in grammar, vocabulary and generic structure are the main reason for lack of proficiency in the target language this (Kee, 2013; Ali & Yunus, 2004).

The study was conducted at SMK Kanowit whereby majority of the 1313 students are Ibans. Thus, it is common to see Malay, Chinese, Bidayuh, Kenyah, Kayan, Melanau, Indian and Dusun student conversing in Iban language among themselves and with their teachers even during English language classes. Due to this, students are unable to perform well in the English language classes. They have difficulty constructing simple sentences and this is clearly a major problem. Secondly, they face great difficulty in scoring good results in the examinations due to inadequate exposure to the language. Three factors have been identified as possible causes.

First, most of the students are still confused with the rules of Subject-Verb Agreement (SVA). Second, they are unsure when to use the present and past tenses. In addition, they tend to omit the use of the Verbs-To-Be (VTB) whenever they construct sentences. As a result, related skills such as reading, speaking and listening are also hampered, causing them to gradually lose interest and confidence in using the language. The best way to improve students' English proficiency is to expose them to the language as early and as extensively as possible (Kim, Curby & Winsler, 2014).

From the researcher's own experience in teaching and observing other colleagues teaching SVA and VTB, it is clear that students usually learn the rules better through deductive instruction. Based on this method, teachers introduce and explain the rules and functions of grammar before expecting them to complete given tasks as a way to practise the concept learned. Farrell and Lim (2005, cited in Hacer & Mehmet, 2014:5) supported this practice. They noted that teachers in Singapore believed that learners are able to use correct grammar faster as a result of deductive teaching as the method involves direct teaching and explanation of rules for grammar structures, drilling and error correction. Hence, this method was favoured. Another pull factor is that the SVA and VTB rules introduced in textbooks in primary and secondary schools are usually in the form of tables. This can slow down the learning process as most students find it distasteful. As it is important for students to see the necessity of having

a strong foundation in SVA and VTB when constructing simple sentences, a change must be made in the way SVA is taught to trigger not only learners' motivation but also to strengthen their knowledge on basic grammar. This statement is further supported by Quora (2014) who claimed that studying grammar using other strategies will help students to learn it faster and better with less effort. In other words, learning grammar will not only provide students with an understanding of the nuts and bolts of English but also provide them with a deeper understanding of the English language itself—a language learned unconsciously through constant practice.

In order to prove this, the researcher has designed a grammar-learning device specifically focusing on SVA and VTB, known as the Wheel of Grammar (WOG). The idea of designing this device came from the researcher's personal experience when observing nurses at the Mother and Child Clinic who used a Wheel Calendar to check the due dates of expected mothers. Using different colours to indicate the Present Tense, Past Tense, Singular Verb and Plural Verb, students will have a stress-free time to construct grammatically correct simple sentences.

The main objective of this study is to analyse 15 Iban students' perception on the use of WOG as a stimulating tool in improving their foundation on SVA and enabling them to construct simple yet grammatically correct sentences. Students will need to build their own WOG so that they have the hands-on experience with the

rules and functions of SVA and VTB when labelling the columns and organising the wheels. This research attempts to answer the following research question:

How does the 'Wheel of Grammar' help improve students' understanding of Subject-Verb Agreement in constructing simple sentences?

### **Advantages of Using WOG in Enhancing Learners' Grammar in Constructing Simple Sentences**

There are a number of advantages in using WOG in enhancing students' grammar foundation in constructing simple sentences. These advantages are fundamentally important to sustain their interest in improving the quality of their sentence-building skills.

First, it is believed that the WOG will be able to enhance learners' foundation in grammar specifically on their knowledge and understanding of SVA in order to improve their writing skills, particularly in constructing simple sentences. Thus far, the learners' most frequent mistake in writing is to translate directly from their mother tongue into the English language. As stated by Kee (2013), "learners find it difficult to express their thoughts in English as they lack English proficiency and because they usually think in their mother tongue" (p. 92). As a result, their ability to use correct grammar is severely affected. By designing their own WOG under the researcher's supervision, learners will have hands-on

experience with the rules and functions of SVA when labelling the columns and organising the wheels.

Second, frequent reference to the WOG is of paramount importance for the learners to have a vivid understanding of the rules of VTB when constructing simple sentences. Through the exercises prepared in the form of handouts, learners are able to apply the correct rules and functions of SVA. For instance, when writing simple sentences with reference to their WOG, learners will also know when, why and how to use the past and present tenses. This is important as learners cannot make new sentences if they do not know the rules; they should analyse the rules in order to make new sentences by repeating and memorising the given ones (Wharton, 2007:4).

Third, by using the WOG in a variety of enrichment activities such as exercises done on task sheets and sentence-building games, it can help to sustain learners' interest in the learning process. It is hoped that learners can gradually build their interest in using the language, particularly in sentence-building since this will not only be very beneficial in improving their writing skills, but also help in enhancing and developing their speaking, reading and listening skills. In addition, the learning environment must be kept fun and enjoyable as it facilitates unconscious learning among students giving them confidence in using the language (Yunus et. al., 2011). As Scarcella (2009) suggested, "English Language development

occurred in natural stages over time through the learners' exposure to English" (p. 209).

## METHODOLOGY

The focus of this research is to enhance learners' foundation in SVA as well as how well they are able to construct simple, yet correct sentences apart from those printed on the WOG. A mix-method approach was used where the researcher collected both qualitative and quantitative data simultaneously through classroom observation, learners' responses and learners' pre- and post-test results on SVA tasks. The respondents selected were 15 Form Five Iban learners from an Arts class who were weak in their English. The selection of the learners was based on their results in the diagnostic test and first middle-semester examination to avoid biasness. Following is the description of the innovative project:

The coloured stickers on every piece of 'wheel' indicate certain rules. For example, **PINK** from the first and second wheel must be paralleled, and it indicates the **PLURAL VERBS**. **GREEN** indicates the **SINGULAR VERBS**. **BLUE** from the second and fourth wheels must also be paralleled, and this shows the **PRESENT TENSE**. **ORANGE**, on the other hand, indicates the **PAST TENSE**. In order to use the WOG, learners are only required to rotate the wheels to *align the colours in the wheel in order to form grammatically correct sentences*.

Wheel of Grammar

<b>PINK</b>	<b>PLURAL</b>
<b>GREEN</b>	<b>SINGULAR</b>
<b>BLUE</b>	<b>PRESENT TENSE</b>
<b>ORANGE</b>	<b>PAST TENSE</b>

i. To draw a [Singular] Simple-Present-Tense sentence, learners align a **GREEN** sticker from the first and second wheels.

Eg: **[She] [is]**

ii. Learners may choose an activity of their choice from the third wheel.

Eg: **[She] [is] [watching television]**

iii. The second wheel [BLUE] must be paralleled with the fourth wheel.

Eg: **[She] [is] [watching television] [now].**



**RESULTS AND DISCUSSION**

This section discusses classroom observation, learners’ observation and results of the pre- and post-tests on SVA and VTB tasks using the WOG.

**Classroom observation**

Throughout the lesson, an observation was carried out to ensure that the learners

were clear of what to do and able to use the WOG in constructing simple sentences, differentiating the present and past tenses in the subjective and objective tasks as well as applying the correct rules and functions of SVA and VTB in their sentences.

The analysis of the observation showed that the weak learners were unsure of the function of the WOG, but after being coached and monitored by the researcher, they were

able to have hands-on experience on the 'wheel'. Colours were used as guides as they represent the rules clearly. Throughout the learning process, unconsciously they read out the simple sentences built through the WOG softly and even coached their friends confidently. Their self-discovery learning was well-used as the WOG is attractive and simple to understand.

### **Learner Response**

From the interviews carried out randomly, the learners found that the WOG has greatly helped them to understand the rules and functions of SVA and VTB (Singular and Plural Forms, and Present and Past Tenses). Learners also felt very motivated and had fun in completing the tasks. This was evident in the response given by a learner:

*The SVA rules on the 'Wheel of Grammar' have taught me to construct simple sentences step by step.*

Using, learners were able to match the SVA correctly without any difficulties, including a male student who was colour-blind. As he was not able to complete the tasks on his own, he was paired up with another learner who later guided him on how to use the WOG. His response was:

*Because of my colour-blindness, I am unable to use the 'Wheel of Grammar' effectively. But with a friend's guidance, I come up with my*

*own alternative in understanding the rules of SVA better—that is through the sentence pattern.*

The WOG is also user-friendly and easier compared to if the rules and functions of SVA are transcribed in the form of tables. Learners agreed that the information in tables in textbooks are too lengthy, confusing and not attractive. The lengthy explanation does not contribute much in increasing their grammar-knowledge level, thus causing them to lose interest in the language (Thirusanku & Yunus, 2012). A learner responded that:

*I feel that self-discovery learning through the 'Wheel of Grammar' is indeed really fun and enjoyable compared to those (the grammar rules) printed in textbooks where grammar rules are printed in tables.*

Overall, all learners were in agreement that the use of the WOG in learning the rules and functions of SVA is undoubtedly very effective. It gives them the chance to discover the rules. Besides, hands-on learning process motivates them to understand the language better. As supported by Kimberly et. al (2000), learners can rise to the challenge that the activity presents when they are free to choose the way to perform the activity.

### **Pre- and Post-test Results**

The third stage in this analysis was the pre- and post-tests that tested the learners' level

of grammar. For the pre-test, they were asked to answer subjective and objective questions without referring to the WOG. However, for the post-test, they were allowed to refer to WOG. The sets of questions were similar to ensure the reliability and validity of the results.

As for the pre and post-test results, their level of understanding of SVA rules used in the construction of simple yet grammatically correct sentences has improved. This can be

seen in the improvement of their post-test results. In the pre-test, 7 learners (46.7%) scored marks between 0% and 39%, 7 learners (46.7%) scored between 40% and 49%, and only 1 learner (6.7%) scored 51%. As for the post-test, 3 learners (20%) scored marks ranging from 60% to 69%, 2 learners (13.3%) scored between 70% and 79% and 10 learners (66.7%) managed to score within the 80% to 100% range.

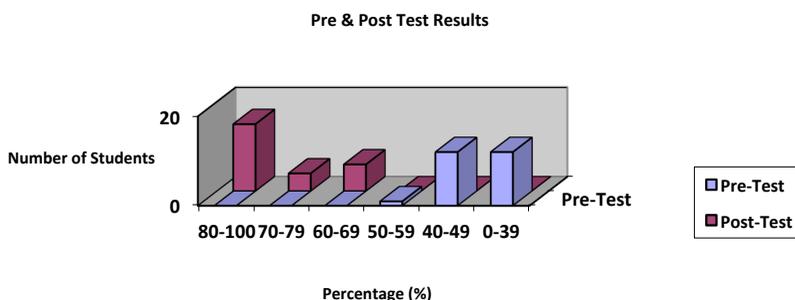


Figure 1. Pre and post-test results

This showed that all weak students need to be given a second chance to learn and understand basic grammar rules because every learner has a different learning style. As stated by Brown (2001), “a teacher must realise that every learner is unique and to cater to the different abilities, (a) teacher must be able to adopt and enlighten the tasks” (p.14). It is unfortunate that these learners are still lacking far behind in grammar when at this age, they should have been able to write error-free sentences. Mohamed Amin Embi (2010:7) suggested that successful language learners must make use of the target language as best as

possible which can be in the form of printed materials such as magazines and newspapers or even electronic media like the internet, television, radio, movie as well as mobile phones. Printed cards such as WOG surely falls into this category of printed materials.

There was only one limitation identified throughout this research. One male student was identified as having colour-blind. Due to this, he was not able to match the colours on the WOG correctly. To overcome this, another student was paired to assist him until he managed to see the pattern of SVA on the WOG and apply it to the tasks successfully.

## CONCLUSION

This paper aimed to describe the use of the WOG to improve students' understanding of SVA in constructing simple sentences. Overall, the frequent use of WOG can rebuild better confidence among learners when constructing grammatically simple sentences. Their self-discovery learning process can be more fun, meaningful and enjoyable. Tomlinson (2011) supported this in his research when he stressed that printed materials are interactive and useful for learners as they enable them to receive feedback on the spoken or written language.

It is important to identify the specific aspects of learners' weaknesses in applying correct rules of grammar when constructing simple sentences as this greatly helps teachers to design suitable tasks that fulfil the learners' needs. After the tasks are completed, there must be a continuous monitoring on their progress with regards to their future test results and confidence in using the language in their reading, listening, speaking and writing activities. When learners participate interactively and collaboratively in the lesson, this will direct their focus and attention towards language learning to provide them with broader contexts (Wright, Betteridge and Buckby, 1984, as cited in Yolageldili & Arikan, 2011).

From the perspective of the learners' learning process, it is crucial to understand the reasons that have led to their inability to construct simple yet grammatically correct

sentences. It is equally important for a teacher to be a mentor, listener and buddy. Teachers can better understand the students if they put themselves in the students' shoes. Different classroom activities are essential to cater to the learners' different needs so that they do not feel that they are being left out of the learning process. As highlighted by Snell (2004), "students should be encouraged to assess their own learning as well as their notions of how they learn, by giving them opportunities to reflect on the teaching/ learning process" (p. 34). If learners enjoy this activity and are able to improve on their grammar, we can be certain that WOG is an activity that would help Malaysian learners to succeed in learning grammar.

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## **Barriers of Implementing Action Research among Malaysian Teachers**

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### **ABSTRACT**

Action research is instrumental in enhancing teachers' professional development. Therefore, this study attempts to identify the challenges faced by Malaysian teachers in conducting action research in their schools and ensure its successful implementation. A total of 34 mathematics and science teachers participated in a focus group discussion. Thematic analyses indicate that the challenges can be classified as the 'S Factor' (school factor) and the 'T Factor' (teacher factor). The key challenges were found to be lack of research culture in schools, which have led to a series of other challenges, and teachers' lack of confidence due to limited scaffolding received in acquiring research-based knowledge and skills.

*Keywords:* Action research, barriers, Malaysian teachers

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### **INTRODUCTION**

Action research is a powerful and effective educational practice that can improve a teacher's instructional strategies to benefit the entire school (Stringer, 2008). In order to address emerging classroom issues, teachers participate voluntarily, plan collaboratively

and improve their instructional practices through observation and reflection. As such, action research initiates the process of school improvement pointing to the key role of teachers in this regard (Grundy, 1994). Since teachers are central in the successful implementation of action research in schools, it is crucial to identify the challenges they face, especially in countries like Malaysia, where the notion of action research is only now gaining roots after it has been introduced as a component of all the pre-service courses of teacher education from the early 1990s (Chee, 2011).

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#### **ARTICLE INFO**

*Article history:*

Received: 28 June 2016

Accepted: 08 September 2017

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### **Action Research**

Action research is a cyclic process involving planning, action or doing the research, and observing and reflecting to improve an educational process (Hine, 2013). It is regarded as a part of teachers' continuing professional development, mainly because action research caters to their on-job learning in keeping abreast changes to their roles, teaching pedagogies and accountability demands that are necessary to address various student needs in this era of globalisation. As the teachers engage in action research, they construct teaching knowledge and become competent practitioners who integrate theory, research and practice (Hine, 2013; Johnson, 2012; Peters, 2004).

According to Riel (2016), action research is a systematic study that critically reflects the actions taken and the effects of those actions, based on empirically supported evidence from multiple sources. Reflective practices are the lifeline of action research because while conducting action research, teachers need to examine their current practices, and analyse actions taken during and post intervention.

Through a series of reflections, teachers construct their own pathway of learning, which in time, helps them to enhance their understanding of how different individual, environmental and societal factors fit into their real and complex educational situations (Bereiter & Scardamalia, 1993, as cited in Riel, 2016).

### **Action Research in Malaysia**

Officers from the Teacher Education Division had convened for a short course from 11 to 18 December (Meerah, Ahmad, & Johar, 2002). In 1990, SEAMEO RECSAM (South East Asian Ministers of Education Organisation, Regional Centre for Education in Science and Mathematics) embarked on a collaborative action research project known as 'Thinking in Science and Mathematics (TISM)' with secondary school teachers in Penang (Tan & Bella, 1990; Chee, 2011). Since then, the notion of conducting action research was sustained through pre-service courses at educational institutes, in-service courses and workshops conducted by Education Planning and Research Department, Malaysian Ministry of Education (Meerah, Ahmad, & Johar, 2002), and the establishment of Malaysian Action Research Network (Kim, 1997). As a result of these programmes, there was a paradigm shift that saw the inclusion of research culture in the Malaysian teachers' profession, which to a certain extent, transformed education in general. As highlighted in Malaysia country report at the International Seminar on Best Practices in Science and Mathematics Teaching and Learning presented for the Asia Pacific Economy Corporation (APEC), the role of Malaysian teachers have been redefined with the incorporation of the research element that sees 'teachers as researchers'. Accordingly, nurturing the culture of research was seen as a vital and timely move,

especially in enhancing and sustaining teachers' professional development. The rationale stands that for teachers, education and learning are lifelong processes and with teaching being dynamic, it was imperative for them to be engaged in classroom research in order to improve their instructional practices. This is a part of their move to enhance students learning in the 21<sup>st</sup> century ("Malaysia", 2013).

According to the Ministry of Education Malaysia (2013), the need to introduce action research in Malaysia was mainly motivated by the advantages that action research brings to the school community. Teachers in particular, can reap the benefits as their experience in conducting action research itself provides an already existing opportunity for 'professional growth', 'self-renewal' in instructional strategies, direct involvement in diagnosing classroom problems and be agents of change in initiating a research culture in their schools ("Malaysia", 2013, p. 131).

In the Malaysian context, action research is slowly but being embraced by the teaching community. Many studies have addressed classroom issues among Malaysian teachers and much of these work is available in print and on the internet. A search in the internet will attest to that. The availability of these action research reports signals that the Malaysian teaching community is moving towards the right direction, as envisioned by the Malaysian Ministry of Education. Although action research promotes teacher learning, with the teachers' existing workload related to

planning a lesson and teaching, managing administrative, advisory, and paper work, conducting action research can be challenging and possibly burdensome to teacher.

### **Challenges in Action Research**

The common understanding of action research is that teachers are required to conduct research in the classroom. However, little or no attention is given to a more pressing demand on teachers, which is, they also undertake the responsibility of initiating the process of implementing change. As a result of their research and action taken, their thinking, knowledge and understanding of the currently adopted instructional practices evolves through critical reflective practices. At a personal level, teachers develop their knowledge and skills (Hensen, 1996; Riel, 2016) to improve student learning (Sweetland & Hoy, 2000), while at a scholarly level they are able to generalise their findings to other situations and disseminate these results (Riel, 2016). At the organisational level, teachers develop a deep understanding on how factors can control change (Riel, 2016). This knowledge accumulated over time among teachers has led to a bigger change in the climate of the organisation (Riel, 2016), which assist in transforming schools into effective learning institutions (Detert, Louis & Schroeder, 2001). By studying evidence from various perspectives and working collaboratively, they engage in an intense inquiry on professional practices, which trigger personal and professional changes

(Osterman & Kottkamp, 1993) and affect the overall climate of the school to bring about societal changes (Riel, 2016). As Pine (2009) puts it, teachers conducting the action research assume the demanding role of 'enacting change' (p. 235), which requires more time, patience and additional skills related to research planning, communication and its implementation. Accordingly, action research poses challenges to teachers.

In a study (Peters, 2004) among Australian teachers, it discovered that one of the main challenges faced by teachers is time constraint: a) heavy school workload, which prioritised teachers' time and as such, impeded their involvement in the action research (Hine, 2013; Peters, 2004); b) The rigid structure of the school timetable that handicapped teachers' commitment in conducting action research, which included meetings to discuss research-related activities that could not be carried out during school time as it deprived students of their learning time. Although teachers willingly arranged for meetings to take place after school hours, there was no one meeting that recorded full attendance as there were incidents of teachers coming late, being absent or leaving early due to personal or official commitments.

While the direct consequence of time working maliciously against teachers was apparent, the indirect consequences of being imprisoned by time also triggered a chain of challenges among them. The teachers were divided between their commitments to students and to their research work (Peters, 2004), which also affected the

robustness of the methodology employed (Waters-Adams, 2006). They faced a huge challenge of continuously and consistently giving attention to their action research as they devoted on improving their teaching practices and improving student learning, which led to research work being at the bottom of their priority list (Peters, 2004).

Another barrier was the support received from the school system, which included the administrative team (Peters, 2004; Slutsky et al., 2005) and the overall school structure (Peters, 2004), with the latter having an overwhelming effect than the former (Leila & Morteza, 2015). The study conducted by Peters (2004) revealed that while the school administration allowed teachers to carry out action research in school, the support was not translated into reducing their existing workload nor rewarding their efforts of conducting the action research. On the other hand, study conducted by Slutsky et al. (2005) found that the teachers lacked support from the school administration and collaboration from their colleagues. This was mainly due to the school culture that perceived teachers sharing their findings as boasting.

According to Peters (2004), the mind set of teachers also posed challenges. Their belief on the usefulness of action research in enhancing their knowledge and professional practices, and their background knowledge was found to be a compelling factor. Despite their conviction on the importance of networking in a professional learning community as a platform to engage in professional discourse, they were sceptical

on the relevance of conducting research and publishing their output as they fear it may take their time away from the core business of teaching. Accordingly, they felt that research aptly suited university scholars. One contributing factor for this the importance teachers place on 'inquiry stance' (Cochran-Smith & Lytle, 1992, as cited in Peters, 2004) and the need to collaborate within the scholarly community to upgrade their knowledge.

Teachers' knowledge on what constitutes research and a lack of research skills act as a barrier s leading to misconceptions on the meaning of action research (Gilbert & Smith, 2003). Their lack of understanding, which can be associated to lack of resources (Leila & Morteza, 2015) has caused them to be overwhelmed by the rigid design of a fundamental research, placing great emphases on the technical and the scientific aspects of research. Much of their suffocation stemmed from misconceptions such as the need to have voluminous data and complex statistical analyses. Additionally, those who understood the process of conducting research quickly embraced its implementation, those who did not were less independent and faced greater challenges (Peters, 2004), especially in confronting their fears, which stemmed from their lack of knowledge about research (McKernan, 1993), and also about not being able to come up with 'substantial' outcomes, which is worthy of reporting as conclusive findings (Slutsky et al., 2005). In this perspective, teachers faced a conflicting role as researchers, which affected their

objectivity to interpret the findings (Waters-Adams, 2006) and the dilemma of filtering the actual results from the expected ones (Hine, 2013).

In sum, the common challenges faced by teachers in embracing action research are related to time constraints, heavy workload, lack of knowledge and skills related to research and action research and misconceptions related to fundamental research and action research. Additionally, peer pressure as a result of the school culture and teachers' mind-set also posed challenges.

### **Challenges in Action Research in the Malaysian Context**

The challenges faced by Malaysian teachers are not uncommon as their counterparts from other parts of the world are also affected. One of the the most critical challenges is time constraint (Norasmah & Chia, 2016). Teachers are restrained by time as they have to balance between their teaching and non-teaching tasks. This is aggravated by their existing heavy workload (Meerah, Ahmad & Johar, 2001), such as completing their syllabus and preparing students for examination. These priorities consume most of their school time, leaving little time for research which involves planning, data collection and analyses, and writing research reports.

Malaysian teachers are also challenged by lack of knowledge and skills related to conducting action research. According to Subramaniam (2011), accurately focusing

on a specific research problem and to reflect it in their writing, are crucial skills for teachers and thus, school support is important, but nevertheless continues to be a challenge (Norasmah & Chia, 2016). Teachers are also challenged by lack of facilities and in addition to the fact not many of their colleagues are also knowledgeable in action research (Meerah, Ahmad & Johar, 2001). However, recent years have seen a marked increase in the number of teachers who have adequate knowledge and skills related to conducting action research through cascading and in-house trainings (Meerah & Osman, 2013).

However, one challenge that was not reported in other countries is lack of financial support (Peters, 2004; Slutsky et al., 2005). Funding action research is an issue raised by Malaysian teachers as the sources of fund were limited to school funds, and allocations from the State Education Department and the Ministry of Education (Meerah, Ahmad, & Johar, 2001). Nevertheless, other institutions are beginning to provide fund for teachers to collaborate and network with lecturers in higher learning institutions (Meerah & Osman, 2013).

### **Statement of Problem**

The benefits of conducting action research are rewarding and promising for the schools, teachers and students (Hine, 2013; Osterman & Kottkamp, 1993; Peters 2004; Riel, 2016). The overwhelming limitations, however, remain as challenges and affect

its full implementation. While there have been extensive studies on the theoretical knowledge of action research and the common challenges faced by teachers in many countries, a digital search indicates a dearth of research on the challenges faced in implementing action research in Malaysian schools (Norasmah & Chia, 2016) are limited.

In addition, there are almost no studies on the challenges faced by Malaysian teachers in implementing action research, from their point of view. As such, this study contributes to the existing body of knowledge on highlighting the teachers' point of view on the challenges they face while conducting action research.

This study focuses on mathematics and science teachers mainly because action research in these two fields is of primary importance as students in Malaysia have not been performing as well as they should in international assessment such as Trends in International Mathematics and Science Study (TIMSS) and Programme for International Student Assessment (PISA). Improving students' achievement in mathematics and science has become a national concern, which was addressed in the Malaysian Education Blueprint 2013-2025 (Preschool to Post-Secondary) (Ministry of Education Malaysia, 2013). Therefore, the need to conduct action research in schools in these two fields is more than necessary, and identifying the challenges faced by the mathematics and science teachers is the

way forward as it will not only alleviate the situation but will improve the quality of action research. It is only by identifying the real challenges that confront Malaysian teacher-researchers who are conducting action research in their schools, can there solutions to ensure the full implementation of action research in Malaysian schools.

### **Research Objective**

This study was aimed at closing the gap between idealism and reality of conducting action research by highlighting the challenges faced by Malaysian teachers in executing action research as part of their professional job. Its objective is to understand the challenges of conducting action research from the Malaysian mathematics and science teachers' viewpoint, who are teacher practitioners and researchers. Hence, this research examined the challenges mathematics and science teachers faced in conducting action research as part of their job description.

### **METHODOLOGY AND SAMPLE**

The study adopted the methodology of focus group discussions, where seven groups of five to six teachers were asked on the

challenges they faced while conducting action research (Krueger, 1988).

This study was conducted based on a one week in-country training conducted at SEAMEO RECSAM. A total of 34 science and mathematics teachers and educators attended this training workshop, with an overwhelming 25 female teachers (73.5%) and 9 male teachers (26.5%). The group consisted of teachers with diverse teaching experience, with majority of them (35.3%) having 11 to 15 years of teaching experience. A majority of 27 teachers were first degree holders (79.4%), while 7 had Master's (20.6%), which indicate that the group is experienced in robust data analyses and fundamental research. The group consisted of teacher-practitioners (24), eight School Improvement Specialist Coach + (SISC+) and two educational officers. The School Improvement Specialist Coaches are mandated to conduct action research in the schools under their care as part of their job description. All of them are mathematics and science teacher educators, who have had classroom teaching experiences having taught in primary or secondary levels (see Table 1 on demographic details of the participants)

Table 1  
*Participants' demography*

		Age (Years)						Total
		21– 25	26 – 30	31 - 35	36 - 40	41 - 45	≥ 46	
Gender	Male	0	1	1	6	0	1	9
	Female	2	5	5	6	2	5	25
	Total	2	6	6	12	2	6	34
Teaching Experience (Years)	1 – 5	2	0	1	0	1	0	4
	6 – 10	0	6	1	3	0	0	10
	11 - 15	0	0	4	6	0	2	12
	16- 20	0	0	0	3	1	2	6
	≥26	0	0	0	0	0	2	2
	Total	2	6	6	12	2	6	34
Academic Qualification	Degree	2	5	4	10	2	4	27
	Master's	0	1	2	0	0	2	5
	Phd	0	0	0	2	0	0	2
	Total	2	6	6	12	2	6	34
Designation	Teacher	2	5	4	7	2	4	24
	Ed. Officers	0	0	0	1	0	1	2
	SISC+	0	1	2	4	0	1	8
	Total	2	6	6	12	2	6	34

The teacher educators were requested were asked four questions on their prior knowledge and skills related to conducting action research. Majority of them (25, 73.5%) have heard of action research, while 10 of them (26.5%) have not heard of action research. About 29.3% (the highest) acquired the knowledge by attending training workshops, 4.7% heard about the concept from their colleagues and the rest knew about it from a variety of sources such as books, internet or attending

talks in schools to fulfil part of the school requirement. Except for three teachers, all of them (91.2%) have had experience conducting action research, with 20 teachers (58.8%) having conducted action research only once. However, when asked to self-rate their confidence level in conducting action research, only 12 respondents (35.3%) rated themselves as having very high or high confidence. Table 2 shows the participants' responses.

Table 2  
*Participants' Responses on Action Research*

		Heard of Action Research		
		No	Yes	
Have Conducted Action Research	No	1	2	3
	Yes	8	23	31
	Total	9	25	34
Num of Times Having Conducted Action Research	None	2	1	3
	Once	4	16	20
	Twice	3	8	11
	Total	9	25	34
Have Confidence	Very Low	1	0	1
	Low	4	7	11
	Fair	1	9	10
	High	3	7	10
	Very High	0	2	2
	Total	9	25	34

In understanding the challenges of action research from their point of view as teacher practitioners, they were first asked whether they had ever conducted any classroom action research. Each participant was later given an individual task of listing some challenges that he or she encountered while conducting action research, or challenges that prevented him or her from carrying it out. They were later assigned to a group of 5-6 participants, where they were given tasks to outline the challenges in an easy-to-read diagrammatic representation on what they experienced while conducting action research. The session concluded with each group having a poster display followed by an oral presentation. This was used as a platform to identify solutions and alleviate their fear of action research. The entire four-

hour session was facilitated by two trainers. The rationale of using this approach was to unearth the challenges faced by the teachers themselves and to allow them to present those challenges as they experienced from their perspective.

#### **DATA ANALYSES AND INTERPRETATIONS**

The poster and oral presentations provided rich qualitative data for this study (Johnson, 2009). This study adopted word analysis, where the focus was on looking at the frequency count of repeating words and keywords-in-contexts (KWIC). The basis of using this form of analysis was because words that occur multiple times are often seen as salient in the respondents' minds (Ryan & Bernard, 2003).

**RESULTS AND DISCUSSION**

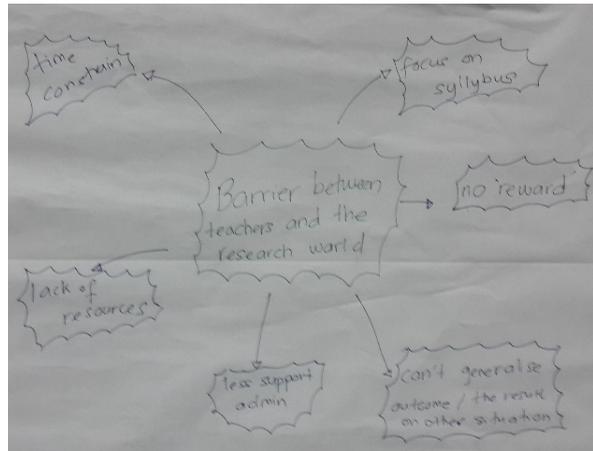


Figure 1. An example of participants’ diagrammatic representation

Table 3  
Barriers to conducting action research

S factor (Number of groups, n)	T Factor (Number of groups, n)
Lack of research culture in school (n=6)	Time constraint (n=5)
Lack of resources and internet facilities (n=4)	Lack of knowledge or skills or confidence (n=5)
Lack of support from administration or school (n=5)	Heavy workload- comprising teaching and documentation (n=3)
Lack of financial support (n=1)	Teachers’ motivation or negative mind-set of conducting research (n=3)
	No extrinsic reward or recognition of doing action research (n=2)
	Exam orientated expectations (n=2)
	Resistant to change (n=1)
	Open-endedness of action research (n= 1)

Further investigation reveals two major categories of issues related to the school and teachers, referred to as the ‘S factor’ and the ‘T factor’. The main challenge captured in the ‘S Factor’ is the lack or absence of research culture in schools. The main argument is that conducting research is ‘not normal’, which probably suppresses the research element and thus the successful

implementation of action research. Another challenge most frequently reported was lack of support from the school or from the school administration. As one teacher explained, “The school supports us by encouraging us but not by reducing our workload”. It is clear that the support rendered by the school is not translated into actions that can reduce the workload that they assume as teachers,

just like in other countries (Peters, 2004) When the research culture is almost absent in schools, it is understandable support from the school to be lacking too. However, support from the school system is critical in motivating teachers to conduct action research (Grundy, 1994).

Despite the ongoing efforts to encourage action research in Malaysian schools, schools are more likely to be focussed in enforcing instructional practices, rather on research. Another challenge that was highlighted, which is related to the school culture, was lack of co-operation among teachers, poor school facilities and financial constraints. Facilities and infrastructure in schools, mainly availability of internet and resources to facilitate action research, was perceived as a drawback in conducting research. Support from the school administration is also important team (Peters, 2004; Pine, 2009). Only one group highlighted financial issues as a challenge among teachers who collaborate in action research. Possible reasons could be that the school lacked sources to fund their research, teachers lack the knowledge to source for funds or the fund is insufficient. In short, the research culture in schools can be captured in two standpoints, the existing static nature of the school culture that does not encourage the research element and the lack of encouragement to conduct research. Either way, it directly affects the growth of a research culture in schools.

The teacher factor or the 'T factor' relates to extrinsic factors such as time constraints and workload, and intrinsic factors such as

attitude, motivation, confidence and fear. While time constrain was reported as a huge challenge, it was often associated with the teachers' heavy workload of teaching and 'clerical' work, which were directed towards finishing syllabus and preparing students for examinations. Time constraint appears to be a global challenge faced by teachers as their instructional time spent in school was insufficient to allow them to engage in action research (Peters, 2004). As highlighted by one of the participants, "If the school can intervene by reducing the teachers' workload, time may not challeng us as how it is now".

Many teachers had negative perceptions of conducting research in schools, as research was generally thought to being secondary to teaching, and therefore viewed as not important or worthy of efforts when compared to teaching, being a teacher's core task. Upon further examination, it was revealed that some teachers were not interested to 'write' the report of the completed action research and as such, were discouraged to conduct action research. Some reported they were not comfortable with the initiative to make a change or to undertake the daunting task of becoming 'agents of change'. Their roles as teachers are perceived as passive consumers of knowledge and not dynamic producers of knowledge, which is seen to be the purview of university researchers. Their resistance to change also formed a barrier in conducting action research.

Another intrinsic factor that had an impact on conducting action research was

motivation. The teachers reported that there was neither reward nor recognition, for assuming a complementary role as teacher-researcher. While monetary gratifications were not their main focus, teachers welcomed a reduced workload or a lighter timetable to cope with the added research-related work, and also guidance from external assistance to scaffold their queries on their research. This may explain why this one-week course on action research received immense response within days of its announcement.

Confidence was another challenge. Many lamented their lack of knowledge and skills associated to research and suggested ways that could be integrated into teaching. Lack of such skills has eroded their confidence and deterred them from conducting action research.

A negative intrinsic factor that directly worked against the teachers was fear. More teachers reported their belief that action research requires the rigorous methodology and rigidity statistical analyses of applied research compounded their fear they already had on lack of knowledge on action research. The open-endedness of action research was also found to be a challenge as some teachers reported that their fear also stemmed from not being able to make substantial findings at the end of their research. A few indicated that their fear sprang from their reluctance to admit the difficult truth, which was related to the pedagogical methods employed in their research. The fear of having conducted a 'failed' research was a challenge by itself in

conducting action research, especially after investing much time and effort.

Therefore, there were manifold factors that deterred this group of science and mathematics teachers in conducting action research in schools. But, lack of research culture was cited as the key factor. Could this be due to lack of or no encouragement from the ministry of education to provide sufficient training for teachers, or there is no reward or due recognition for teachers as researchers? Discussions with the sample revealed that school teachers were subjected to heavy procedures when applying for leave to present their findings in international conferences, coupled with the burden of self-financing, and not even obtaining partial sponsorship from the authorities. Yet, financial support was listed at the bottom of the scale and therefore least expected. The results also indicated that lack of knowledge or skills and support from administration were high on the list of thorny barriers. Time constraint was cited as problematic, but workload was not perceived as much of a deterrent factor. Thus, the results show that motivation can remove the negative mindset of teachers in engaging classroom action research and ensure they are less resistant to changes in their instructional practices.

## CONCLUSION

The article has shed some light on the challenges faced by Malaysian teachers-researchers in conducting action research from their viewpoint. The lack of research culture in schools and lack of support from

school administration were identified as key challenges in addition to teachers' heavy workload, which were associated with time constraint, and teachers' low confidence, which was related to lack of knowledge, skills, and scaffolding.

As highlighted by Grundy (1994), even though teachers play an instrumental role in improving the quality of education through action research, the pivotal role of the school as providing a 'benign facilitative structure' (p. 34) must be acknowledged. According to the author, but the school is a site where educational reform is taking place. Such recognition highlights the importance of receiving support from schools, specifically through the organisational structures within which teachers operate, which is not exclusive to the administrative teams.

Thus, provision of proper scaffolding to address the poverty of research culture in school is essential. Accordingly, a two-way collaboration between university lecturers and school teachers is important (Yuan & Lee, 2014). The external assistance will provide the teachers the much-needed support in terms of knowledge and skills related to research, and simultaneously address their lack of confidence, motivation, interest, knowledge and skills, and minimise fear. The experience born out of this partnership can be rewarding for both parties and it also forges professional ties between the two educational institutions. By working towards promoting, embedding and actualising the culture of 'doing research' in schools, it will help to alleviate the lack

of support from the school and improve teacher cooperation as well. This is because when schools are mandated to execute a programme, it becomes a priority and no longer an option.

This study has highlighted some of the challenges faced by Malaysian teacher-researchers in conducting action research in schools. However, it ought to be noted that the study was carried out in a small-scale among a selected sample of mathematics and science teachers who attended a one-week course on action research. It is recommended that future studies be conducted among a large sample from all the states in Malaysia, for the successful implementation of action research. For monitoring and evaluative purposes, it is vital to get current updates on the implementation of action research in Malaysian schools, especially in view of the on-going training programmes on action research conducted by the Ministry of Education to nurture and sustain action research for the teacher's continuous professional development. For this purpose, it is also proposed that the school and teacher categories that were identified in this study be used as constructs to be developed into a questionnaire.

To conclude, improving educational practices is not solely concerned with methodology. For action research, teachers play a vital in its successful implementation. It is hence, important that they receive support from schools and the Ministry of Education in overcoming challenges related to sustainability of action research.

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## **Aspirants' Agendas and Party Ideology in Newspaper Political Ads in Nigeria**

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### **ABSTRACT**

This article used Roland Barthe's *Rhetoric of the Image* to analyse newspaper political ads of two presidential aspirants of a political party that defined Nigeria's nascent democracy from 1999 to 2015. Semiotics was employed as a theory and method to engender an understanding of how persuasive messages are used to elicit party support in Nigerian and by extension, African political communication systems. It can be inferred from the evidence that the candidates' rhetoric was conveyed using denotative and connotative messages. The linguistic messages were conveyed through denotative meanings using *anchorage* and *relay* – two functions of linguistic messages in ads – to direct the reader to preferred meanings and to add extra meaning to a preferred one. The connotations from the ad visuals were conveyed using polysemic meanings. However, the visuals did not signify the party's ideology, though ideology is the common domain of the signified in ad visuals. Overall, the *Daily Trust* and *The Guardian* were instruments in conveying the aspirants' persuasive messages on salient economic, political and social issues.

*Keywords:* Culture, Print media, Semiotics

### **INTRODUCTION**

Political advertising in this article refers to the purchase of advertising space at

commercial rates, to transmit political messages to a mass audience. This type of media may include cinema, billboards, the press, radio, and television (McNair, 2007, p. 86). However, forms of political

#### **ARTICLE INFO**

*Article history:*

Received: 25 July 2016

Accepted: 11 August 2017

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advertising are determined by the political communication system in a society. For instance, in the United States, voters are exposed to television and radio political ads (Bartels, 2014; Blumler & Kavanagh, 1999), direct or electronic mails, websites and party blogs, text messages, social media and rallies (Biagi, 2012). In contrast, political rallies, radio and TV jingles, mobile phones, newspapers, magazines, billboards, posters and social media are common forms of political ads and campaigns in Nigeria. This study analysed political advertising in Nigerian newspapers because of its elitist nature (Adesonaye, 1990, p. 63). Newspapers are also a strategic media for targeting political elites, who are the audience of the political ads analysed in this study.

The analyses in the current explored political ads that promoted the candidature of immediate past Nigerian President, Goodluck Jonathan and former Vice President Atiku Abubakar in Nigerian newspapers. The two contested for the presidential candidacy of Nigeria's erstwhile ruling party, the People's Democratic Party (PDP) during the 2011 election. Nigeria returned to democracy in 1999 after over two decades of military dictatorship. The PDP controlled and redefined the country's political landscape for 16 years, from 1999 until 2015, when it lost the presidency and most state and parliamentary posts went to the current ruling party, the All Progressive Congress (APC).

In conceptualising how political parties should operate in Nigeria, the PDP introduced

a power sharing principle between Nigeria's South and North for two-terms of eight-years each, and Olusegun Obasanjo, a Yoruba from Western Nigeria emerged president on PDP's platform from 1999 to 2007. The late Umaru Musa Yar'Adua was the party's presidential candidate and winner in the 2007 presidential elections. The PDP's power sharing principle was truncated when Yar'Adua died before completing the North's first tenure. Goodluck Jonathan, an Ijaw, one of Nigeria's several ethnic minorities from the South, who was Yar'Adua's deputy, became president. Osaghae (1998, p. 3) posits that ethnic minorities are in contradistinction to major groups coexisting in the political systems. They experience systemic discrimination due to their numerical inferiority status and a host of historical and sociological factors, which leads them to take political action to further their collective interests. Therefore, the Ijaws and Southern Nigerians, as ethnic minorities furthered their political interests and argued that the incumbent at the time had constitutional rights to contest. Meanwhile, the second aspirant, Atiku Abubakar was the Northern Nigerian consensus candidate. He sought to complete the North's second tenure based on the PDP's power sharing principle. Jonathan was eventually elected PDP's candidate and president during the 2011 presidential elections.

The 2011 contest challenged the party's multi-ethnic framework for distributing political and nominative positions. Meanwhile, Kendhammer (2010) notes that the PDP held itself together with an

elaborate but largely informal system of power-sharing as a commitment by party leaders to distribute the highest-ranking positions in the government and in the party according to six geographic zones that represent ethnic realities.

In Nigeria, party politics is still enmeshed in ethnic alliances. No brilliant creative political ad can perform wonders for a candidate if he or she does not belong to a favoured specific region, religion or party (Ayeni, 2011, p. 51). There is also a struggle between individuals seeking to monopolise State power on behalf of sub-national communities in Nigeria (Joseph, 2014).

Therefore, we studied the political ads of the presidential aspirants of Nigeria's most influential political party (at the time), which targeted delegates who voted for the party's candidate for the 2011 presidential elections at a national convention to fill a dearth in semiotic research literature on political advertising in Nigeria and to understand how political party aspirants' campaign for support of political elites in a sub-set of an African political communication system. This is because political parties are at the constitutional heart of the democratic political process (McNair, 2007, p. 7), and we explored newspaper political ads to uncover aspirants' agenda and theorise their party's ideology because Eco (as cited in Woollacott, 2005, p.87) argues that, ideology is the final connotation of the totality of connotations of the sign or the context of signs. Furthermore, the analyses herein are the researchers' subjective

interpretations within the contexts of the study area. Therefore, the findings are by no means universal. However, it contributes to the knowledge on Africa's political communication systems by using semiotics as a theory and methodology to explore the meanings embedded in newspaper political ads, considering that semiotics is rarely used as an alternative content analysis approach in researching Nigerian political communication media texts.

## THEORETICAL FRAMEWORK

This study used assumptions from Roland Barthes' Rhetoric of the Image exemplified in his classic analyses of the *Panzini* (Italian pasta) advert. Barthes (1977, 1978) argue that the first message in any advertising is linguistic, which is supported by the caption and the labels. The second and third messages are denoted and connoted. Meanwhile, the linguistic message is two-fold: denotational and connotational, where the first is literal and the second is cultural, and therefore, symbolic.

The linguistic message functions in two ways: anchorage and relay. The most frequent function in the former is to signify multiple meanings and interpretations (polysemy). But anchorage is also used to focus on one of the many meanings, or direct the reader to choose a preferred intended meaning and ignore other meanings. The function of the latter is to add meaning so that both text and image work together to convey intended meaning (Barthes, 1977, pp. 155-157; McCabe, 2009).

In addition, the denoted meaning in an image is literal while the connoted meaning, which is the “rhetoric of the image”, is often cultural, and includes all the visual elements, that can be employed as signifiers. Thus, the connoted meaning varies, and may depend on different kinds of knowledge – practical, national, cultural, aesthetic, etc. However, the common domain of the signified connotation is ideology (Barthes, 1977, pp. 158-162; McCabe, 2009).

### **POLITICAL ADVERTISING AND SEMIOTIC RESEARCH TRADITIONS IN NIGERIA**

Most research on Nigerian political campaigns use quantitative content analysis to examine TV ads on cross-cultural products, commercial advertising in print and broadcast media, and electoral choices (Alozie, 2003, 2010, 2011; Olatunji & Akinjogbin, 2011; Olujide, Adeyemi, & Gbadeyan, 2011; Oyedele & Minor, 2012). For instance, political advertising significantly affected electoral choices (Olujide et al., 2011), and most Nigerian newspaper political ads (49.5%) in the 2007 presidential elections which were sponsored by political parties were significantly negative, and did not comply with regulatory laws (Olatunji & Akinjogbin, 2011). Consumer ads maintained an ideological position of patriarchy, promoted imperialism and dependency, encouraged unemployment and promoted the failure of Nigerian manufacturing industry (Alozie, 2011). However, this study explored the gap in literature on political advertising

in Nigerian newspapers using semiotic theoretical and methodological perspectives to uncover the agenda of political aspirants seeking Nigeria’s highest political office. This is contextualised in a political party communication system. In a country where power is essentially contested (Axford, 1997), PDP aspirants deployed various tactics to secure the presidential candidacy of their party. Additionally, Nigeria plays an influential role in Africa as well as the global economy and politics and recently witnessed a political Tsunami with a shift in power from a political party which held sway for over 16 years since the country’s return to democracy in 1999.

### **POLITICAL AGENDA AND IDEOLOGY IN NIGERIA**

Political agenda are a set of issues that are the subject of decision-making and debate within a given political system at any one time (McCombs, 1981), while ideologies are a shared framework of mental models possessed by groups of individuals to provide both an interpretation of the environment and a prescription on how an environment should be structured, according to Parsons (as cited in Jost, Federico, & Napier, 2009, p. 309). Ideologies also describe or interpret the world by making assertions or assumptions about human nature, historical events, present realities, and future possibilities. It envisions an ideal world and specifies acceptable means of attaining socio-economic and political ideals (Jost et al., 2009, p. 309).

Another vehicle for conveying political agenda and ideology is the media. McNair (2011, p. 47) posits that the media provides cognitive knowledge, informing people about what is happening, in addition to providing order and structure to political reality, allotting greater or lesser significance to events according to their presence or absence on the media agenda. McNair (2007, p. 6) further argues that the media does not just serve as an intermediary between political organisations and citizens; it provides a channel through which persuasive messages of political candidates and parties are conveyed to citizens using various elements, including political advertisements. In the context of this paper, agendas in the newspaper political ads of the aspirants during the 2011 PDP presidential candidate election conveyed aspirants' persuasive messages on economic, political and social issues salient to Nigerians at the time.

Meanwhile, Omotola (2009) juxtaposed ideological dispositions of Nigerian political parties under successive republics to infer that manipulation of ethnicity and religion as well as dominance of money politics effectively relegated political ideology to the background. Musawa (2014) asserts that Nigerian political parties lack party ideology while Oluwatola (2014) argues that Nigeria does not need ideologically-driven political parties but adequate competition in the political space, and that whatever political ideology drives a party, the goal is to better the lives of the electorate by fulfilling electoral promises.

Interestingly, it is not new that political party ideologies define political landscapes of global democracies. Different political spectra defined Nigerian political parties in pre- and post-independence era. The ideological differences were congruent in serving diverse needs and aspirations of the party. Early Nigerian political parties such as the Northern People's Congress (NPC), Action Group (AG) and the National Convention of Nigerian Citizens (NCNC) were dominant in Northern, Western and Eastern Nigeria respectively with different political beliefs.

Omotola (2009, p. 131) asserts that ideologically, the NPC was essentially a conservative and elitist party; the AG appeared to be progressive and socialist; while the NCNC was welfarist and predicated on the nationalist ideology. There are commentaries that the ideological beliefs drove the social regional organisation and accounted for disparities, for example, in gaps on western education between Western and Northern Nigeria. Therefore, Nwangwu and Ononogbu (2014) explained that ideology is an essential ingredient of viable political parties and the fundamental basis for socio-political mobilisation. Oluwatola (2014) highlights that ideological classifications were untenable in the reality of current political practices within the argument that what matters are politics driven by interests, protection of the rights of many, and a focus on what is in the best interest of the majority. Nonetheless, Nwangwu and Ononogbu (2014) argue

that in Nigeria, instead of mobilising people around issues of development on a horizontal basis, the political elites are manipulating the people with regional, ethnic and religious prejudices to create barren development.

### **A BRIEF ON NEWSPAPER AND POLITICS IN NIGERIA**

Some factors that nurtured early Nigerian press historically include ethnic and regional configurations (Oso, Odunlami, & Adaja, 2011). During the regional era, each of Nigeria's Eastern, Northern and Western governments and political parties had loyal newspapers engaged in regional bitter polemics (Oso et al., 2011; Sobowale, 1985; Uche, 1989). At present, there are many state-run newspapers in Nigeria that are operated and funded by state governments and are circulated within those states as well as a few neighbouring towns. There are also over 100 private commercial print media proprietors in the country (Akingbulu & Bussiek, 2010), and these owners are former state governors, influential politicians, oil magnates and business moguls and a few veteran journalists.

### **METHODOLOGY**

This study purposively analysed political ads in two Nigerian newspapers: *Daily Trust* and *The Guardian*, based on their strength of circulation and publication of political ads of the aspirants. There are no reliable newspaper circulation figures in Nigeria (Alozie, 2011; Oladoyinbo, 2013; Oxford-Business-Group, 2012).

However, the 2010 Advertisers Association of Nigeria (ADVAN) report showed that *The Guardian* sold 25,222 copies, while the *Daily Trust* sold 11,672 copies daily. These two newspapers are the top seven highest selling and most influential newspapers in Nigeria (Akingbulu & Bussiek, 2010). *Daily Trust* is the most widely read newspaper in Northern Nigeria and is owned by a group of private proprietors from the North (Musa & Ferguson, 2013). *The Guardian* is a vintage newspaper that appeals to influential members of society, and is the flagship of the Nigerian press (Akingbolu, 2011).

Political ads that appeared in dailies were sampled from November 23<sup>rd</sup>, 2010 to January 13<sup>th</sup>, 2011 when the campaign commenced and ended with the PDP national convention where delegates elected the party's presidential candidate. Sampling dates, Bryman, Teevan, and Bell (2009, p. 204) observed, are sometimes dictated by the occurrence of interest. A total of 34 political ads were found in 26 editions of the sample population within the period - 26 adverts in *Daily Trust* and 8 in *The Guardian*. The ads were assigned random numbers from 1 to 34. Subsequently, a seven-day weekly table was constructed and samples of the political ads were selected using simple random sampling with a one-week interval to select four political ads for each aspirant, and a total of eight political ads for the analysis.

The visuals were analysed using Roland Barthes' Rhetoric of the Image classical analyses of the Panzini (Italian pasta) advert as indicated in the theoretical framework.

The unit of analysis was restricted to the visuals, including language, which according to Saussure (as cited in Danesi, 2004) is a system of signs that expresses ideas. These include words and phrases supporting the political ads. These were used to explore denotative and connotative meanings, since a key assumption of semiotics is that surface signs are related to an underlying structure with a related assumption that there is an underlying structure (Feldman, 1995). Denotative meaning refers to the basic meaning whereas a connotative meaning refers to deep-culturally rooted contextual meanings among Nigerians. In addition, since semiotics is fundamentally cultural in its approach (Feldman, 1995), codes and sub-codes within the Nigerian context were applied in the light of a general framework of cultural references. This is more so that codes guide interpretation in an environment where interpretation unfolds (Danesi, 2004). These subjective interpretations are appropriate because Krippendorff (2004, p. 33) argues that in content analysis, a context is always someone's construction, the conceptual environment of a text, the situation in which it plays a role.

The following were analysed: headlines and sub-headlines, slogans, text/body-copy, blurbs, boxes/panels, identification marks, closing ideas and illustrations. The signs were systematically clustered using Feldman (1995, pp. 21-24) three-column table technique for handling qualitative data in semiotic analysis. The first column denotes, the second connotes, and the third contextualises institutional concerns.

Descriptions of all uses of the concepts of interest were denoted in the first column. The second column underscored what the concepts mean when Nigerians talk about it and relied on one of the researchers' understanding of the context and culture to draw a pattern that can show the significance to both the researcher and the audience. The third column was used to identify the issues of concern to Nigeria as a nation during the 2011 Presidential Election as well as clarifying various contexts.

The signs consist of trichotomies based on the works of Charles Sanders Peirce. Peirce (1955) argues that signs comprise an *icon*, an *index* or a *symbol*. An *icon* is a sign that refers to the object that it denotes merely by characters of its own, and which it possesses, and is embodied in the form of an object. An *index* refers to the object or event that it denotes by being very affected by that object, hence establishing an association between the *index* and the object. A *symbol* is a societally established law or convention in general which loses the character that makes it a sign if there was no interpretation. Therefore, icons represent objects mainly by similarity and exude semblance, indexes establish association with an object and symbols are signs interpreted from experience as replicated by rules within a social context.

## FINDINGS

### Denotations from the Political Ads

The denotations from Atiku Abubakar's political ads were interwoven as the selling

points of his candidacy to portray him as a patriotic citizen, a visionary leader and one whose election promises to bring infrastructural and economic development. The denotative meanings were conveyed in both linguistic and visual messages. The linguistic messages appeared in captions and labels using *anchorage* and *relay*. Anchorage directs the reader to preferred meanings while relay adds extra meaning to the preferred one, which the reader's attention is being directed to. In Figure 1, for example, the caption 'Atiku: Candidate for All Nigerians' signifies that Atiku has been endorsed by all Nigerians. Anchorage was also used to influence the reader to perceive him as a patriotic citizen using texts and backgrounds with emerald green colour of Nigeria's national flag as a national symbol as exemplified in Figures 1 to 4. Additionally, anchorage functioned in Figure 2 to signify Atiku's rhetoric in terms of developmental and economic policy thrusts. Meanwhile, relay is used as the second function of a linguistic message to complement the meanings from anchorage. For example, relay is used in Figure 1 where the traditional titles held by Atiku across the nation's geographic regions are specified. This is used to complement the linguistic message anchored on endorsement. Similarly, in Figure 3, the caption 'The difference is Not LUCK!', is a satirical coinage from the name of his fellow contestant, and former president, Goodluck Jonathan, to direct the reader to conceive Atiku as a leader with a progressive development agenda. Comparison is made between Nigeria and the Britain by exemplifying that in 1881

when British homes and factories were lit with electricity, 15 years later (in 1896), a 60-kilowatt electricity generating plant was also commissioned in Lagos, which was a British colony at the time. This relay function in Figure 3 shows Atiku's leadership symbolises a new dawn of patriotic leadership that will provide the infrastructure that has eluded Nigerians for decades and has been its bane causing its under-development. The closing idea in Figure 3, 'vote wisely...' also uses relay as a linguistic device to complement the anchored message that Atiku, who has the endorsement of the royal elites, is the best leader PDP can bequeath to Nigerians.

In addition, the denotative messages in the visuals of the political ads of Atiku, for example, Figure 1, indicate that he is the candidate endorsed by Nigeria's royal elite based on his appearances in Northern, Eastern, Southern and Western Nigerian traditional attires. His corporate attire is endorsement by the white-collar sector, comprising civil servants and private and business sectors. The visuals in Figure 2 for example, also portray him as the choice of northern Nigerians signified by his typical Northern Nigerian traditional attires in Figures 2 and 4, as well as the photos in Figures 1 and 2 with *Babban riga* and *damanga*. The former is a typical Northern Nigerian traditional flowing gown and the latter is a typical Northern Nigerian cap. These significations appeal to Northern Nigerian delegates to visualise Atiku as 'The Candidate' of Northern Nigeria. However, the denotative meaning in the visuals in Figure 4, unlike previous ones, is

polysemic. It could signify that Atiku has political power or control as a great leader. The headline 'A symbol of democracy' and Atiku's towering photo also combine linguistic anchorage to signify him as a symbol of democracy with polysemic denotative meanings of a powerful man or someone with a large following. In most of his ads, Atiku was also depicted as someone who is dynamic, with the penchant for imbibing contemporary global trends and technological tools for communication such as *Twitter* and *Facebook* due to the constant placement of those social media logos on his ads. These social media platforms are popular in Nigeria and appeals to youth, a burgeoning segment in Nigeria and among the delegates who voted at PDP's 2011 convention.

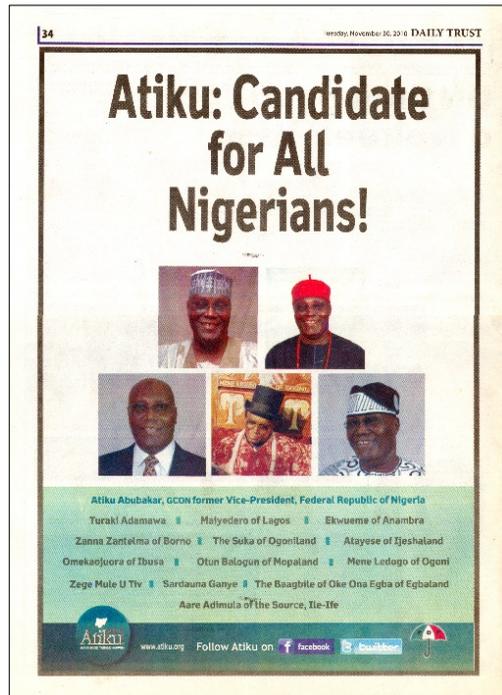


Figure 1. *Daily Trust*, November 30, 2010, p. 34

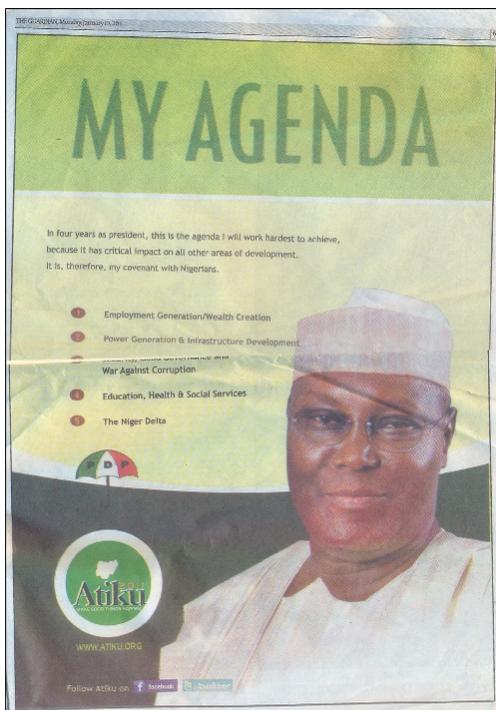


Figure 2. *The Guardian*, January 10, 2011, p. 61

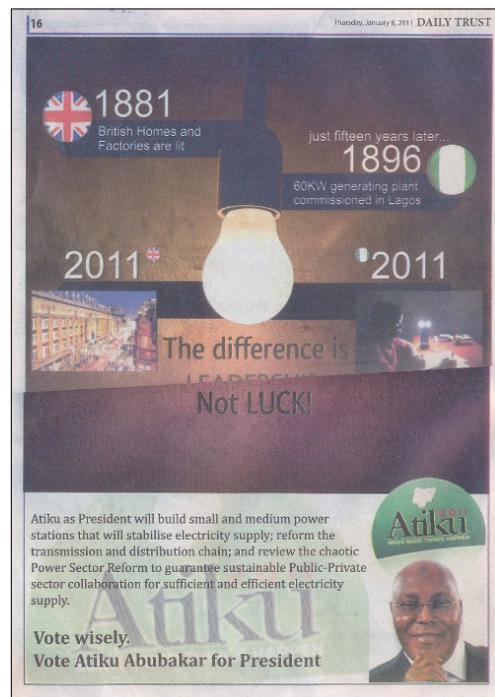


Figure 3. *Daily Trust*, January 6, 2011, p. 16



Figure 4. *The Guardian*, December 6, 2010, p. 26

Similarly, the denotative meanings of Goodluck Jonathan's ads were also conveyed using linguistic and visual messages. The linguistic messages were conveyed using anchorage and relay in captions and labels. The denotative meanings conveyed messages of unity, endorsement, political participation and economic development.

In Figure 5 for example, the linguistic message used anchorage to signify that Jonathan was the candidate to guarantee Nigeria's unity and thus: 'NORTH, SOUTH, EAST OR WEST, WE ARE ONE NIGERIA'. The sub-caption 'Support Nigeria's Consensus Candidate Chosen by 150 Million Wise Men & Women' uses

another linguistic function – relay – to signify endorsement, and as a supplement to the preferred message that was conveyed using anchorage. In addition, the denotative signification in the visuals (in Figure 5), portray Jonathan's endorsement with his appearance in traditional regalia and textual illustrations to show his endorsement by traditional leadership across Nigeria's diverse ethnicities<sup>1</sup>. This gigantic picture of Jonathan in *babban riga* and *damanga* – the former, a typical Northern Nigerian traditional flowing gown and the latter, a typical Northern Nigerian cap – superimposed on a green-white-green coloured Nigerian map surrounded by miniscule pictures in Southern, Eastern and Western Nigerian traditional attire denotes a counter-narrative to the Northern Nigerians on PDP's power sharing arrangement discussed in the introductory section. It depicts him as the choice candidate of Nigeria's diverse ethnicities. It also countered the regional divisive political rumbling within the party. Jonathan is from Nigeria's South. Depicting him in Northern Nigerian traditional attire ascribes to him Northern Nigerian heritage and eligibility as its candidate. This narrative is accompanied by the Nigerian national flag as a symbol of authority in the background. This is his endorsement as a 'consensus

<sup>1</sup>Nigeria has over 250 ethnic groups who speak over 450 dialects.

candidate chosen by 150 million wise men and women’.

Meanwhile, the denotive messages from the ads sponsored by Jonathan did not only focus on promoting his candidacy, but also on using negative propaganda campaign against his opponent. These are depicted in Jonathan's ad in Figures 6 and 7 which used a campaign of calumny to demonise Atiku as an agent of doom and corruption. The linguistic message uses both anchorage and relay to conceive tales of horror, and depict Atiku as a desperate politician whose corruption with impunity attracted the wrath of ‘big brother’ America. The visual in Figure 6 signify horrific tales of agony and destruction of lives and property as consequences to Nigerians if Atiku becomes the presidential candidate of the PDP in the 2011 elections. Equally, the labels in Figure 7 linked one of Atiku's wives to corruption and to establish his corrupt personality.

The linguistic message in Figure 8 uses anchorage to signify Jonathan as the candidate that would support creative minds and entrepreneurs with the bold inscription: ‘Behind every enterprising entrepreneur will be his government's support’. The additional sub-caption ‘Goodluck Jonathan understands the despair of a young man or woman who can create but is unable to. Those days will soon be over. Vote Goodluck Jonathan’ uses relay to reiterate the initial message in the anchored preferred linguistic message to portray Jonathan as

‘The messiah’ that will curb soaring high rates of unemployment, create job, businesses and enabling business environments for teeming jobless Nigerians. The denotative meaning in the visual of Figure 8 uses the PDP coloured attire to ascribe to him the status of a party chieftain. The agenda of the phrase ‘it is time to make progress’ meant his candidacy will open a new vista in the history of Nigeria. The slogan, ‘power to the people’ is the motto of the PDP, and was used to confer power to the delegates, by making them believe they hold the power to ‘decide’.

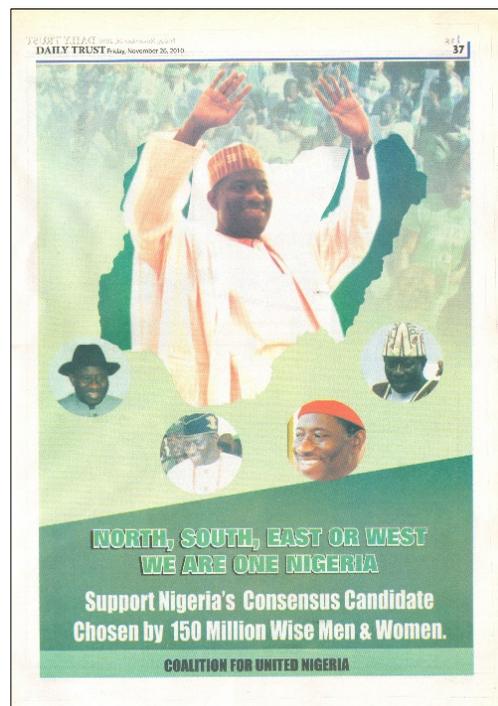


Figure 5. *Daily Trust*, November 26, 2010, p. 57



Figure 6. *The Guardian*, December 23, 2010, p. 57



Figure 7. *The Guardian*, December 14, 2010, p. 78

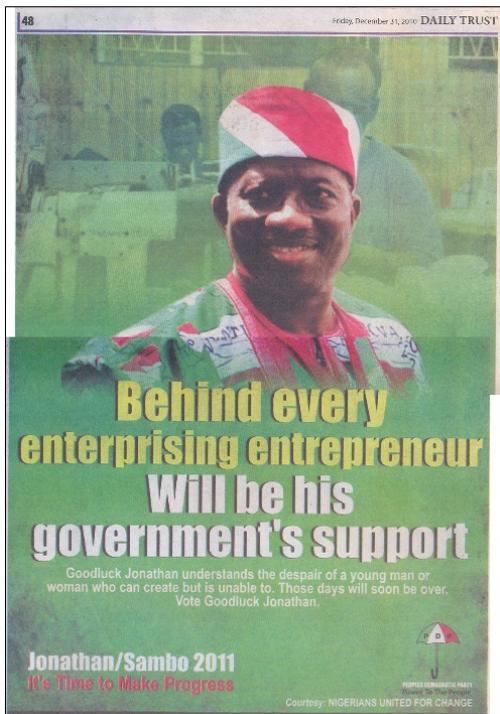


Figure 8. *Daily Trust*, December 31, 2010, 48

### Connotations from the Political ads

The rhetoric in the ads of Atiku sought to convince delegates to perceive him as the popular and most competent candidate. He was promoted as a visionary and patriotic leader who will promote infrastructural and economic development. Multitudes of traditional titles in his home state, Adamawa in Northern Nigeria and ethnic groups in other regions connoted endorsement by his people and diverse ethnic groups. This showed that Nigeria's diverse ethnicity bequeathed royal and ancestral rights and responsibilities on him. The use of Nigeria's second highest national honour (GCON – Grand Commander of the Order of the Niger), conferred on him when he

was vice president assigns to him a symbol of authority by the state and its constituent powers. In the Nigerian context, traditional attires are symbols of authority and convey the values and beliefs of a people. Dikko (2015) corroborates this position with evidence that costumes influence the status symbol of traditional title holders of Northern Nigeria.

Evidence for the preceding arguments can be exemplified with the photographs of Atiku in royal attires of diverse ethnic groups to symbolise various ethnic groups' conviction of his capacity to represent them. These invariably gave him their loyalty and support. The use of new media platforms, *Facebook* and *Twitter*, connotes that Atiku is a revolutionary and trendy leader, using technology for governance and development. The use of the PDP logo connotes endorsement by the party's high echelons.

The emphatic use of emerald green that Greer and Donica (2013, p. 191) argue symbolise hope, was used as a national symbol to appeal to delegates' patriotism. The assertion by Penn (2000) that green is the colour of life, renewal, nature, and energy, is synonymous here too for growth, harmony, freshness of ideas and purpose, security of lives and property and a promising future for Nigerians. Therefore, the bold emerald green letters connoted unity in diversity and prosperity. Furthermore, one of Atiku's ads focused on a five-point agenda: employment generation and wealth creation, power generation and infrastructure development, security, good governance and war against

corruption, education, health and social services, and the Niger Delta. These was based on Nigeria's development challenges to underscore his knowledge of Nigeria's bane of underdevelopment.

The electrified British building and street, and a photo of a student reading with a candle and rechargeable lantern compares progressive and retrogressive developments in the U.K. and Nigeria respectively. The brightly lit electric bulb symbolised hope and prosperity for Nigerians. The British and Nigerian flags, in circles, as well as the dates draw attention to milestones of historical accomplishments in the U.K. and in Nigeria way back in the colonial era, where in 1881, the U.K. had stable electricity and Nigeria's colonial capital, Lagos, enjoyed the same 15 years after in 1896. Atiku suggests he will reverse Nigeria's path and solve its electricity problems to create an enabling environment for development, industrialisation and economic prosperity. The super-imposed map of Nigeria, in white, over a semi-circle, in the emerald green of the Nigerian flag symbolises Nigeria's national identity. The slightly tilted half circle, like a rising sun, connotes a new dawn. The inscription, 'make good things happen', which was the slogan for Atiku's 2011 campaign, supports a new beginning and prosperity for Nigerians living in poverty. His charismatic photo and the phrases 'Vote wisely... Vote Atiku Abubakar for President', are closing ideas, which Axford (1997) argues are important for motivating an audience for immediate action.

Figure 4 shows that Atiku is an advocate of social equality, and metaphorically designated him to be a democrat whose leadership ideals represent fairness, equity, justice, inclusive governance, collective participation and judicious utilisation of public resources for collective interests. However, the crowd beneath the giant photo of Atiku failed to serve the intended purpose. Nonetheless, his giant photo on the miniaturised crowd weighs in and suggests he can ‘command’ the people. The Atiku campaign logo, unlike the slightly tilted half circle in Figure 3, appears as a full circle, connoting continuity.

Jonathan’s ads focused on development, participation, economic prosperity, unity, endorsement and negative propaganda to demonise Atiku as an advocate of doom and corruption. Jonathan was signified as a unifying personality who has the endorsement of Nigerians. This emphasises the indivisibility of Nigeria’s distinctive geographic entities. The consensus support by 150 million Nigerian ‘wise’ men and women is a veiled endorsement by most Nigerians.

Meanwhile, Jonathan is also dressed in attires of different major Nigerian ethnic groups, including a gigantic image in Northern Nigerian attire. His protruding giant image in Northern Nigerian attire from the map of Nigeria against his miniaturised ones in traditional attires of other major ethnic groups connotes his association with,

endorsement and preference by, the revered Northern Nigerian traditional institutions.

Furthermore, the bold inscriptions in Figure 8: ‘Behind every entrepreneur will be his government’s support’ meant that his government’s policy thrust will focus on job creation, industrialisation, improving standard of living and reducing unemployment. Meanwhile, the lead message printed in brilliant yellow suggests that his administration’s economic management and planning team have brilliant ideas to turn things around for Nigerian entrepreneurs. He is attired in PDP colours and a symbol to signify that he shall actuate the true sense of its slogan: *power to the people*. The faded background images of fashion designers signify a shift in the occupational outlook from the craze for certificates and white-collar jobs towards skilled labour and entrepreneurship. The attire also connotes a typical successful and rich Nigerian unlettered entrepreneur, whose trade-in-stock are to dress in flamboyant fabrics and colours. The *peacock* look makes him stick out in a crowd as he smiles to tell of his success. The slogan, ‘Jonathan/Sambo 2011... It’s time to make progress’ signifies that years of misrule were responsible for Nigeria’s stagnation and that Nigeria has all it takes to be a developed nation. The texts ‘Goodluck Jonathan understands the despair of a young man or woman who can create but is unable to’ empathically exploit the staggering unemployment rates among

Nigerian youths who are at least, one-third of the nation's population. The PDP slogan, 'power to the people', could also connote that his government will give priority to ordinary Nigerians<sup>2</sup>.

The negative propaganda against Atiku in ads sponsored by the Jonathan camp in Figures 6 and 7 portrayed Atiku as a demonic crusader of doom in an illuminating red robe, a silhouette trunk, a sword held high in his right hand, ready to strike with a bell in the left hand. On his neck is hung an inscription, 'apostle of violent change', written in a reverse white on black background. These are apostolic symbolic signification and indexical association within Peirce (1955's) trichotomies of signs. The symbol used the socially established convention of a priest to spread salvation. But, this red-robed priest spewed out the gospel of violence and blood-letting. Atiku, is then indexically associated to violence using red-letters in blurbs to quote aspects of a statement credited to Atiku and using gory pictures of war, maimed and charred human bodies, to associate violence with the red-robed human object representing Atiku. This subscribes to the observation by Jefkins (1992, p. 6) that the origin of propaganda is Catholic, and to missionary work, where priests propagated the gospel of Jesus. Meanwhile, as depicted in the political advertising among Nigerian

politicians, the modern use of the concept of propaganda is now broadly used to promote a negative cause.

Figure 7 used illustrations to establish Atiku's corrupt personality and the rhetorical question 'Coming to America?' to pre-empt his actions. The silhouette used Peirce (1955) trichotomies of signs to *iconise* Atiku as morally decadent and corrupt. The *desperado* label on his cap, scandals and corruption allegations on his body and bags are *indexes* to establish association between Atiku's attitudes and behaviors. The illustrations and the boxes, Trehan and Trehan (2006, pp. 120-122) note, are used in ads to increase attention of the audience towards specific portions of the texts. Figure 7 also refers to torrents of corruption allegations in hundreds of millions of U.S. dollars. Issuing him a red-card at a supposed U.S. entry point, is a *symbol*, using the socially established law from football to penalise him. The 'no entry' on the red card signifies Atiku is a *persona non-grata* in the U.S. However, the allegations are based on a U.S. Senate corruption indictment from statements of Senator Carl Levin of the US. Senate Permanent Subcommittee on Investigations and not by a court of competent jurisdiction. The use of body text, to point to corruption allegations against Atiku, Trehan and Trehan (2006, p. 122) stresses is typical of print advertisement body copy, which persuades and influences. This is used to inform the PDP delegates that Atiku and his family are corrupt and that his family alongside his legal counsel are aiding and abetting his corrupt acts to make

<sup>2</sup>However, commentators argue that the PDP slogan is only a political gimmick to hoodwink the people when canvassing for support. The debilitating poverty conditions and the glaring disparity between politicians and the electorates are key indicators of such neglect.

the allegations credible and to establish that Atiku, his family, and confidants are untrustworthy.

## DISCUSSION

This section discusses the findings from the denotative and connotative meanings in the political ads of the two contestants.

The denotative meanings were conveyed using linguistic and visual messages. The linguistic messages appeared in captions and labels using anchorage and relay to direct readers to preferred meanings and to strengthen the latter. The denotative signification in the visuals, for example, that signify the aspirants' endorsement by the traditional leadership and institutions across Nigeria's diverse ethnicities were an appeal to delegates' psychology, because Nigerians revere traditional beliefs and values and their custodians. The rhetoric was to make delegates think that a vote for either candidate is a vote representative of the diverse royal allegiances and constituents.

According to McCabe (2009), the common domain of the signified of connotation is an ideology. Hence, the following can be inferred. First, the connotational message in an image has multiple meanings, is not sacrosanct and depends on the body of knowledge within the viewer of the image. Therefore, whatever message the *Daily Trust* and *The Guardian* conveyed in the ads of the two candidates, are subject to the preferred interpretations of their audiences, even though the attention of the reader may have been directed to a preferred reading. This was even more so

that McCabe (2009) and Barthes (1977) posit that the rhetoric of an image from the connotations may vary depending on the practical, national, cultural, aesthetic or any other knowledge that the reader possesses. Second, the media is a vehicle for conveying political agenda and ideology. McNair (2007) argues that the media provides a channel through which persuasive messages of political candidates and parties are conveyed to citizens using various elements, including political advertisements. The *Daily Trust* and *The Guardian* were instruments in this regard in conveying the aspirants' persuasive messages on economic, political and social issues that were salient to Nigerians at the time.

However, within earlier arguments, ideologies are a shared framework of mental models possessed by groups to provide an interpretation of the environment and prescription of how to structure that environment according to Parsons (as cited in Jost et al., 2009). Ideologies also describe or interpret the world of possibilities, visualise an ideal world and specify acceptable means of attaining socioeconomic and political ideals (Jost et al., 2009).

The political ad of the two aspirants during the 2011 PDP presidential candidacy election, may have been a result of an intra-party-political process and therefore, a political group process. It however failed to prescribe specific framework of the party's public policies, and how the various elements of society would be organised to fulfil the needs and aspirations of Nigerians. It only succeeded in outlining salient

issues that affect the people. Therefore, the aspirants' rhetoric failed to prescribe a people-centred political ideology for their party even though the common domain of the signified connotations is ideology.

The findings provide empirical evidence to support commentaries by political analysts who comment that 'Nigerian political parties lack party ideology' (Musawa, 2014; Omotola, 2009). Furthermore, considering the current developmental frameworks in fast growing economies, especially in Asia, the Middle East and Latin America, in addition to the failures of established 'ideal' democracies, where (neo)liberalist and capitalist political ideologies had prescribed government policies that plunged nations into economic crises, it can be argued that the PDP, following its grip on the Nigerian political landscape for close to two decades need not confine itself to a particular political spectrum, but could have fused and prescribed contextually-appropriate political, social and economic frameworks that best suit the needs and aspirations of Nigerians. Omotola (2009) argue that in a democracy, party's political ideologies should drive towards positively improving the lives of the people rather than accepting rigidly defined political spectrum.

Interestingly, the death of President Yar'Adua, a Northern Nigerian, who was a founding member of the PDP and Nigeria's president in 2010, who spent three years of the North's tenure based on the party's rotational power agreement, created a vacuum and led to the power tussle between Nigeria's North and South. Atiku and

Jonathan represented these divides in the 2011 PDP presidential candidacy elections. Notably, both Atiku and Jonathan are also founding members of the PDP and Jonathan was at the time, the leader of the party and incumbent president.

Mudslinging and labelling Atiku as a corrupt leader and demon fits into the rhetorical context of findings by Iyengar and Prior (1999, pp. 3-4) that the most distinctive feature of contemporary political campaign advertisements is the negativity of their content and tone. However, the negative propaganda ads by Jonathan could have provided the rhetoric that described and prescribed a policy framework to remedy political pitfalls of corruption based on the allegations against Atiku. It could also have described how a Jonathan-led candidacy will recover and judiciously appropriate the alleged stolen funds, or prescribed how a Jonathan-candidacy would institute deterrent measures against future corrupt practices by political office holders. Instead, it chose to dwell on negative propaganda and ethnic sentiments. Atiku could also have used his agendas to describe how his government will organise the different sectors of the Nigerian state for the common good of the people. This corroborates assertions by Nwangwu and Ononogbu (2014) that Nigerian political elites manipulate the people with regional and ethnic prejudices to create barren development.

Furthermore, the findings infer interactions between ethnic alliances and media ownership influence on Nigerian

politics. The political adverts supporting Jonathan and demonising Atiku as an apostle of violence and a corrupt politician were found in the samples published by *The Guardian*. This may not exonerate *Daily Trust* from such practices since the samples analysed were limited to only the political advertising of the two candidates during the 2011 PDP candidate elections.

Instructively, *The Guardian* is an elite newspaper whose proprietors hail from an ethnic group from Delta State in Nigeria's Niger Delta. Jonathan is an ethnic Ijaw from Bayelsa State, also in Nigeria's Niger Delta. Historically, both Bayelsa and Delta states were part of the old Bendel State in Nigeria's era of 12-state structure from 1967 to 1976. Therefore, *The Guardian* could have accepted to publish negative propaganda advertisement as a strategic ploy to deter Atiku Abubakar from actualising the North's tenure considering that the Niger-Deltans and South-South jettisoned the PDP's South-North power sharing agreement during the 2011 presidential aspirants' elections because Atiku was the 'preferred candidate' of the Northern Nigerian political class. The negative ads against Atiku also suggested ethnic-aligned politics since Jonathan has ethnic ties with the publisher of *The Guardian*. This corroborates assertions by Ayeni (2011, p.51) that in Nigeria, party politics is still enmeshed in ethnic alliances. Nwangwu and Ononogbu (2014) add too, that Nigerian political elites display regional, ethnic and religious prejudices. Earlier discussions in this paper showed

that the PDP power sharing arrangement set the context for the power-tussle, and subsequently, some of the themes in the political ads of the two contestants.

Arguably, the ownership of *The Guardian* may be considered an ethnic minority, based on Nigeria's broad ethnic identities, however the negative political advertisements seeking to support an incumbent president to retain his office can significantly appease the political class aligned with the incumbent. It also significantly guarantees the protection of *The Guardian's* and its parent company's business interests and provides leverage and future patronages for their businesses considering the power of incumbency in Nigerian and African politics. This argument of serving its business interests is corroborated by Agbaje (as cited in Adesoji & Hahn, 2011) who assert that the Ibru family, who are the owners of *The Guardian*, get involved in politics ostensibly to safeguard their business interests.

It can also be argued that depicting both aspirants as the endorsed candidates of Northern Nigerians, and the appearance of most of the political advertisements in the *Daily Trust* newspaper is a deliberate attempt to use strategic media placements to placate Northern Nigerian political delegates and elites to allocate the Region's bloc votes to either of the contestants, because *Daily Trust* is the most widely read and circulated newspaper in Northern Nigeria and the newspaper's audience appeal is pro-Northern Nigeria.

## CONCLUSION

This study showed that the print newspaper political ads in the 2011 presidential candidates of the PDP published in the *Daily Trust* and *The Guardian* newspapers conveyed denotative and connotative messages. The linguistic messages used anchorage and relay to direct the reader to preferred meanings and to add more meaning to a preferred one. The connotations from the ad visuals did not signify the party's ideology. Yet, ideology is the common domain of the signified in an advertising visual. This projects the PDP as a non-ideological political party, despite its role in defining Nigeria's nascent democracy. Additionally, business interests may also have been used to negotiate political power within Nigeria's multi-ethnic blocs considering the business interests of the publisher of *The Guardian*. The emphatic significations of Northern Nigerian political values in the political ads are direct attempts to woo the PDP Northern Nigerian political elites who have a grudge against the South for jettisoning the South-North power sharing arrangement.

## ACKNOWLEDGMENT

This work was supported by a fellowship from Universiti Sains Malaysia (USM) from December 2015 to November 2017.

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## **Sociology of Political Support in Russia: The Ukraine Crisis, Putin and the Dynamics of Public Opinion**

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### **ABSTRACT**

Since the Ukraine crisis in 2013, citizens of Russia have improved their attitudes toward the foreign and domestic policies of their government. This process culminated in an 89% approval rating (according to Levada Center) of President Putin in 2015. In particular, Russian citizens gave unusually full support to Russian authorities in the area of foreign policy. President Vladimir Putin and his foreign policy regarding the Ukraine crisis, which became the focus of Russian mass media, took firm control of the situation to a degree unprecedented for contemporary political regimes. This study examines effects of agenda-setting in the contemporary political process of Russia. The authors claim that public opinion in Russia has changed in favour of President Vladimir Putin after the Ukraine crisis as a result of agenda-setting. The findings suggest that public support was one of the main reasons for Russian foreign policy with regards to the Ukraine crisis.

*Keywords:* Agenda-setting theory, public opinion, Putin, Russia, Ukraine crisis

### **INTRODUCTION**

Why did President Vladimir Putin decide to use military force to retake the Crimean Peninsula and to support separatists in Donbass, Eastern part of Ukraine, in 2014

despite very dangerous consequences, including economic sanctions from the international community? The Ukraine crisis has various foreign and domestic dimensions and while foreign policy introduced a new wave of confrontation with the West and the European Union (Braun, 2014), domestic policy resulted in new levels of popularity for President Vladimir Putin (Deliagin, 2015). Several researchers in foreign affairs tend to examine the Ukraine crisis from a point of view traditional for international

#### **ARTICLE INFO**

*Article history:*

Received: 21 September 2016

Accepted: 11 July 2017

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relations, i.e., considering Ukraine a critically important part of the Kremlin's foreign policy toward restoration of Russian 'domination' in Eurasia (Tsygankov, 2015).

However, many scholars of international relations have admitted that domestic factors played a very important role during the Ukraine crisis. For example, Michael Rywkin remarks that 'the Kremlin's propaganda seems to be destined to satisfy two purposes: elevate the morale of its own masses and display disrespect of Western governments' (Rywkin, 2015). Mikhail Suslov highlights the role of popular geopolitics in Russian media, concluding that 'taking Crimea from Ukraine is tightly linked to the reshuffling of the mental landscape of the Russians' (Suslov, 2014). Pro-Kremlin political analyst Mikhail Deliagin stresses the integration of Crimea with Russia is able to serve as a national project that 'could revive Russia while allowing its leaders to root out traitors and other undesirables from among the Russian elites' (Deliagin, 2015). In his article, Deliagin emphasises the domestic aspects of the Ukraine crisis for Russia believing that the Ukraine crisis was used by President Vladimir Putin to strengthen his position in the political system of Russia through the well-known technique of agenda-setting to mobilise public support.

Therefore, the objective of this study is to examine the dynamics of public opinion in Russia during the Ukraine crisis. It reveals the mechanisms of agenda-setting through comparative study of agenda-setting in the

USA, France and the Russian Federation. It also attempts to describe the following :

- to define agenda-setting as a political technique;
- to describe dynamics of public opinion in the USA, France and the Russian Federation during military operations;
- to verify if agenda-setting technique has influenced public opinion in Russia during the Ukraine crisis.

## RESEARCH BACKGROUND

This study's framework is based on the theory of agenda-setting. The agenda-setting theory was developed by several well-known researchers such as McCombs, Shaw, Weaver, Graber, Scheufele, and others (Graber, 2010; McCombs, Shaw, & Weaver, 2014; Scheufele, 2000). The theory claims that political actors sometimes create events so important that the mass media will not be able to ignore them. The establishment of a favourable agenda is highly effective but rarely used in practice. A term known as 'framing', which in contrast to agenda-setting, focuses not on the events but on their characteristics, and relating these events to already-known categories or frames (Oliver, & Johnston, 2000; Weaver, 2007).

For a better understanding of this phenomenon, it's necessary to know that modern political systems tend to involve mass media in all kinds of activities in order to influence public opinion inside the given country as well as abroad. One of the most successful strategies in this aspect is the

active management of the agenda in mass media, or agenda-setting. In its most general form, agenda-setting can be described in terms of 'relative media emphasis on certain issues' (Cutlip, Center, & Broom, 2006). Managing agendas can direct public interest to a particular topic, change public priorities and even, if the issue affects the interests and emotions of the people, alter the behaviour of the audience (Achkasova, 2012).

The agenda-setting theory was first formulated in-depth in 1972 by McCombs and Shaw (1972). Unlike the representatives of the Chicago sociological school, who developed the theory of opinion leaders and two-step communications, the founders of agenda-setting theory indicated that the influence of media on the behaviour of citizens could be treated in a variety of ways. The influence of opinion leaders is an important factor, but it does not fully explain the problem. The original hypothesis of agenda-setting theory emphasises that 'the mass media set the agenda for each political campaign, influencing the amount of attention to political problems' (McCombs, & Shaw, 1972). In other words, the media can both gloss over some important political issues but give undue importance to others.

Subsequent verification of this initial hypothesis led to the emergence of additional conceptual positions (Weaver, Graber, McCombs, & Eyal, 1981). For example, the authors of agenda-setting theory were able to distinguish the existence of two types of events: 'obtrusive' and 'unobtrusive'. As specified by Dyakova and Trachtenberg (1999), obtrusive events are where 'people

have direct and constant experience, such as inflation and unemployment, they acquire social significance as a result of personal experience'. On the contrary, 'unobtrusive events are about topics in relation to which people have no personal experience, and the media serve as the sole teacher and a source of information about these issues' (Dyakova, & Trachtenberg, 1999). These problems or events can be such complex phenomena as the 'greenhouse effect', 'bird flu', 'war on terror', 'gay marriage' and so on. In this observation, we see the first important limitation of the theory of agenda-setting. In order for 'unobtrusive' events to cause interest, they must be unexpected and large-scale enough to seem like they have the potential to affect everyone.

The most important consequence of the theory of agenda-setting is that the shifting attention of the general public is almost always superficial and short-lived. Since the vast majority of people do not have a high level of personal expertise regarding 'unobtrusive' problems, they are not able to assess what is really happening. They either have to trust the opinion of 'opinion leaders' or avoid any judgment of conformist considerations tending toward the opinion of the majority. Graber explains this idea in her classic book 'The Power of Media in Politics', pointing out that the vast majority of citizens in modern countries learn their views on political matters through mass media (Graber, 2010). At the same time, citizens are neither political experts nor certified political analysts, and they do not have the capacity, time or effort required for

political education. As such, the political ideas that citizens do absorb are very superficial and sometimes self-contradictory (Gerber, Huber, Doherty, Dowling, & Ha, 2010).

In recent years, there has been intense discussion around the problem of connecting the theory of agenda-setting and the achievements of modern discourse analysis (McCombs, Shaw, & Weaver, 2014). Weaver, one of the founders of the theory of agenda-setting, says there are two levels of setting the agenda. He explains further in his paper 'Thoughts on Agenda Setting, Framing, and Priming': at the first level, one talks about the prominence given to some of the events or issues at the expense of others, and at the second level, one stresses the preferential illumination of certain aspects of events or issues (Weaver, 2007). This point of view leads to an extremely broad interpretation of agenda-setting theory. In this paper, we use the 'classic' theory of agenda-setting, focusing on the first level of events.

However, one should be aware of the importance of priming (the order in which the events appear in mass media) and framing (the attribution of any particular event or situation to already-known categories or to a frame, offering a simple and intuitive interpretation) in modern political communication (Scheufele, 2000). For example, Goncharov believes that in today's media-centric political system, it is much easier to work with framing and priming than such complex structures as ideologies or costly and risky activities

of large-scale events (Goncharov, 2012). Thus, literature review indicates that there are two almost opposite answers to the main research question of this paper. On one hand, Scheufele (2000) and Goncharov (2012) stress that under current conditions the agenda-setting approach is not possible anymore, and, on the other, the founders of the agenda-setting concept, Weaver and McCombs, allow theoretical possibility of using this approach in the new environment.

Therefore, to address this question, we provide analysis of three cases (the USA, France and the Russian Federation) followed by comparative analysis of the public opinion polls and search queries in the search engine Yandex. Classic works in the field of agenda-setting were based on research of the agenda in the media, the agenda of the citizens and on the results of elections or public opinion polls. The present study used a combination of methods that allow the researchers to capture all three dimensions. The most problematic point deals with a possible subjective interpretation or selection of events that have influenced public opinion. In the case of Russia, it is the referendum on the status of Crimea and further military operations in eastern Ukraine.

## RESULTS AND DISCUSSION

### **Agenda-setting in the United States of America: the Case of George W. Bush**

There have been few cases where the approval rating of a head of state exceeds 85%. One recent example is the approval

rating of George W. Bush right after the 9/11 terrorist attacks. Figure 1 shows the dynamics of Bush's approval during his two terms as president of the United States, as well as some of the events that generated great public interest. The study does not claim that these developments alone determined changes in the rating of George Bush. Obviously, any level of support is based on several factors. However, it is clear that the George W. Bush's ratings peaked after 9/11 and subsequent military action in Iraq. In the second case, we see two peaks of popularity: immediately after the war and again after the capture of Saddam Hussein. In this case, we deal with the phenomenon of personification, a well-known PR strategy that suggests that good news should always be delivered by a person involved so as to evoke human emotions in the audience. In this respect, Saddam Hussein was the old 'good' enemy, well known to the general public. After his capture, Bush's ratings

decreased steadily, although he was still popular enough to earn him a second term.

Analysing the dynamics of George W. Bush's support, it becomes apparent that agenda-setting can radically and quickly mobilise support and attract political opponents. In the case of the events surrounding the 9/11 terror attacks, Bush's approval rating rose to about 35% immediately after the attacks, gained about 20% at the outset of the Iraq War, and climbed another 10% after the capture of Saddam Hussein. Questionable intelligence about the presence of weapons of mass destruction in Iraq, followed by military operations there, led to complicated and sometimes disadvantageous long-term implications for the US in the Middle East and around the world. But in the short term, waging this war had real benefits for George Bush personally and for his group of high-ranking political supporters.

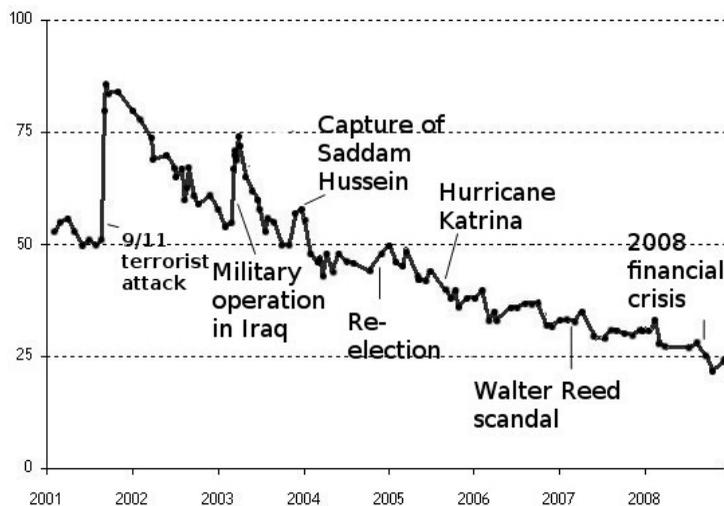


Figure 1. Political agenda and approval of George W. Bush as president of the USA

Source: Compiled by authors, based on data from Pew Research Center (Bush and Public Opinion, 2008)

Military developments in the Middle East and American counter-terrorism operations continued, but these have effectively lost its value in terms of agenda-setting. The combined effect of the terrorist attacks of 9/11 and the Iraq War, and economic difficulties gradually but irreversibly reduced the level of support for George Bush to very low levels (less than 25% approval rating by the end of his second term).

**Controlling the Political Agenda in France: The Case of François Hollande**

François Hollande is one of the poorest-rated presidents in the modern political history of France. Figure 2 shows his approval ratings of his activities and some events in the political life of France between 2012 and 2015 (Cotes de popularités ministers, 2015). It's clear that not all the had an impact on François Hollande's ratings. For example,

there were two military operations in Africa with the participation of the French armed forces, neither of which led to a noticeable improvement in President Hollande's ratings. We see that the support curve does not have such sharp fluctuations as in the case of George Bush. Attempts to reverse the situation through limited military operations in Africa have not yielded significant results. The adoption of the law on same-sex marriage and the unity of the nation after the Charlie Hebdo terrorist attacks added a few percentage points for François Hollande, but still could not radically improve the slide in his popularity. François Hollande went down in history as the French president with the lowest ratings ever. Moreover, French Prime Minister Manuel Valls enjoys higher levels of approval than François Hollande himself (Techniquement, François Hollande peut descendre encore plus bas dans les sondages, 2014).

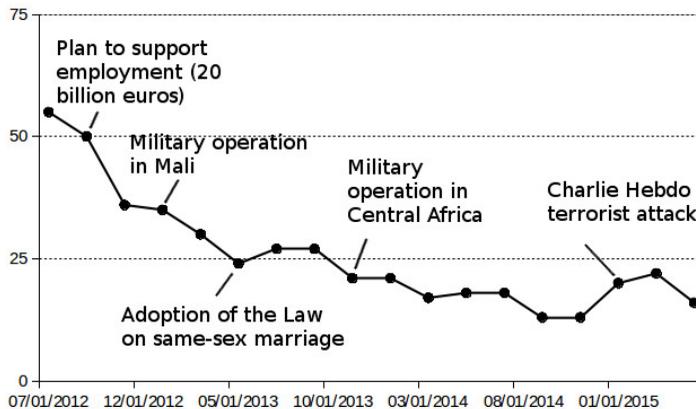


Figure 2. Political agenda in France and approval of François Hollande  
 Source: Compiled by authors, based on data from TNS-Sofres (<http://www.tns-sofres.com>)

The interpretation of Hollande's support from the point of view of agenda-setting theory is fraught. Compared with the United States, France's military operations did not cause any significant increase in Hollande's ratings. This is because the Hollande had to deal with economic problems and issues related to his personal life. In the US, George Bush undertook active and strong actions after the terrorist attacks of 9/11. The president introduced drastic foreign and domestic policies in addition to starting fairly large-scale military operations known as the War on Terror. In contrast, Hollande was not able to offer comparable solutions for France's domestic and foreign issues. The actual problems in the economy were accompanied by scandals in his personal life. Under these circumstances, the events that could potentially have improved Hollande's ratings did not result in successful presidential actions. As Achkasova rightly pointed out, 'the media, that set the agenda for the mass audience, decide about what will people think, although it is unknown what these people will think' (Achkasova, 2012). In the case of François Hollande, military operations and other events were unable to divert the attention of the French

people away from everyday problems such as economic difficulties and high unemployment. At the same time, the personal life of François Hollande was a smart 'unobtrusive' story for the media, providing a reason to disapprove of his both political activities and official duties.

### **The Ukraine Crisis and the Public Opinion in Russia**

To begin with, one should note one very important fact: approval ratings of Vladimir Putin as the president or prime minister of Russia has always been very high and never actually went down to the danger level of 50%. Twice the ratings approached the level of 60% (but not less). The first time this happened was during a programme of 'social welfare monetisation'. The second instance occurred during and after the so-called 'protest wave' in 2011-2012. Sociologists have taken to using the phrase 'Teflon rating' to describe this paradoxical phenomenon in which no bad news seems to be able to damage Putin's popularity in Russia. Thus, it can be concluded that the high level of Putin's support has been and will continue to be a long-lasting phenomenon in Russia.

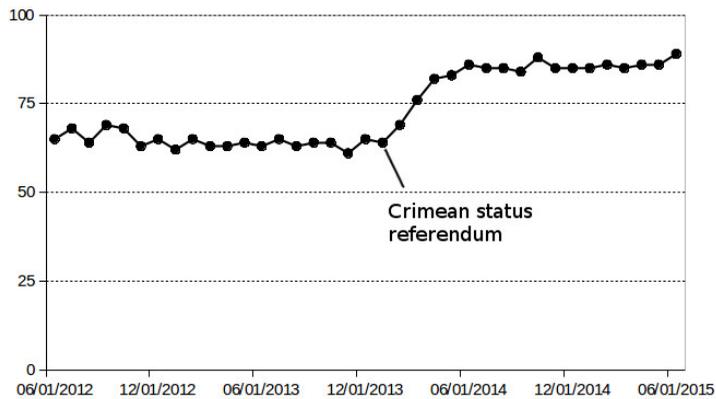


Figure 3. Political agenda and approval of activity of President Putin in 2012-2015  
 Source: Compiled by the authors, based on data from the Levada Center (<http://www.levada.ru>)

The Ukraine crisis in 2014 has two major parts. The first one was about Russian occupation of the Crimea Peninsula in the beginning of 2014 followed by the referendum in Crimea. The second part was caused by secession of Donbass, Eastern part of Ukraine, which take part in the late of 2014. A detailed analysis of Putin’s ratings over the last three years reveals that 2-3 months after the referendum in Crimea and the official decision of Russia to include Crimea in the Russian Federation, Putin’s approval ratings increased by 20% (Figure 3). Preceding events in Ukraine were connected with the so-called ‘Euromaidan’, meaning the overthrow and subsequent flight of Ukraine’s current president Viktor Yanukovich. However, these previous events had no significant effect on Putin’s ratings. Thus, the decision to include Crimea in the Russian Federation was a landmark event that has had a significant impact on the political agenda of contemporary Russia.

The Ukraine-Russia relations since the collapse of USSR were characterised by

economic issues. The crucial problem was the price of oil and the fees imposed by Ukraine for transporting it to Europe, a key Russian market. Historically the Crimean Peninsula was part of the Russian Soviet Republic from the moment when the USSR was formed. However, in 1954, this region was transferred to the Ukrainian Soviet Republic in order to improve governability and boost economic growth. Under the Soviet Union, this question had no importance, but today border movement and controls have taken precedence in international relations, unprecedented for Europe. Additionally, the Russian language is not a state language in Ukraine. The request to grant Russian language a state status played a major role in the Ukraine Crisis because almost all the population of Donbass and Crimean Peninsula speak Russian.

It is also necessary to take into account the internal political situation in Russia that is associated with the so-called ‘protest wave’ of 2011-2012 (Gel’man, 2013; White, & McAllister, 2014). Many authors have

discussed possible scenarios of the political developments in authoritarian countries when ruling elites face large-scale protests (Finkel & Brudny, 2012; Koesel & Bunce, 2013). It is likely that internal political mobilisation and rallying citizens around a national leader is one of the most likely

scenarios in this case (Gerber, 2014; Gerber, 2015; Gjerde, 2015). Hence, it becomes clear that a new political agenda in contemporary Russia is not about international affairs, but rather about domestic policy to consolidate its authoritarian political system.

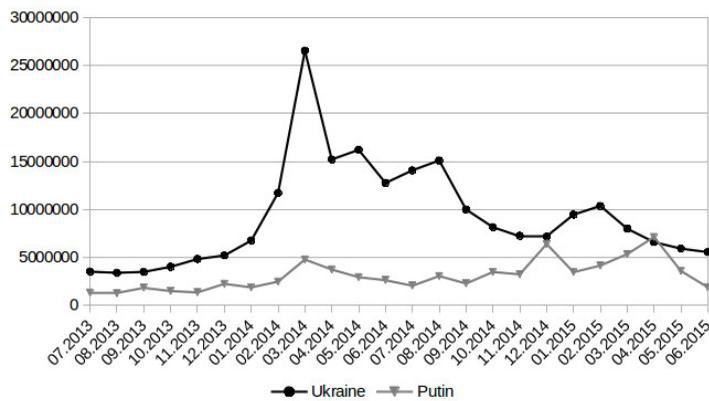


Figure 4. Search queries in Yandex for keywords 'Ukraine' and 'Putin'

Source: Compiled by the authors, based on data from Yandex (<http://www.wordstat.yandex.ru>)

Figure 4 displays the dynamics of search queries in Yandex for the keywords 'Ukraine' and 'Putin'. The picture represents the dynamics of real political interests among citizens of Russia. One can see that the attention given to Ukraine and Putin by Russian Internet users has grown considerably since the beginning of the events surrounding Crimea and eastern Ukraine. While the interest in Ukraine then levelled off (though at a level two times higher than it was initially), the interest in Putin has only increased. someone can observe misalignment of the trends in the second half of the time period. There was a great deal of attention given to the Ukraine

crisis in the beginning, but since then Putin has occupied the central position in the political agenda of Russia.

## CONCLUSION

It should be noted there is a very important question about the possibility of using the agenda-setting theory for analysing political communication in non-democratic countries (Dyakova, 2002). It is impossible to speak about any kind of totalitarian control over the mass media in modern Russia. The Russian media sphere is more competitive than, for example, in China, especially in relation to the Internet. The international non-governmental organisation Reporters

Without Borders indicates in its world press freedom index that Russia belongs to the category of countries with a 'complicated situation' regarding freedom of the press in 2010, ranking 148th out of 180 (Reporters sans Frontiers, 2014). At the same time, China is in the category of countries with a 'very difficult situation' in the field of freedom of speech, ranking 175th out of 180. Moreover, as indicated by S. Della-Vigna and E. Kaplan, Rupert Murdoch's Fox News managed to increase voter turnout for the Republican Party by 4-8% in the United States in the states where it was broadcast (Islam, 2008). This suggests the influence of the media in democratic political systems. Thus, the impact of agenda-setting may differ in authoritarian and democratic regimes, but the effect is present in both systems.

The agenda-setting theory can be applied to studies focused on post-Soviet transformations because public opinion has become a vital part of domestic and foreign policies in these countries. Many authors have discussed the phenomenon of President Vladimir Putin's long-lasting popularity (Finkel & Brudny, 2012; Gerber, 2014; Gerber, 2015; Gjerde, 2015; Koesel & Bunce, 2013; Mishler & Willerton, 2003; Nikolaev, 2012; Persson & Petersson, 2014; Wood, 2011). One factor of his popularity deals with the use of public relations techniques that help to produce an image of a unique political leader. Moreover, Russian authorities have recently successfully applied an agenda-setting approach to influence public opinion in Russia and

abroad. For example, the latest development in Syria on the eve of the 70<sup>th</sup> session of the United Nations General Assembly almost completely shifted the attention of the world and public opinion from the crisis in Ukraine to the situation in Syria. In the last decade, Russia has developed a broad network of mass media and PR agencies to promote its foreign policy, for example making TV channel 'Russia Today' (RT) the most notable outlet for the Russian government and its foreign policy.

In scientific literature, there are two theories related to this phenomenon: institutional effectiveness and cultural tradition. The institutional effectiveness hypothesis emphasises good economic performance of the regime (Anisimov, 2014; Mishler & Willerton, 2003). The cultural tradition hypothesis focuses instead on Putin's abilities to activate and to resemble old political culture archetypes that are rooted deeply in the subconscious of Russians (Nikolaev, 2012; Persson & Petersson, 2014; Wood, 2011). Both factors have had a positive impact on Vladimir Putin's high ratings. It is also important to note that before the recent events, Vladimir Putin's rating reached its maximum (88%) in September 2008, immediately after the armed conflict in Ossetia and Abkhazia (Volkov, 2015).

To sum up, agenda-setting is able, in some cases, to achieve very impressive results and to cause a significant increase in the level of support and the mobilisation of supporters. This is especially true in cases of serious armed conflicts. This is the

reason why in order to solve some internal political problem, some political forces have used the method of a 'small victorious war'. If successful, military confrontations can have a significant effect on public opinion in favour of the winner and divert the attention of citizens away from real socio-economic and political problems. In this regard, there is no more adequate theory for the analysis of empirical data than the theory of agenda-setting. However, it is important to understand that agenda-setting theory is only effective in the case of 'non-intrusive' events. Also, it should rely on prevailing social stereotypes followed by a combination of priming, spin-doctoring or framing. It is important to have a reputable leader capable of mobilising supporters. Thus, it is not surprising that in the case of President Vladimir Putin, the active use of foreign policy events has led to a drastic increase in political support in spite of the declining socio-economic situation. Economic concerns have been compensated for so far by the reputation of successful economic policy in previous years.

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## **The Effect of Medium on the Message: Paper-and-Pencil vs. Electronic Teacher Corrective Feedback**

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### **ABSTRACT**

In this study, we examined the nature of teacher Corrective Feedback (TCF) in Paper-And-Pencil and Electronic modes by exploring the form and purpose of TCF and the strategies used to mark errors in the writings of undergraduate EFL students. We also investigated possible differences between the two modes. To this end, we randomly assigned the students to the control (PAP feedback) and experimental groups (E-feedback). Taking a mixed-method research design, we analysed data which included the first drafts of students' essays of the two groups in hard and soft copy forms. We used a modified version of Analytic Model for Corrective Feedback and Error Feedback Strategies profile to identify the nature of TCF. The results showed: a) higher percentage of E-feedback compared with PAP feedback; b) *make a grammar/mechanics comment/question, statement, or imperative* as the most frequently used feedback type in both groups; c) *underline/circle/ highlight the errors and underline/circle/highlight and categorise the errors* as the most frequent feedback strategies in the control and experimental group respectively; and d) significant differences in the nature of feedback between the two modes. The findings suggested the medium (mode) by which feedback was provided affected the nature of the message given to the students. The outcome of this study is useful for writing instructors.

*Keywords:* Teacher corrective feedback (TCF), paper-and-pencil feedback (PAP), electronic feedback (E-feedback), feedback types and strategies

### **ARTICLE INFO**

*Article history:*

Received: 16 September 2016

Accepted: 27 July 2017

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### **INTRODUCTION**

Providing of feedback to students has always been a major issue in the field of

second language teaching and learning; in particular, teacher corrective feedback (TCF) continues to play its role as the primary response method since “altering students to their strengths and weaknesses can provide the means by which they can assess their performance and make improvements to future work” (Weaver, 2006, p. 379). Feedback is also one of the major criteria affecting students’ judgment about quality of a course (Yang & Durrington, 2010). Over the last few decades, changes in writing pedagogy have led to more contemporary modes of feedback, one of which is the electronic feedback (E-feedback).

To date, in many educational contexts like Iran, Paper-and-Pencil (PAP) feedback is the only type of feedback, and foreign language educators are exploring ways to cope with the inconvenience of this feedback mode and thus, are seeking better alternatives. Teacher feedback has been criticised for being time-consuming, frustrating, vague, idiosyncratic, inefficient and inaccurate, to name a few (Guénette, 2007; Lee, 2008; Mahmud, 2016; Truscott, 1996; Zamel, 1985). On the other hand, application of new educational technologies, characterised by Levy’s (1997) Computer Assisted Language Learning (CALL), has significantly changed how students write, how they deliver their work, how they are given feedback, and how they perceive the feedback and alternatives for teachers’ written corrective feedback (Chang et al., 2012; Li & Cumming, 2001). Hence, it is expected that CALL, using Word-Processor (such as Microsoft Office) as a means of

producing feedback which is delivered through email acts as a tool or a convenient medium of feedback production and delivery for instructors but also as a motivator for students. Some students simply prefer to use a computer because they find it more enjoyable (Bangert-Drowns, 1989), and consider it as more convenient since they do not have to respond to it immediately in real time (DiGiovanni & Nagaswami, 2001).

Despite the convenience and many feedback opportunities that technology offers, so far, few studies have explored the nature of E-Feedback and speculated how feedbacks created on computers may differ from those produced by the traditional method. Accordingly, how the medium affects the message or, in other words, how feedback produced on papers and those produced electronically on the screen differ in terms of their nature, i.e. form, purpose and strategies requires more in-depth investigation. Therefore, the current study is an attempt to address this issue.

## Literature Review

The process of writing “is mediated both by the available cultural tools such as pen and paper and electronic media” (Barnard & Campbell, 2005, p. 89). Thus, computers can be employed to write easier, more, differently, and effectively (Pennington, 1996, 2003). They help teachers to provide more efficient feedback. Feedback is generally conceptualised as “input from a reader to a writer with the effect of providing information to the writer for revision” (Keh, 1990, p. 294). Karim and

Ivy (2011) stretched the definition to include “any response (even facial expression) from the teacher reader to the student writer’s writing at any stage of the writing process” (p. 31). Students expect to receive feedback specifically on their writings and that absence of feedback conveys to the students that their message has not been communicated effectively (Sommers, 1982).

Traditionally, students received written corrective feedback; however, with the advent of ICT E-feedback, a form of “automated feedback provided by a computer” (Ware & Warschauer, 2006, p. 3), became popular. Compared with written feedback, E-feedback is time- and place-independent, yields greater sense of autonomy, has less delivery effort, and involves no negotiation of meaning (Chang et al., 2012; Tuzi, 2004). There is increasing evidence highlighting students’ positive attitude towards computer-generated feedback which helps them to improve on their writing skills (Bitchener, 2008; Budge, 2011; Chang et al., 2012; Jackson, 2014; Ho & Savignon, 2007; Stevenson & Phakiti, 2014; Tsui, 2004).

A strand of research examines the potential effectiveness of software-generated feedback over the PAP human feedback. The findings of these studies showed that computers can facilitate teacher’s commentary on students’ writings using electronic cut and paste, keeping track of the feedback the teacher has given to which students, and marking on-screen using a colour-coding scheme in which different colours represent

specific types of errors (Peretz, 2005). The efficacy of email as an asynchronous medium on writing instruction has also been investigated. Among others, time independence (Warschauer, 1999; Lightfoot, 2006), speedy delivery (Chang et al., 2012; Huett, 2004; Lightfoot, 2006), increase in student’s motivation (Warschauer, 1999), grammatical accuracy (Gonzalez-Bueno, 1998), editing and revising work easily, reduction in paperwork problems such as lost or forgotten papers (Sullivan, Brown, & Nielson, 1998), and being less worried about making mistakes (Pennington, 1996) are reported to be its major benefits. Peretz (2005) argued that “one-on-one writing consultancies via email, on-screen marking using colour coding, the editing tool and comment function, and email submission of written assignments have proven to be more effective than the traditional paper submission and PAP ‘correction’ of assignments” (p. 62). These benefits become clear usually when researchers take a comparative approach involving both PAP and electronic modes to address this topic. Exploring the differences between typed and handwritten TCF, Abuseileek (2006) found that the experimental group who used word-processor to produce their writing had more opportunity for self-learning, and the use of a variety of word applications such as checking grammar, style, editing text, etc. resulted in the improvement of their writing. Students in Denton, Madden, Roberts, and Rowe’s (2008) study also perceived e-feedback as more valuable than handwritten feedback. Consistent

with the above findings, Chang et al.'s (2012) study indicated students' preference for E-feedback (68%) over handwritten feedback (34%) based on six criteria of accessibility, timeliness, legibility, quality, personable, and miscellaneous.

Despite the potential benefits of computer-generated feedback, a group of researchers, however, point to the inefficiency of particular features of software programs (Liu & Sadler, 2003), poor typing skills (Bohlke, 2003), and lack of experience in giving E-feedback (Russell & Haney, 1996); hence, it is suggested that successful impact of word-processing on ESL writing requires assessing several intervening factors such as the context of use and the software chosen (Pennington, 1993). Type, function, and form of feedback given on students' written work as well as strategies used by the teachers to offer feedback have also been addressed in some studies. In his study, Byrne (1988) found minimal marking of indirect feedback as more effective than direct teacher's feedback. Likewise, Lalande (1982) observed that students receiving indirect feedback reduced their errors over time more than students receiving direct feedback. Ferris (2002) dealt with selection, time and error correction delivery. She found that teachers mainly used indirect feedback such as circling and coding errors. They only used direct feedback such as the provision of the correct form when errors were untreatable. Chandler (2003) showed that teacher's use of editing tools and underlining with description (e.g. pink for errors to be corrected by the students and

green for questions indicating clarification, rewriting, etc.) led to significant writing improvement. On the other hand, Ferris (2006) found that error corrections by teachers ranged from direct feedback to corrections judged as 'unnecessary'. Lee (2008), similarly, found that the teachers mostly used overt corrections (underline/circle the errors/and provide corrections) and the degrees and types of error feedback strategies varied from one teacher to another. For example, in this study, teacher A used a great deal of feedback coded as categorising errors with error codes which were not used by teacher B at all.

While these are valuable and praiseworthy findings, they do not shed light on the nature of the feedback (e.g., Bitchener, 2008) provided through written and electronic modes; hence, some studies specifically concentrated on the form and purpose of different TCF types provided through different modes and the findings of these studies showed mixed results. Form-focused feedback is perhaps the most common feedback given on students' work by the teachers (Chandler, 2003; Ellis, 2016; Ferris, 2006; Lee, 2008; Lightbown & Spada, 1990). However, Truscott (1996) challenged the efficiency of this form of feedback after reviewing many research studies and argued that grammar correction by L2 teachers is insufficient and ineffective. Subsequently, more attention was given to content-based feedback which mainly focused on meaning (Heffernan, Otoshi, Kaneko, 2014; Kepner, 1991; Magno & Amarles, 2011; Zamel, 1985). Fathman

and Whalley (1990) showed that both grammar and content feedback positively affected rewriting. In a more recent study, Rastgou (2012) evaluated the provision of content-based feedback compared with form-based feedback and found that the former considerably improved the general performance of students, albeit not grammar and spelling, indicating that teachers should not waste time correcting grammar. Overall, there is a consensus among scholars that best results are achieved when a dual focus on form-focused and meaning or content-focused feedback are provided (Al-Jarrah, 2016; Ellis, 1994; Ferris, 1995, 1996; Shang, 2007).

A more recent strand of research was pioneered by Ferris, Pezone, Tade, and Tinti in 1997. These researchers investigated rhetoric of teacher comments through measures of length, types, use of hedges and text-specificity of teacher comments to analyse the compositions written by a group of ESL university students. They observed that most of the marginal comments were short or average while the end ones were average and long which showed they were comprehensive. The teacher included few hedges such as *Can you give an example?* and most of the comments were text-based. Moreover, the most common type of marginal note was *ask for information* whereas the most frequent type of end note was *positive comment*. In a follow-up study, Ferris (1997) investigated the nature of commentary and categorised teacher commentary according to its linguistic forms, i.e. declaratives, questions and

imperatives, and found that teachers asked a lot of questions on students' drafts with the purpose of eliciting more information. Of all teacher commentary types, *imperatives* had the lowest rate. Due to the significance of this study, other researchers also tried to explore rhetoric of teacher commentary in other contexts. Martin (2011) used the measure developed by Ferris to investigate students' revision on rough drafts. Although the overall effect of teacher commentary on revision was positive (56.3%), some differences were observed between the two studies. In his study, unlike Ferris', most comments were short, *ask for information* was the most frequently used comments by the teacher, and most comments were generic. Similarly, Rezaei (2012) studied the nature and rhetoric of teacher comments by replicating Ferris's study in the Iranian educational context and compared the results with those of Ferris'. Her examination of 81 first drafts of the students' essays showed that in both studies, marginal comments were more frequent than the end comments and *making a grammar/mechanics comment* was a frequently addressed comment. Her study suggested that the type of comment is an indicator of success than comment on characteristics such as length.

Thus, there have been many studies on teacher corrective feedback. The studies reflected a growing interest in use of technology as a more efficient means of feedback provision and as an alternative to the traditional PAP TCF (Gonzalez-Bueno, 1998; Huett, 2004; Lightfoot, 2006; Pennington, 1996; Sullivan, Brown, &

Nielson, 1998; Warschauer, 1999), due to its contribution to improving students' writing skills (Abuseileek, 2006; Budge, 2011; Chang et al., 2012; Jackson, 2014; Ho & Savignon, 2007; Li, 2010; Li & Cumming, 2001; Tsui, 2004; Ware & Warschauer, 2006); yet, the contradictory findings of some studies which highlight the negative side of E-feedback (Bohlke, 2003; Liu & Sadler, 2003; Pennington, 1993) call for a need for further investigation of computer-generated TCF. Moreover, whereas most of the research studies dealt with the type of TCF (Byrne, 1988; Ellis, 1994; Fathman & Whalley, 1990; Ferris, 1995, 2002; Lalande, 1982; Lee, 2008, Shang, 2007), and its subsequent effect on students' writing improvement (Chandler, 2003; Weaver, 2006, Tuzi, 2004), there has been a dearth of studies that addressed the nature of TCF (Rezaei, 2012; Martin, 2011, Ferris et al., 1997; Zhang, 1995). In addition, many researchers emphasise the need for future studies to overcome uncertainties concerning the most effective means of responding to student writings, (Ferris, 1995, 1997, 2006; Warschauer, 2006; Gonzalez-Bueno, 1998; Peretz, 2005; Hyland & Hyland, 2006a & b; Hyland, 2010), and investigating rhetoric of corrective feedback offers valuable insights (Ferris, 2010) because without understanding the nature of feedback, the real effectiveness of it cannot be realised (Stevenson & Phakiti, 2014). The present study is, hence, designed to address these gaps identified through extensive review of literature.

### Objectives of the Study

The present study was aimed at exploring the nature of TCF in two traditional paper-based and modern digital modes to understand how medium (computer vs pen) can affect the message (nature of the feedback). For the purposes of this study, the nature of feedback refers to the form, purpose, and strategies used by the teacher to detect errors. This study was motivated by the fact despite overwhelming interest in the use of electronic TCF in Asian academic settings like in Iran, the real nature and effect of E-feedback s remained unknown. Thus, addressing this problem is crucial and the findings hopefully contribute to the existing literature and indicate how the nature of feedback may vary from one mode to the next. To account for potential advantages of E-feedback over PAP feedback, the current study took a comparative approach where two feedback modes were employed in two writing classes. Accordingly, the current study sought answer to the following questions:

- 1- What is the form and purpose of teacher corrective feedback in PAP and electronic modes of feedback?
- 2- Is there any difference between the form and purpose of teacher corrective feedback in PAP and electronic modes of feedback?
- 3- What are the corrective feedback strategies used by the teacher in PAP and electronic modes of feedback?
- 4- Is there any difference between the corrective feedback strategies used by

the teacher in PAP and electronic modes of feedback?

## METHOD

Fifty undergraduate students, both male (N = 17) and female (N = 33), majoring in English Literature in a private university in Shiraz, Iran were selected through convenience sampling. All the participants were native speakers of the Farsi language and were aged between 19 and 25 years.

The participants were enrolled in an advanced writing course as one of the obligatory courses of the programme, and were placed in two writing classes with each class consisting of 25 students. The *Practical Writer with Readings* by Bailey and Powell (1989, 2<sup>nd</sup> Ed.) was taught in this one-semester course (16 weeks). Classes were conducted once weekly for 100 minutes.

The two writing classes were randomly assigned to control and experimental groups. Students in the first class (control group) received the traditional PAP feedback, while those in the second class (experimental group) received the treatment, that is, they were instructed on how to use the computer (Microsoft Word Office, version 2003-2007, 2010) to produce their essays, use email as a means of delivery, and submit the writings to the teacher within the deadlines determined by the teacher each week. All the essays or written assignments were later reviewed by the teacher who provided PAP feedback on hard copy, handwritten essays of the students in the control class, and E-feedback on the soft copy of the students' essays

in the experimental class using different strategies including writing comments on margins, underlining, circling the errors, and functions of Microsoft Office, such as comment boxes and colour codes. The source of data for analysis included the first draft of students' essays in the two classes in the form of hard copy for handwritten essays which were handed to the instructor in person, and the soft copy for the computer-generated essays in the experimental class which were systematically saved in a mailbox, organised by participants and paired-up with the corresponding teacher's responses for further analysis and retrieval. Students in each class produced 5 first drafts of essays and a total of 245 essays were collected which comprised the corpus data used in this study.

The study adopted a mixed-method research design (Baran & Jones, 2016; Riazi & Candlin, 2014) and incorporated both quantitative and qualitative methods for data analysis. First, to answer the first research question, that is, to identify the type and nature of TCF, the teacher's feedback in both modes was identified and codified using a modified version of Analytic Model for Corrective Feedback (Ferris, 1995). This model allows the examination of several features of feedback including their length, type, text-specificity, and place of feedback of which only the type of feedback (form and purpose) was the focus of the current study. To ensure the reliability of data, the essays were codified by the first researcher and another proficient rater in the department of language and the

inter-rater reliability computed by Pearson Correlation Coefficient was reported as 97.1 suggesting that the codification had an acceptable rate. Next, to answer the third research question, that is, to identify TCF strategies employed by the teacher to mark the errors in the two modes of feedback, data was analysed using a modified version of the profile of 'Error Feedback Strategies' proposed by Lee (2008). Afterwards, the data obtained from both profiles were subjected to inferential and descriptive statistics using SPSS software (.19) where the frequency, percentage, Mean and Standard Deviation of types of TCF were computed in both PAP and E-feedback modes to provide quantitative data for discussion purposes and to account for the possible differences that existed between the two

feedback modes. To elaborate, in order to answer research questions 2 and 4, 15 independent t-tests were performed and the mean of eight feedback types and seven feedback strategies in the PAP and electronic feedback modes were compared. The results of statistical analysis were presented in appropriate tables.

## RESULTS AND DISCUSSION

### The Form and Purpose of TCF in PAP and Electronic Modes

To answer the first research question, descriptive statistics was performed and the frequency, percentage, mean, and SD of different feedback types (which refers to form and purpose of feedback) were computed and the results presented in Table 1.

Table 1  
*Descriptive statistics for the types of TCF in the control and experimental groups*

Feedback forms and purposes		Control group			Experimental group		
		Percent (No)	Mean	SD	Percent (No)	Mean	SD
1	Ask for information/question	15.63 (93)	1.86	1.03	9.70 (85)	1.70	.64
2	Make a request/question	9.07 (54)	1.08	.63	6.85 (60)	1.24	.51
3	Make a request/statement	7.56 (45)	.90	.46	10.03 (88)	1.76	.71
4	Make a request/imperative	17.99 (107)	2.14	1.39	14.13 (124)	2.48	.50
5	Give information/question	4.87 (29)	.58	.64	4.90 (43)	.87	.33
6	Give information/statement	6.90 (41)	.82	.66	21.90 (192)	3.84	.79
7	Make a positive comment/ statement or exclamation	10.42 (62)	1.24	.91	8.20 (72)	1.44	.50
8	Make a grammar/mechanics comment/ question, statement, or imperatives	27.56 (164)	3.28	1.61	24.29 (213)	4.26	1.36
Total		595 (100)	1.48	.89	877 (100)	2.19	1.23

According to Table 1, teachers offered more electronic (N=877) than PAP (N=595) feedback; hence, the total mean of the experimental group was higher than that of the control group (M = 2.19 vs. 1.48). *Make a grammar/mechanics comment/question, statement, or imperative* was the most frequently used type in both experimental (24.29%) and control (27.56%) groups as also indicated by the mean scores (4.26 & 3.28 respectively). *Give information/statement* with 21.90% and the mean of 3.84, was the second frequently used type of TCF (E-feedback) in the experimental group where it had a low percentage (6.90%) in the control group (M = .82).

*Make a request/imperative* with 14.13% was the third highly used E-feedback type in the experimental group which was also the second most frequent type of PAP feedback in the control group with 17.99% and the mean of 2.14. The third most frequent feedback type in the control group was *Ask for information/question* with 15.63% and the mean of 1.86 which had a rather low percentage in the experimental group with 9.70% (M = 1.70).

With regard to the less frequent TCF types, *Make a request* in the statement form had more occurrence in the experimental group with 10.03% (M = 1.76) whereas it had more occurrence in the control group in its question form with 9.07% (M = 1.08). *Make a positive comment/statement or exclamation* also had a higher percentage in the PAP mode (10.42%) than in the electronic mode (8.20%). *Give information/question* was the least

frequently used feedback in both control (M = .58) and experimental groups (M = .87) with approximately the same percentage (4.87% & 4.90%, respectively).

These findings are consistent with those of Rezaei's (2012) indicating that *make a grammar/mechanics comment* (42%) and *Give information/statement* (20%) were the most common types of marginal comments and *make a request/question* was the least offered feedback type. Likewise, in Martin's (2011) study, *make a grammar/mechanics comment* with 47.9% was the most common feedback type. However, these findings do not corroborate with those of Ferris' (1995) which indicated that the majority of marginal comments centred on *ask for information/question* (31%). This lack of consistency in the results of these studies implies that the nature of feedback given by teachers varies across different contexts and different teachers place emphasis on different aspects of writing. According to the results presented here, in the educational context of this study, the teachers provided feedback on linguistic problems than on other important aspects of writing including organisation and content; the TCF, regardless of its mode, was mainly form-focused than meaning-focused as shown in some previous studies (Chandler, 2003; Ellis, 2016; Lee, 2008; Lightbown & Spada, 1990), and it reflected the teachers' view on the nature of language and what constitutes its major components.

It is also noteworthy that frequent use of one feedback form (e.g., imperatives, statement, and question) may reduce the

chance of using other forms. For example, the results showed that the use of *make a request* in the imperative form was more common than using it in the statement form (17.99% vs. 7.56%) in the control group and this might be related to the rhetoric and functions which are more common in any given language.

Finally, the higher proportion of E-feedback compared with PAP feedback provided by the teacher in this study can imply that, E-feedback is a mode of feedback favoured by teachers (Mahmud, 2016). Similarly, this form of feedback is likely to be favoured by the students as well because the latter may perceive E-feedback as more valuable than handwritten feedback (Abuseileek, 2006; Budge, 2011; Denton et al., 2008). Also, they usually prefer more specific comments on their written work which is more feasible using the electronic mode. However, greater feedback does not necessarily result in better outcomes and

teachers and instructors might have different perceptions about how much feedback is adequate (Leki, 1990; McMartin-Miller, 2014).

### **Difference between TCF Form and Purpose in PAP and Electronic Modes**

In order to answer the second research question, that is, to identify possible differences in form and purpose of TCF in the PAP and electronic modes, eight t-tests (inferential statistics) were administered and the mean scores of both groups with regard to every feedback type were compared. The results are summarised in Table 2 which shows the mean difference between both groups was significant only in four types of feedback: *Make a request/statement* (.000<.01), *Give information/question* (.005<.01), *Give information/statement* (.000<.01) and *Make a grammar/mechanics comment/question, statement, or imperatives* (.001<.01).

Table 2  
Results of Independent T-test for comparing the types of TCF in PAP and electronic modes

Feedback types	Mean Difference	Std. Error Difference	Sig.
1 Ask for information/question	.160	.172	.355
2 Make a request/question	-.160	.115	.170
3 Make a request/statement	-.860	.120	.000
4 Make a request/imperative	-.340	.210	.109
5 Give information/question	-.297	.102	.005
6 Give information/statement	-3.02	.145	.000
7 Make a positive comment/statement/exclamation	-.200	.147	.179
8 Make a grammar/mechanics comment/question, statement, or imperatives	-.980	.299	.001

The results suggested that the medium by which feedback was provided (PAP and Electronic) by the teacher, to some extent, had an impact on the students because the difference was significant only in four out of the eight feedback types. However, the medium did have an impact on the frequency of feedback. In all of these categories, the rate of E-feedback was higher than that of the PAP feedback. That the teacher provided more E-feedback than PAP feedback suggests that electronic mode can be a more convenient tool for provision of feedback (Gonzalez-Bueno, 1998; Pennington, 1996, 2003; Peretz, 2005; Sullivan et al., 1998). One reason maybe that writings produced electronically are neater than those produced manually. In the traditional paper-based writings, teachers usually face lack of space in the margins to include their feedback so they decide to provide general summative feedback at the bottom of the papers which are usually less specific and less effective (Chandler, 2003, Zamel, 1985). On the other hand, teachers using electronic mode have many other choices from giving comments in the

margins to inserting comment boxes, arrows, etc. to provide more specific feedback close to the problems where they are not ignored by the students (Peretz, 2005).

### **The Strategies of TCF in PAP and Electronic Modes**

Table 3 shows the results of descriptive statistics (frequency, percentage, mean, & SD) of the feedback strategies that the teacher employed in the two modes of feedback in order to answer the third research question.

According to Table 3, the frequency (1244) and overall mean (3.60) of strategies used in the experimental group was larger than the frequency (915) and overall mean (2.61) of the control group. Strategies A and E, *underline/circle/ highlight the errors* and *give a hint about the errors by putting a mark in the margin* with 27.43% and 23.28%, and the mean of 5.02 and 4.26, respectively comprised the highest proportion of feedback strategies in the control group (PAP). Strategy G, none of the above with 21.20% also comprised a high proportion in this group (M = 3.88).

Table 3  
*Descriptive statistics for the TCF strategies in the PAP and electronic mode of feedback*

Feedback strategies		Control group			Experimental group		
		Percent (No)	Mean	SD	Percent (No)	Mean	SD
A	Underline/circle/ highlight the errors	27.43 (251)	5.02	.97	24.27 (302)	6.04	1.10
B	Underline/circle/highlight the errors/and provide corrections	14.97 (137)	2.74	.77	10.20 (127)	2.54	.50
C	Underline/circle/ highlight and categorise the errors	4.49 (41)	.82	.48	33.11 (412)	8.24	1.59
D	Underline/circle/ highlight, and categorise the errors, and provide corrections	8.63 (79)	1.58	.73	17.12 (213)	4.26	1.06
E	Give a hint about the errors by putting a mark in the margin	23.28 (213)	4.26	.98	0 (0)	.00	.00
F	Give a hint about the errors by categorising them in the margin	0 (0)	.00	.00	14.06 (175)	3.50	1.03
G	None of the above	21.20 (194)	3.88	.98	2.65 (33)	.66	.59
Total		915 (100)	2.61	1.88	1244 (100)	3.60	2.90

On the other hand, strategy C, *underline/circle/highlight and categorize the errors* with 33.11% ranked the highest in the experimental (E-feedback) group ( $M = 8.24$ ) which had a very low percentage in the control group (4.42%,  $M = .82$ ). However, having a high proportion by 24.27% similar to the control group, *Underline/circle/highlight the errors* ranked the second ( $M = 6.04$ ). Strategy D, *underline/circle/highlight, and the errors, and provide corrections* with 17.12% was the next frequently used component in this group ( $M = 4.26$ ).

With regard to strategy B, it had roughly the same mean in the control and experimental groups (2.74 & 2.54, respectively). Interestingly, strategies E and F were not applicable to either PAP or E-feedback groups; to elaborate, *give a hint about the errors by categorising them in*

*the margin* was not the strategy employed in PAP mode at all (0.0%), and *give a hint about the errors by putting a mark in the margin* was not the strategy used in the electronic mode (0.0%). *Categorising errors in the margin* is a time-consuming strategy which may require much space to be incorporated so it is not a strategy often used by the teachers who offer PAP feedback. On the other hand, simply marking an error in the margin was not used by the teacher when offering E-feedback, as more effective choices such as using highlighting and categorizing were available to her. In another instance, observing the essays produced by the students in the two groups indicated that *Underline and circle* were the main strategies used to comment on students' paper-based writings in the control group whereas errors in the experimental group had been *highlighted*.

The high proportion of strategy D, *None of the above*, in the control group (21.20%) suggests that teachers offering PAP feedback have more limited strategies to use compared with the electronic mode and it consequently leads to the provision of less feedback to the students. Conversely, the low occurrence of this strategy in the experimental group by 2.65% ( $M = .66$ ) reveals that with the presence of a variety of strategies (A-F), teachers need not turn to other less common strategies which are not included in this categorisation. These findings in general are supported by other studies (e.g. Huett, 2004; Peretz; 2005; Chandler, 2003; Lightfoot, 2006) that encourage the use of word-processors or similar tools for provision of feedback. Ho and Savignon (2007), for instance, found that students using the Microsoft office annotations, specifically the use of 'track changes', allow easier reviewing process

and making additions and deletions to the writings. However, there are some studies that do not support the findings of the current study. For example, according to Chang et al. (2012), although the majority of students preferred e-feedback, handwritten feedback was of higher quality and favoured because students perceived it more personal.

#### **Difference between TCF Strategies in PAP and Electronic Modes**

In order to answer the fourth research question, that is, to identify possible significant differences in strategies used by the teacher in order to provide feedback to the students in the PAP and electronic modes, seven independent t-tests (inferential statistics) were run and the mean scores of both groups with regard to every feedback strategy were compared. The results are summarised in Table 4.

Table 4  
*Results of independent T-test for comparing the strategies of TCF in PAP and electronic modes*

Feedback types	Mean Difference	Std. Error Difference	Sig.
A Underline/circle/ highlight the errors	-1.02	.208	.000
B Underline/circle/highlight the errors/and provide corrections	.200	.130	.120
C Underline/circle/ highlight and categorise the errors	-7.42	.236	.000
D Underline/circle/ highlight, and categorise the errors, and provide corrections	-2.68	.182	.000
E Give a hint about the errors by putting a mark in the margin	4.26	.139	.000
F Give a hint about the errors by categorising them in the margin	-3.50	.146	.000
G None of the above	3.22	.162	.000

As can be seen in Table 4, there was a significant difference in the use of all feedback strategies except strategy B (*Underline/circle/highlight the errors/ and provide corrections*) between the experimental and control group ( $p < .01$ ). Table 3 shows that concerning strategies A, C, D, and F, the mean scores of the experimental group were significantly higher than those of the control group.

The significant difference found with regard to strategies used to mark errors in PAP and electronic mode was expected since in the E-format, a variety of available functions such as Microsoft Office comment box, track changes, as well as arrows, and colour-coding scheme, to name a few, allow teachers to mark errors in a clearer way and to provide more specific feedback in appropriate places within a text (Peretz, 2005). On the other hand, in PAP mode the teachers may limit their feedback to minimal marking of an error such as underlining it with a single pen colour throughout the text. Legibility of errors is another important criterion that should be paid heed when dealing with PAP and E-feedback. *Provide correction* and *give a hint* along with highlighting, circling or underlying are frequent strategies used by the teachers; however, findings of some studies suggest that students read typed comments easier than handwritten comments (Chang et al., 2012). Overall, clear marking of errors through more useful and effective strategies is of high significance; otherwise, the feedback provided to the students would not be helpful.

## CONCLUSION

The current study which investigated the nature of teacher corrective feedback in the traditional PAP and modern electronic mode indicated that the medium or mode of feedback had an effect on the type and frequency of feedback to the students suggesting that the distinctive characteristics and capabilities of word-processor and email as a means of delivery make them worthy of integration into writing classrooms as it facilitates provision of more effective feedback to the students. In fact, provision of E-feedback is becoming a must in many settings because as class sizes continue to grow, provision of feedback becomes more challenging for the writing instructors; yet, they are expected to provide rigorous feedback. Moreover, as educational settings increasingly try to incorporate CALL to facilitate teaching and learning, introduction of E-feedback can be a feasible alternative, or a complementary mode of feedback along with the traditional PAP feedback which are still valued by students. Nevertheless, provision of feedback yields a couple of theoretical and practical challenges for teachers, one of which is the matter of choice among the mode of feedback as well as different feedback types and strategies. This is where understanding the advantages and disadvantages of each mode of feedback and its nature of TCF becomes evident; in fact, teachers should view error correction as a problem-solving activity and reflect on the nature of feedback they provide to the students to realise which feedback has the potential for improving writing skills.

Students, specifically those who have always received traditional hand-written TCF, also need to develop capabilities of computer-generated writing and E-feedback.

Despite the significant findings yielded by this study and its contribution to the existing literature, it also had some limitations. It used a limited sample in the context of Iran. Although the findings have implications across a variety of contexts and writing classes in general, conducting this study in other contexts and using a larger population is recommended. Further research can study the features of computer-generated feedback as a medium of producing and delivering feedback on students' written works. In addition, the present study did not investigate the effect of PAP and electronic feedback on students' revision so to provide evidence of the efficacy of each mode of feedback. Thus, future studies should address the degree to which these two feedback forms bring about positive changes in students' writings and their subsequent revisions. However, in order to see whether Electronic or PAP feedback is more effective, it is important to understand the nature of each feedback mode (their form, and purpose and strategies by which they are provided) in the first place; in other words, what is that makes one feedback mode more effective than the other or how medium affects the message to be transferred to the students to result in improving their writing.

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## **Exploring Teachers' and Parents' Perceptions on Social Inclusion Practices in Malaysia**

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### **ABSTRACT**

This article outlines the findings from a contemporary study on the development of social inclusion practices in primary and secondary schools in Malaysia. Recent inclusive education policy in Malaysia has increased schools' accountability for the inclusion of students with SEN into mainstream schools. This article draws on recent empirical evidence related to social interaction development among students with special educational needs and their typically developing peers thus providing an insight into Malaysia's efforts in developing an inclusive education system. The research findings will provide contemporary information on the social interaction development among SEN and mainstream pupils, as perceived by teachers and parents in the country. The article also highlights what is required to enhance the social interaction development of students with SEN and their more abled peers.

*Keywords:* Inclusive education, social inclusion, social interaction

### **INTRODUCTION**

Developed and developing nations are progressing at different rates in their implementation of inclusive education

(Toran et al., 2016; Schwab et al., 2015; Schwab et al., 2013; Helldin et al., 2011; Lee, 2010). Inclusion for students with special needs into the mainstream classroom has become an international agenda since the 1990s (UNESCO, 1994; 1999; Smeets, 2007; Yeo & Teng, 2015).

#### **ARTICLE INFO**

*Article history:*

Received: 15 August 2016

Accepted: 23 May 2017

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Malaysia advocated an inclusive education for all students as it is a signatory of the Salamanca Statement (UNESCO, 1994). The Ministry of Education of Malaysia decided to integrate students with SEN into the national schools as part of a reform initiative to educate the community and increase awareness on the educational rights of children with SEN (Ali et al., 2006; Jelas & Ali, 2012). Schools now are responsible to accept students with SEN, and provide the facilities and support needed to meet their demands (Adams et al., 2016; Lee, 2010).

Inclusive education is seen as vital in assisting students with SEN to build self-confidence, social interaction and gaining greater social acceptance (Yasin et al., 2014). According to Allen and Cowdery (2005), the benefits of inclusive education are as follows: firstly; it is the fundamental right of students no matter what their abilities and disabilities are to equal education; secondly, the opportunity to develop students' social skills (Koegel et al., 2011) and thirdly; the access to quality education (Ruijs et al., 2010). Despite emerging inclusion policies and innovative implementation methods, Malaysia and other developing countries still face challenges in making all classrooms inclusive. For some time, it was assumed students with SEN were a better fit in special education schools. Consequently, many countries began to develop an education system consisting of different types of special schools catering to specific special needs. These special education schools were viewed as possessing various advantages such as trained special education teachers,

individualised instructions in classrooms, lower teacher-student ratio, and a curricular based on social and vocational development (Kavale & Forness, 2000). However, many of the presumed advantages came to be questioned as students with SEN were segregated from their typically developing peers.

There is relatively little evidence on inclusion in developing nations such as Malaysia (Lee, 2010). Successful inclusion means the student with special needs feels a part of the mainstream education classroom (Obiakor et al., 2012). *'Inclusive education relies heavily in theory and practise on successful social interactions among students across ability levels'* (Wilkerson et al., 2014; pg. 3). It is important, therefore, to focus on one factor that could influence the functioning of students with SEN, the presence of other able students in the same class. This factor could influence the effect of inclusive education. The involvement of the students' able peers may bring a whole new dimension of acceptance in classroom learning. Social inclusion of students with SEN remains an important aim in current times (Koster et al., 2007). An understanding of the social and communication process is a key factor in the inclusion of students with SEN.

As a contribution to building a more substantial knowledge base on social interaction development among SEN and mainstream pupils, as perceived by teachers and parents in Malaysia, this article reports the findings from a small-scale empirical inquiry of social inclusion practices in

Malaysia. The goals of this research study were:

1. Illuminate the extent students' social interaction among SEN and mainstream pupils exist, as perceived by teachers.
2. Illuminate the extent students' social interaction among SEN and mainstream pupils exist, as perceived by parents.

The article is structured as follows. Initially, key findings from the research literature on social inclusion will be outlined, explanation of the research methods follows before the findings are analysed and discussed. The findings from this research highlights the important role of students' able peers in further enhancing the social interaction development of the students with SEN.

## **SOCIAL INCLUSION MATTERS**

Initiatives to increase social inclusion for students with SEN are a major step towards total inclusion rather than just complying with the rights of these students to be educated alongside their typical peers in mainstream schools. 'It is critical to understand teacher perceptions about social inclusion because these perceptions influence the quality of instruction, teacher efficacy in the inclusive setting, and attitudes toward students with SEN in the classroom (Gotshall & Stefanou, 2011). Teachers' perceptions on working with students with SEN in an inclusive classroom are complex (Berry, 2010). Teachers with a positive view often have confidence in their teaching ability and its effectiveness with SEN students, while those with a less favourable

perception tend to feel that inclusion is too demanding, and that students with SEN should be taught separately, where they can receive individual instruction (Berry, 2010). In understanding teachers' perceptions of social inclusion, schools can better provide teachers with training and support them when they implement inclusive teaching practices (Damore & Murray, 2009)'.

Parents often view social inclusion as the primary motive for placing children with SEN in a regular mainstream school (Koster et al., 2009, 2010). They hope that the physical presence of their children will lead to social inclusion and build positive relationships with their peers. Parents have expectation that an inclusion process for SEN children can increase opportunities for contact with peers, more social situations and friends, and better integration with the local community (de Boer et al., 2010). In view of the emphasis of social inclusion by parents, it is important to investigate if this aspect of social inclusion can really be achieved in Malaysia.

Generally, the term "students with special needs" refers to students with various (combinations of) impairments and/or difficulties in participating in education (Pijl et al., 2008). Currently, only 6% of students with special needs are in inclusive programs. 89% attend integrated programs, and the remaining 5% attend special education schools (Ministry of Education, 2013). Initiatives are being taken to harness the positive influence of able peers on inclusion of students with SEN (Ruijs et al., 2010). The introduction of the "Malaysia Education

Blueprint 2013–2025” in 2012 highlights the Malaysian Ministry of Education commitment towards an inclusive education model based on current national policy and international best practices. Among the 11 Key Shifts in the Education Blueprint for transformation and change is that by 2021 to 2025, 75% of students with SEN will be enrolled in inclusive programs, and every child with SEN will be provided with high-quality education by teachers equipped with basic understanding and knowledge of SEN.

The literature has consistently shown that inclusion of students with SEN in a mainstream school does not spontaneously lead to friendship and positive contacts with their typical counterparts (Guralnick et al., 2006; Guralnick et al., 2007). Research shows students with SEN in regular mainstream schools often find it difficult to participate socially. They are often neglected by their peers, low acceptance by their peers, have relatively few friendship circles compared to their typically developing peers (Pijl et al. 2008). Students with SEN often face an obstacle with social interaction (Louis & Isaac, 2016; Wendelborg & Tøssebro, 2011). These students are often incapable to express their thoughts and feelings leading to hindered social interaction development (Wendelborg & Tøssebro, 2011). Physical integration of students with SEN is an important first step however, difficulties with peer relationship and a low social position at school among students with SEN might lead to maladjustment in the future (Rubin

& Fox, 2005).

A combination of (reciprocal) friendships with social interactions and peer acceptance are important strategies to facilitate social inclusion of students with SEN (Williams et al., 2005). Friendship is an important element to evaluate the success of a social inclusion process for students with SEN and their typically developing peers (Koster et al., 2009). De Monchy et al. (2004) does not define social inclusion but in terms of the social position of students with SEN in terms of the number of friends, being liked and performing a task together, and the degree to which they are bullied by classmates. Vaughn et al. (1998) describe the social interaction development for students with and without SEN by focusing on the friendship and friendship quality. Fryxell and Kennedy (1995) found students with SEN within a friendship network received more social support and had more social contacts with their able peers. Students without SEN are willing to form friendships with their peers with SEN (Hendrickson et al., 1996), as inclusion increased their personal growth, acceptance of others (Wiener & Tardif, 2004) and helped them find companionship (Staub et al., 1994).

Social interactions between students with SEN and their able peers is an essential part of a social inclusion process (Bossaert et al., 2013; Lambert & Frederickson, 2015). Students’ social interaction in this study means students with SEN acquiring sufficient sets of social skills close to their age group. These social skills may

be learned by copying others or with a guided instruction from able people. King et al. (1997) describes students with SEN as being particularly at risk since some of them are not physically, sensorial or intellectually capable to learn the social skills needed. Young children are relatively comfortable being in the same classroom with children who have special needs, although this may change as they get older. Questions frequently arise if students with SEN do have frequent interaction and forms friendships with their able peers (Frostdad et al., 2011). Social interaction among students with SEN and their able peers needs to be a guided process as these students often lack the knowledge how to interact and join in activities effectively (Wilkerson et al. 2014; pg. 55). A variety of classroom grouping arrangements such as teacher-centred or peer-mediated group instruction will help students with SEN join in classroom activities and assist in developing social interaction with their able peers.

Maximizing social interaction between able peers and students with SEN is a crucial aspect of inclusion as it might have a positive effect on the social-emotional development of the students with SEN (Koster et al., 2009). Hunt et al. (2003) found students with SEN improved their engagement in classroom activities and their academic skills due to their participation in conversations and interactions with their able peers. Ring and Travers (2005) revealed students without SEN also benefit from social inclusion as they have learned great patience, great tolerance and

great understanding. They also revealed interactions to ask for assistance, the use of verbal and non-verbal gestures with able peers were predominantly initiated by the students with SEN.

Peer acceptance is a frequently used term among researchers and of great importance for an inclusive education system (Doll et al., 2003). Pijl et al. (2008) emphasized the importance of peers' acceptance to the continued process of social inclusion. This includes students with SEN being able to connect and relate with their typically developing peers, make friends and ultimately be accepted by their peers. An important essence in the process of social inclusion is social acceptance or 'peer group socialisation' (Cambra & Silvestre, 2003). Considering the literature on the possible low social position of students with SEN if they face peer rejection and the risks involved if intervention are not made, acceptance by classmates of students with SEN is an important aim for this research.

The empirical evidence about social interaction patterns of students with SEN and their able peers in primary and secondary schools in Malaysia, and indeed any contemporary, independent evidence about social inclusion in Malaysia remains limited. The 'missing link' in the local literature is the development of social inclusion in three major themes – 1) students' friendship, 2) students' interaction and 3) students' acceptance by classmates. This study aims to provide an important link in Malaysia's effort towards developing an inclusive education system. The research findings

provide contemporary information of the extent social interaction among SEN and mainstream pupils as perceived by teachers and parents in Malaysia.

## **METHOD**

### **Study Design**

This study employed a sequential explanatory mixed-methods research design (Creswell & Plano Clark, 2011) where quantitative approach was supported by a qualitative approach to support the data. (Creswell & Plano Clark, 2007, p. 11). Collins et al. (2006) reasoned that mixed-methods research may enrich the research data by the interpretation of participant's experiences. The data collection process was done in two major phases. In the first phase, questionnaires were distributed to teachers and parents followed by the next phase where interviews with teachers and parents were conducted to gather their experiences.

### **Population and Sample**

Ten Malaysian, government funded inclusive education primary and secondary schools located in the Klang Valley, Malaysia were selected for this study. The criteria for selection was based on the active running and implementation of inclusive education practices. Students in these schools are from the Learning Disabilities category which includes Attention Deficit Hyperactivity Disorder (ADHD), Minimal Retardation, Dyslexic, Down's Syndrome and Autistic students.

A survey instrument was administered

to 95 teachers and 104 parents. Only 68 parents' responses were selected for further data analysis based on their frequency of attending the Individualized Education Program (IEP) meetings with the teachers.

### **Instrumentation**

The instrument used for this study consists of three major constructs concerning the extent social interaction among SEN and mainstream pupils exists, as perceived by teachers and parents in: (i) students' friendship; (ii) students' interaction; (iii) students' acceptance by classmates. The instrument consists of 16 items using a five Point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Based on the teachers' and parents' responses, semi-structured interviews sessions were carried out on a later date with a sub sample of 6 teachers and 5 parents to explore further their experiences concerning social inclusion development in their schools.

### **Data Collection and Analysis**

The questionnaires were distributed to all selected teachers and parents. The questionnaires consist of a series of Likert-type questions which measures a particular trait, thus creating a Likert scale (Boone & Boone, 2012). Descriptive statistics consisting of mean scores were used to analyse data relating to the constructs concerning the extent social interaction among SEN and mainstream pupils exists, as perceived by teachers and parents in: (i) students' friendship; (ii) students'

interaction; (iii) students' acceptance by classmates. The interpretation of the level of social inclusion was based on the following set of descriptors: 1.00–2.40 (low level of interaction); 2.41–3.80 (moderate); and 3.81–5.00 (high level of interaction). Data were analysed descriptively (i.e. they were ranked from the highest level to the lowest level) before proceeding with the interview data.

Semi-structured interviews was carried out with a sub sample of 6 teachers and 5 parents to explore further their experiences concerning social inclusion development in their schools. Teachers' and parents' response were coded Teacher 1 (T1) to Teacher 6 (T6) and Parent 1 (P1) to Parent 5 (P5) to address the issue of respondent confidentiality.

Research data from both the quantitative and qualitative methods were integrated (Creswell, 2003). Specific quotes from the interview were highlighted to support the

questionnaire data, adding more depth and richness to the study. The combination of two types of data provides a robust analysis required for a mixed methods design (Johnson & Onwuegbuzie, 2004).

## RESULTS

This section of the article outlines the extent social interaction among SEN and mainstream pupils as perceived by teachers and parents in: (i) students' friendship; (ii) students' interaction; (iii) students' acceptance by classmates. The descriptive statistics are presented in Table 1 depicting 95 teachers who completed the questionnaire.

As shown in Table 1, it is interesting to note from this table that majority of the teachers had a Bachelor Degree academic qualification, and teachers in this study were largely very experience with 30.5% had 6 to 8 years of experience working in the special education field.

Table 2 shows the breakdown of parents'

Table 1  
*Teachers' demographic information*

Demographic	Variables	Percentage (%)	Total Respondents
Highest academic qualification	None	0	95
	Diploma	9.5	
	Bachelor Degree	78.9	
	Master Degree	9.5	
	Doctorate Degree	0	
	Others	11	
Worked in the special education field	Less than 3 years	21.1	95
	3 to 5 years	24.2	
	6 to 8 years	30.5	
	9 to 11 years	10.5	
	More than 12 years	13.7	
	Non-Applicable	0	

demographic information, in percentage. It is interesting to note from this table that the percentage of mothers (52.9%) and fathers (47.1%) that responded to the study were almost equal, their child has been studying

in this school for at least 1 to 4 years and parents were generally active attending their child’s IEP meeting / discussion in the school.

Table 2  
*Parents’ demographic information*

Demographic	Variables	Percentage (%)	Total Respondents
Gender	Male	47.1	68
	Female	52.9	
Child been studying in this school	Less than 1 year	7.4	68
	1 to 2 years	32.4	
	3 to 4 years	39.7	
	5 to 6 years	20.6	
	None	0	
Attended the IEP meeting / discussion in the school	1 to 2 times	48.5	68
	3 to 4 times	29.4	
	5 to 6 times	7.3	
	More than 7 times	14.7	

**Students’ Social Interaction among SEN and Mainstream Pupils as Perceived by Teachers**

Table 3 below indicates which of the three students’ social interaction constructs was the most prevalent among teachers. Based on the overall mean, it can be observed that teachers (n=95) rated themselves highest on students’ “acceptance by classmates” (M= 3.76, SD= 0.25), followed by students’ “friendship” (M= 3.56, SD= 0.29), and students’ “interactions” (M= 3.55, SD= 0.23), respectively.

The mean score for students’ “acceptance by classmates” had the highest rating from teachers as it expressed acceptance between

mainstream students and SEN students during school recess time. This is reflected in item 11 (the student with special needs eats together with their classmates) of the questionnaire with a high mean of 3.96. Teachers also stated that there was close cooperation between mainstream students and SEN students in classroom activities as supported in item 10 (the student with special needs works together with their classmates on tasks) with a high mean 3.78. SEN students were also seen to enjoy schooling and this is reflected in item 16 (the student with special needs is happy attending school) with a high mean of 4.06

Table 3  
*Level of students' social interaction among SEN and mainstream pupils as perceived by teachers*

Construct	Mean	SD
Friendship	3.56	0.29
Interactions	3.55	0.23
Acceptance by classmates	3.76	0.25

Six teachers were further interviewed in order to determine teachers' perception on students' acceptance. Excerpts from the interview with four teachers 2 (T2), 3 (T3), 5 (T5) and 6 (T6) supports the quantitative data findings. These teachers confirm that there is a sense of acceptance between mainstream students and the SEN students as active interaction also happens during school recess time. Teachers also stated that there was close cooperation between mainstream students and SEN students in classroom activities.

*"The mainstream students can accept the SEN students. They've become close, communicates with one another. Even during recess, they talk."* (T2)

*"A mainstream student helped to tie the shoelace of the SEN student who can't do it. Meaning the student can accept the SEN student wholeheartedly. If they can accept each other, it's easy for them to mingle."* (T3)

*"Mainstream students don't look down on the SEN students anymore."* (T5)

*"We also see a close cooperation in class."* (T6)

Interestingly, two teachers (T4) and (T6) emphasized that mainstream students and their SEN peers are now comfortable within each other's company. They further elaborated:

*"They've become friends. So, the SEN student that joins the inclusive class will not feel isolated because they have friends, they can mingle easily and talk. They are more comfortable in their friendship."* (T4)

*"Within themselves when we're training together at the field, they are cheerful and mingling with each other. Mainstream students started socializing with the SEN kids."* (T6)

To summarize, the interviews with these teachers revealed teachers' perception that students with SEN are well accepted by their able peers in the schools studied.

### **Students' Social Interaction among SEN and mainstream Pupils as perceived by Parents**

Based on the perceptions and responses provided by parents, the level of students'

social interaction among SEN and mainstream pupils are presented in Table 4. Parents (n=68) rated themselves highest on the students' "acceptance by classmates" (M= 3.92, SD= 0.29), followed by students' "interactions" (M= 3.81, SD= 0.17), and students' "friendship" (M= 3.70, SD=0.20), respectively.

The mean score for students' "acceptance by classmates" had the highest rating among parents, who were happy that their child was being accepted by their peers. A positive indicator of this trend can be seen from the fact that their children now look forward to school every morning as reflected in item 15 (My child is happy attending school) in the questionnaire with a high mean of 4.24. Parents also stated that their children received assistance in classroom activities as shown in item 5 (my child are assisted by their classmates in lessons) with a high mean of 3.84 and item 12 (my child eats together with their classmates) with a high mean of 4.04.

Table 4  
Level of students' social interaction among SEN and mainstream pupils as perceived by parents

Construct	Mean	SD
Friendship	3.70	0.20
Interactions	3.81	0.17
Acceptance by classmates	3.92	0.29

Five parents were further interviewed in order to determine whether parents' perceived students' acceptance by classmates as the most vital element in the social inclusion process. Excerpts from the interview with

parents 2 (P2), 4 (P4), and 5 (P5) supports the quantitative data findings. Two parents expressed their joy in their child now being accepted by their peers. A positive sign about this aspect from every parent was the fact that their children now look forward to school every morning. Parent 4 (P4), and Parent 5 (P5) mentioned:

*"He likes the school, he won't cry. Every day he goes to school."* (P4)

*"She feels comfortable and happy to go to school. Morning she gets up to go to school very fast. It's not difficult to wake her up. When she comes back home also she's happy. She always says her teacher and friends is good Mom."* (P5)

In addition, a parent (P2) shared the fact that their child gets invitation to birthday parties by her mainstream peers:

*"There was once her friend invited for a birthday party, it was a normal child. She was telling us about this normal friend that she had who was so nice to call her to come for a birthday function."*

To conclude, parents expressed joy that their child with SEN are accepted by their able peers in school. Evidence of students' acceptance by classmates was clearly supported by the interviews above. They emphasise that their child's ability to connect with their peers constitutes an important index of social inclusion.

## **DISCUSSION**

This study was directed to examining the extent of social interaction among SEN and mainstream pupils exists, as perceived by teachers and parents in Malaysia in three major areas: 1) students' friendship; 2) students' interaction; and 3) students' acceptance by classmates. The study further highlights what is required for this goal to be practically achieved.

The data from the descriptive analysis showed that teachers believed there is a sense of acceptance between mainstream students and the SEN students as active interaction also happens during school recess time. Close cooperation between mainstream students and SEN students in classroom activities was also evident. This finding is contrary to research on social acceptance where results consistently showed that students with special needs are less accepted than classmates without special needs (Wiener & Tardif, 2004). An inclusive approach towards SEN provided students with major social inclusion benefits. Hwang and Evans (2011) similarly revealed teachers indicated that students without disabilities learned to accept and understand people who were different from them. They also indicated that teachers too understood the difference between integrating and truly including students with disability. Pijl et al. (2008) also asserted that part of pupils' social development is influenced by their peer groups.

They emphasise the importance of peer acceptance for social inclusion, and define peer acceptance as the ability to interact

with peers, make friends with peers and be accepted by peers. According to Cambra and Silvestre (2003), one of the factors that plays an important role in social inclusion is 'peer group socialisation'. They consider social acceptance to be the essence of social inclusion. The approach presents both a challenge and opportunity for many educators (Ali et al., 2006).

## **IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH**

The effect of inclusion classes on social interaction and academic achievement for students with SEN continues to produce positive results (Lampton, Graves & Ward, 2012). One of the components of successful inclusion is the degree to which the students with SEN feel a part of the mainstream classroom. The feeling of belonging has a positive effect on students' self-image and self-esteem, motivation to achieve, speed of adjustment to the larger classroom and new demands, general behaviour, and general level of achievement. The impact of the inclusion of students with SEN on the mainstream classroom is a major consideration for inclusion planners. Fostering positive social relationships between students with SEN and their able peers requires the preparation of able peers so that they understand the needs of their new classmates. Teachers may use many strategies to help students with SEN achieve a sense of belonging to the inclusive class.

A study by Calabrese, Patterson, Liu, Goodvin, and Hummel (2008) found

that the peer intervention program Circle of Friends Program (COFP) was very beneficial in increasing social interactions both inside and outside the classroom. The COFP paired students with SEN with able buddy. The COFP is not only a model for successful inclusion of students with SEN in and outside the classroom but has the potential to serve as a vehicle for facilitating school-wide inclusive educational practices. It was evident that the COFP helps foster a culture of acceptance through encouraging relationships between students with SEN and their able peers. Further research studies on social inclusion in Malaysia could explore the effect of peer intervention programs as a platform for effective inclusion processes. The involvement of more able peers may bring a whole new dimension of social inclusion and acceptance in classroom learning which is worth researching in more depth.

## CONCLUSION

*'Inclusive education obviously attempts to provide equal access to academic instruction and social opportunities for all students, regardless of ability levels'* (Smith et al., 2015; pg. 18). This notion is supported by educators (Ruijs & Peetsma, 2009) who assert that it is the human rights of students with special needs to attend mainstream schools and receive quality support. The goal is not to erase differences but to enable all students to learn within an educational community that validates and values individuality (Lusthaus et al., 1990).

This study revealed that placing students with SEN in an inclusion classroom was positively received by their able peers. They believed that inclusion benefits them in terms of increased acceptance, understanding, and tolerance of individual differences; a greater awareness and sensitivity to the needs of others; greater opportunities to have friendships with students with SEN; and an improved ability to deal with disability in their own lives (Salend, & Duhaney, 1999). Furthermore, successful social inclusion brings benefits with SEN students who begin to feel they are not secluded, that their peers do not view them differently, and thus feel more comfortable when relating to others in their age group, thereby increasing their self-esteem and self-confidence.

The sample of teachers and parents in this study is not representative but indicative and serve as a point of reference for educators and policy-makers interested in enhancing inclusive education practices in Malaysia. This study on the development of social inclusion attempts to fill a gap in knowledge. The views of teachers, parents provide interesting insights into how social inclusion development had taken place at the selected sample schools.

The MOE in Malaysia aspires to Wave 3 of its education blueprint so that by year 2021 to 2025, 75% of students with SEN will be enrolled in inclusive programs. However, policy makers in the pursuit of better education performance, largely fail to consider exactly how policy implementation influences student outcomes (Harris &

Jones, 2015). A policy with a sustained process of monitoring, assessment, and regulation (Harris et al., 2014) can result in an exceptional education system (Harris et al., 2014).

This study highlights how this goal maybe achieved and points towards the importance of social interactions between students with SEN and their able peers. An inclusive classroom cannot be successfully created without positive social inclusion outcome. The establishment of peer relationships between students with special needs and those without disabilities is viewed as an important outcome of school integration efforts (Frostad & Pijl, 2007). The main aim now is to make this happen.

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## **Corporate Governance Disclosure in Indonesia**

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### **ABSTRACT**

The purpose of this study is to examine corporate governance (CG) disclosure, particularly audit committee and internal audit disclosure, of listed firms in Indonesia. To the best of the researcher's knowledge, no previous studies have specifically examined the compliance level of listed firms in Indonesia with prevailing CG regulations, specifically related to audit committee and internal audit disclosures. We compared annual reports of 443 listed firms between 2012 and 2013 based on the regulations that govern disclosures set by the Indonesian Capital Market Authority. It was found that the level of disclosure 2012 and 2013 on CG, particularly with regards to audit committees and internal audits, was relatively low. Specifically, the level of disclosure was only 39.5% and 43.9% in 2012 and 2013 respectively. The old regulation lacked detailed requirements, meaning that the level of disclosure varied greatly across firms. The revised regulations announced in 2012 were stricter and more detailed, meaning annual reports for 2013 were expected to have richer information on the firms' CG practices. However, the level of disclosure in 2013 increased by only 4.4%. This result shows that the revised regulations did not automatically increase the level of disclosure possibly due to the fact that enforcement was not yet in place. The findings of this paper have implications for capital market regulators in particular the need to enforce the regulations with the ultimate objective of ensuring full compliance with mandatory disclosures.

*Keywords:* Audit committee, corporate governance, disclosure, internal audit

### **ARTICLE INFO**

*Article history:*

Received: 27 October 2016

Accepted: 22 August 2017

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### **INTRODUCTION**

Many studies have examined the issue of disclosure (for example: Lang & Lundholm,

1993; Botosan, 1997; Sengupta, 1998). Managers have an information advantage over outsiders, about the firm's past and future economic performances (Sengupta, 1998). This information asymmetry creates agency problems. Based on the agency theory, companies disclose information to mitigate agency conflicts between shareholders and managers. Even though companies may voluntarily disclose information to outsiders, there are mandatory disclosures required by regulatory bodies.

Companies release information to the market through a number of sources, including annual reports, quarterly reports, press releases, and websites. Although there are other means of releasing information, the annual report is considered to be the major source of information for users (Botosan, 1997). Knutson (1992, p. 7), for example, states that, "at the top of every analyst's list (of financial reports used by analysts) is the annual report to shareholders. It is the major reporting document and every other financial report is in some respect subsidiary or supplementary to it." The annual report should contain useful information that will allow readers to make the right decisions, as well as make efficient use of scarce resources (Akhtaruddin, 2005).

Corporate governance (CG) is considered one of the important factors when making investment decisions, and has generated much public interest. Concerns related to public interest have motivated stock exchanges and regulators in many countries to introduce regulations that require governance-related disclosures by listed

firms (Yu, 2010). In Indonesia, for example, the Capital Market and Financial Institutions Supervisory Agency/*Badan Pengawas Pasar Modal and Lembaga Keuangan* (Bapepam-LK)<sup>1</sup> (now the Financial Services Authority/Otoritas Jasa Keuangan (OJK)) released several regulations pertaining to corporate governance. One example is Regulation No. X.K.6 on the Annual Reporting of Issuers or Public Companies. Under this regulation, the annual report must contain a brief description of the implementation of corporate governance in the current period. Another regulation is Regulation No. IX.1.5 on Formation and Work Performance Guidelines of the Audit Committee. Audit committees have oversight responsibility over the financial reporting process, the audit process of external and internal auditors, and compliance with prevailing laws and regulations. Regulation No. IX.I.7 also relates to corporate governance, regulating internal audit units within the corporations' organisational structures. In performing its roles, the internal audit unit works closely with the audit committee.

<sup>1</sup>Since 31 December 2012, the role of Bapepam-LK, which is structurally under the supervision of the Ministry of Finance, has been transferred to the Financial Services Authorities/*Otoritas Jasa Keuangan* (OJK). The OJK was established by the Indonesian Government to perform regulatory and supervisory duties regarding financial service activities in banking, capital markets, and non-banking financial industry sectors.

The above-mentioned regulation on audit committees was issued in 2004, and the regulation on annual reports was released in 2006, while regulation pertaining to internal audits has existed since 2008. However, no studies have examined disclosure practices on corporate governance in Indonesia, particularly on audit committees and internal audits. Previous studies have not specifically examined mandatory corporate governance disclosure (specifically related to audit committees and internal audits) except to compare the disclosure in annual reports with a checklist based on OECD (Organization for Economic Co-operation and Development) principles of corporate governance or other checklists, which contain both mandatory and voluntary disclosures. It is therefore necessary to analyse current practices, which will provide OJK with input on the level of compliance with existing regulations. Based on this evaluation, OJK may obtain information on the current practices of audit committees and internal audits, namely whether they comply with regulations, and which areas may require improvement.

Thus, the aim of this research is to map the current practices of audit committees and internal audits based on disclosures in the annual reports of listed firms. We examine the current practices and identify the level of compliance with regulations. The results of this study will provide inputs for OJK on the listed companies' compliance with prevailing regulations.

## **LITERATURE REVIEW**

### **Regulations in Indonesia**

The OJK has issued Regulation No. IX.1.5 on the Formation and Work Performance Guidelines of the Audit Committee which requires all issuers or public companies to have an audit committee. The main role of an audit committee is to assist the board of commissioners in fulfilling its oversight responsibilities for compliance with the prevailing laws and regulations. The audit committee is responsible for providing professional and independent opinions and judgement over financial reporting and other reports submitted by the board of directors to the board of commissioners, as well as identifying important matters that require the board of commissioners' attention. The rule also requires firms to have an audit committee charter. This charter should be disclosed on the website of issuers or public companies. Under current regulation, audit committees should have at least three members, consisting of one independent commissioner as head of the audit committee, and at least two external independent members. Among the three members of the audit committee, one member must have a good educational background and expertise in accounting and/or finance. The audit committee is also required to hold regular meeting at least once every three months.

In 2006, OJK issued Regulation No. X.K.6 on the Submission of Issuers or Public Companies Annual Reports. Under this regulation, the annual report must contain a brief description of the implementation of corporate governance in the current period. The corporate governance disclosure should contain the following information related to the audit committee: names; working experience and the legal basis for the appointment; educational background; assignment period; independence of the audit committee; disclosure of corporate policies and their implementation; the frequency of audit committee meetings and level of attendance; and a brief description of the audit committee's activities in accordance with the audit committee charter.

Regulation No. IX.I.7 outlines the requirements for internal audit unit within a firm's organisational structure. The roles and responsibilities of internal audit units are, among others, to: (1) test and evaluate internal control and risk management systems; and (2) perform audits and evaluations of efficiency and effectiveness of the firm's operation in the areas of finance, accounting, operations, human resources, marketing, information technology and other activities. In performing these roles, the internal audit unit works closely with the audit committee.

These regulations were revised in 2012. The changes included the requirement to upload annual reports and the audit committee charter to the company's website, as well as a detailed requirement regarding the content of the internal audit charter.

## **Previous Studies**

There have been many researches on corporate disclosure, especially in other countries. Xiao (1999) examined corporate disclosure practices in China and found a high level of compliance, largely because these requirements were mandatory. He also found many examples of voluntary disclosure, especially earnings forecasts and the supervisory board's report.

Akhtarudin (2005) investigated the extent of mandatory disclosure of 94 listed firms in Bangladesh. He found companies in general have not responded adequately to mandatory disclosure requirements, and on average, they disclosed only 44% of the mandatory requirements. This led him to conclude that prevailing regulations are ineffective monitors of companies' disclosure compliance.

Another study, on mandatory disclosure in Egypt, by Abdelsalam and Weetman (2007) examined the level of disclosure in annual reports between 1991–1992 and 1995–1996 to compare the outcome of the new Capital Market Law to the situation immediately prior to its enactment. They found that compliance with established regulation improved between 1991–1992 and 1995–1996. Samaha et al. (2012) also conducted a study on corporate governance disclosure in Egypt. They found that the levels of voluntary corporate governance disclosure were minimal; however, they found that disclosure was high for mandatory items under the Egyptian Accounting Standards (EAS). In the US, the Securities Exchange Commission (SEC) mandated

compensation disclosures, first issued in 2006. The SEC conducted a comprehensive study focusing on compensation disclosures, where it found that many firms did not fully comply with the new compensation disclosure rules (Robinson et al., 2011).

Other studies have examined the levels of mandatory and voluntary disclosure. Omar and Simon (2011), for example, showed in Jordan, there was a significant increase in the level of aggregate disclosure (average 69%) compared with findings of previous studies. They found that the extent of mandatory and voluntary disclosures was 83% and 34% respectively. These findings show that the level of mandatory disclosure is high; nevertheless, non-compliance still exists.

Devalle and Rizzato (2012) examined the consolidated financial statements of the groups listed on the Italian, French, German and Spanish stock exchanges and belonging to the main indexes of the above-mentioned markets (FTSEMIB40, CAC40, DAX30, IBEX35). They found that the quality of disclosure was very low with reference to the mandatory disclosure of IAS 36 – impairment of assets. They also found that from the sample of consolidated financial statements, only 27% reported the mandatory disclosure.

Therefore, it is clear that even though regulators in many countries require a certain level of mandatory disclosure, the level of disclosure is sometimes still quite low. Even in countries where the level of mandatory disclosure is relatively high, there are many examples of non-compliance.

## RESEARCH METHOD

This study is exploratory in nature to obtain an understanding of the current disclosure practices of the corporate governance mechanisms of audit committees and internal audits. This is secondary data, collected from annual reports, especially disclosures on corporate governance, audit committees, and internal audit units. Reporting practices of audit committees, internal audit units, as well as their activities undertaken are mapped and an analysis on the compliance level of audit committees and internal audit units with OJK regulations is done. This comparison is performed using the checklist that was developed based on regulations issued by the OJK to identify the level of compliance of issuers and public companies. The results will form the basis for recommendations to the OJK for future amendments to regulations on audit committees and internal audit units.

Content analysis was performed based on the disclosure of corporate governance practices in annual reports, particularly disclosures on audit committees and internal audits. The content analysis is based on a checklist that consists of 48 items of mandatory disclosure. A score of 1 is given for each item disclosed in the annual report, so that the maximum score for each sample is 48. The checklist is prepared based on the disclosure requirements as follows:

1. Regulation No. X.K.6 regarding the Submission of Issuers or Public Companies Annual Reports, issued for the first time in 2006 and revised in 2012.

2. Regulation No. IX.I.7 regarding the Formation of Internal Audits and Guidelines on Internal Audit Charters, issued for the first time in 2008 and revised in 2012.
3. Regulation No. IX.1.5 regarding the Formation and Work Performance Guidelines of the Audit Committee, issued for the first time in 2004 and revised in 2012.

with accessible annual reports. A summary of the sample selection process is provided in Table 1.

Table 1  
*Sample selection*

Total public firms in 2013	468
Annual reports not available	(20)
Firms newly listed in 2013	(5)
Final Sample	443

Most of the checklist items (37 items) are newly required under the revised regulations published in 2012. The remaining checklist items (11 items) are contained in the previous versions of the regulations. Based on the types of disclosure, checklist items can be classified into three main categories, as follows:

1. CG disclosures in general (3 items).
2. Audit committee disclosures (23 items).
3. Internal audit disclosures (22 items).

## RESULTS AND DISCUSSION

Up to 30 September 2013, there were 468 firms listed on the Indonesian Stock Exchange (IDX). Among these, five companies were newly listed in 2013 and therefore, did not yet issued annual reports. Twenty firms were excluded from the sample, as their annual reports are not available either on their websites or that of the IDX. Following this exclusion, the final sample consisted of 443 public firms

Analysis based on checklist items, as provided in Table 2, reveals that the 2012 disclosure level of CG, audit committees, and internal audits is relatively low, 39.5% of the required disclosure. Further analysis on the types of disclosure shows that the level of internal audit disclosure, 31%, is the lowest. The low level of internal audit disclosure may be explained by the fact that the practice of internal audits is new to most public firms. The requirement for the formation of internal audits was enacted only in 2008 after the release of Regulation No. IX.I.7. Meanwhile, the requirement for the formation of audit committees was enacted earlier, in 2004, after the release of Regulation No. IX.I.5. Since the internal audit requirement is relatively new for most listed firms, the level of its disclosure is consequently still low. This finding of a relatively low level of mandatory disclosures is consistent with previous studies (such as Akhtarudin, 2005; Devalle & Rizzato, 2012).

Detailed analysis based on the year of regulation enactment shows that the level of disclosure for items under the 2012 revised versions of regulations is lower than disclosure for items that were earlier required. This indicates that corporations need time to implement the new regulations. Even though the new regulations had not yet been enforced in 2012, some new disclosure items were reported in firms' annual reports, indicating certain voluntary disclosure practices by some of the listed firms.

To further examine the compliance level of listed firms, we examine the 2013 annual reports. The results are presented

in the last column of Table 2 as well as in Figure 1. The results show that on average, there are increases in the level of disclosure, even though it is only a slight increase of 4.4% (from 39.5% in 2012 to 43.9% in 2013). Owing to the enactment of the 2012 revised regulations, which require more detailed disclosure, we expected the level of compliance to have increased, resulting in a higher percentage. The results show, however, that in 2013, when the revised regulations had already come into effect, the overall disclosure level, as well as disclosure on audit committees and internal audits, is still low.

Table 2  
*Disclosure level*

Type of Disclosure	Checklist Items			Mean (%) Disclosure	
	Regulation Before 2012	Regulation in 2012	Total Items	Annual Reports 2012	Annual Reports 2013
Overall CG	1	2	3	58.2%	60.4%
Audit Committee	4	19	23	45.2%	50.5%
Internal Audit	6	16	22	31.0%	34.7%
Total	11	37	48	39.5%	43.9%

The level of overall disclosure in 2013 is 60.4% (an increase of 2.2% compared to 2012); the audit committee disclosure level is 50.5% (an increase of 5.3%); and the level of internal audit disclosure is 34.7% (an increase of 3.7%). The increase in audit committee disclosure is the highest compared to levels of overall and internal audit disclosure. This could be due to

audit committee regulations having been enacted in earlier years, hence, most listed firms already have audit committees in accordance with prevailing regulations, whereas the lower level of internal audit disclosure might be related to this being the most recently enacted among the three regulations.

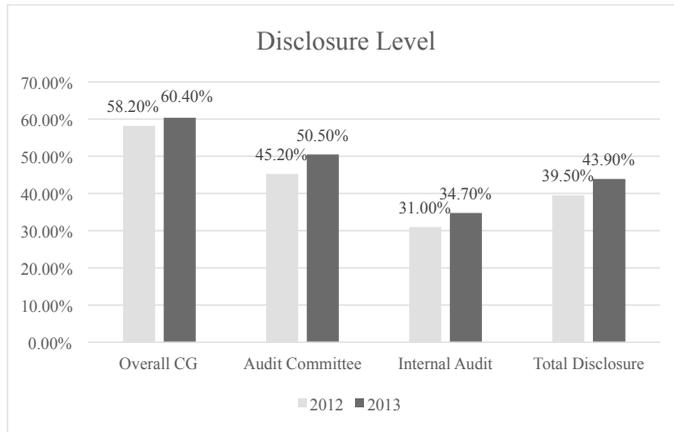


Figure 1. Disclosure level trends from 2012 to 2013

The frequency distribution of disclosure as presented in Table 3 shows that most companies (73%) have relatively low disclosure levels, i.e. less than 50%. Only 8% of the sample companies attain a disclosure level of 75% or higher. This result is consistent with the previous analysis that the overall disclosure levels of CG, audit committees, and internal audits are relatively low. These results indicate that most Indonesian public firms have not yet met the disclosure requirements of the OJK.

Further analysis of each type of disclosure is presented in Tables 4, 5 and 6. Table 4 shows that most of the sample firms (73.1% in 2012 and 73% in 2013) have disclosed the overall practice of CG in their annual report. Even though the total overall CG disclosure shows a small

increase from 58.2% to 60.4%, there is no increase in the disclosure items based on the mandatory items set forth since the regulation was first issued in 2006. This finding indicates that listed firms that are consistently maintaining their disclosure level to meet the requirements, whereas other firms that still do not fully comply with the regulations are not meeting those requirements.

Table 3  
CG disclosure distribution

Distribution	Number	Percentage
< 25%	144	33%
25% – 49%	177	40%
50% – 75%	87	20%
> 75%	35	8%
	443	100%

Table 4  
Overall CG disclosure

No	Disclosure Items	Requirement starts in	Disclosure Level	
			2012	2013
1	Annual report is uploaded to website at the same time of annual report submission to capital market authority	2012	54.2%	57.6%
2	Management report discloses the implementation of CG	2012	47.4%	50.6%
3	Disclosure items	2006	73.1%	73.0%
Mean			58.2%	60.4%

Even though it was not a requirement at the end of 2012, some firms (54.2% in 2012) had uploaded their annual report to their websites. Listed firms are typically large firms that have websites in order to communicate with various stakeholders, including investors that require financial information. Presenting annual reports on corporate websites does not incur additional costs for these large firms; therefore, it is expected that the voluntary presentation of

annual reports on corporate websites should be a common practice.

The requirement to upload annual reports to company websites was introduced in 2013. The percentage of listed firms that uploaded their annual reports to their websites in 2013 increased to 57.6%, an increase of 3.4% compared with 2012. This increase is relatively low and points to the fact that many firms are still not uploading their annual reports on their websites.

Table 5  
Audit committee disclosure

No	Disclosure Items	Requirement begins in	Disclosure Level	
			2012	2013
1	Issuer or public company has an audit committee charter	2004	35.4%	42.7%
2	Audit committee charter is available on the company's website	2012	7.9%	15.9%
3	Audit committee charter contains at least:			
	a Duties, responsibilities, and authority	2012	33.0%	37.1%
	b Composition, structure, and membership requirements	2012	16.3%	27.0%
	c Procedures	2012	10.2%	14.7%
	d Policies on meeting	2012	13.3%	18.2%
	e System on reporting activities	2012	9.9%	17.5%
	f Whistleblower process	2012	3.8%	7.5%
	g Assignment period	2012	9.5%	16.3%
4	Audit committee consists of a minimum of three members	2004	94.6%	94.6%
5	Members of audit committee c of an independent commissioner and external members	2004	90.3%	94.2%

Table 5 (continue)

6	Audit committee is chaired by an independent commissioner	2004	94.6%	95.3%
7	Disclosure of audit committee covers:			
a	Name	2012	94.8%	94.9%
b	Professional background	2012	74.7%	78.8%
c	Working experience	2012	74.7%	79.7%
d	Assignment base	2012	25.1%	33.8%
e	Educational background	2012	75.4%	81.6%
f	Assignment period	2012	32.5%	32.9%
g	Disclosure on the audit committee's independence	2012	45.1%	43.6%
h	Policies on the frequency of audit committee meetings	2012	24.6%	30.8%
i	Actual frequency of audit committee meetings	2012	73.4%	76.7%
j	Level of members' attendance at audit committee meetings in the current year	2012	71.3%	74.6%
k	Brief description of audit committee activities in the current year as outlined in the audit committee charter	2012	29.3%	53%
Mean			45.2%	50.5%

Analysis of the audit committee disclosure level details, as presented in Table 5, shows a high level of disclosure (more than 90%) for information pertaining: names and number of audit committee members; information demonstrating that the chair of the audit committee is also an independent member of the board of commissioners; and information that audit committee members are external parties. However, only a small number of firms (7.9%) disclose their audit committee charter on their corporate website.

The audit committee disclosure items show an increase in 2013 compared with 2012. Nevertheless, this increase is also relatively small. Consistent with the findings on instances of uploading annual reports to websites, only 7.9% of listed firms had uploaded their audit committee charter to their websites in 2012. Even though there

was a twofold increase in 2013 (15.9%), the compliance level is still low. Based on the compliance level in 2012, most firms did not disclose the audit committee charter on their websites because there was no requirement for it. However, after the regulation was enacted in 2013, only 15.9% of listed firms complied with the requirement to upload their audit committee charter to their websites. This low level of compliance should encourage an increase in OJK enforcement.

According to Regulation No. IX.1.5 released in 2004, public firms are required to have an audit committee and an audit committee charter. Considering that this regulation has active in force for almost 10 years, all public firms should have met this requirement. The results in Table 5, however, show that only 35.4% of firms in 2012 and 42.7% of firms in 2013 had

an audit committee charter and only about one third of them (15.9%/42.7%) uploaded their charter to websites. The whistleblower system is another item that has a very low level of disclosure as it involves significant cost and complex arrangements. Therefore, it is expected that only a small number of firms can afford it.

One of the items that has the highest increase in the level of disclosure is a

brief description of the audit committee's activities in the current year, as outlined in the audit committee charter. In 2012, the level of compliance is only 29.3%, which increased to 53% in 2013. This item is mandatory in the revised regulation. The results show that for certain items, mandatory requirements may increase the level of disclosure.

Table 6  
*Internal audit disclosure*

No	Disclosure Items	Requirement starts in	Disclosure Level	
			2012	2013
1	Internal audit charter	2006	50%	50.8%
2	Internal audit charter items:			
a	Structure of internal audit unit	2012	26%	29.8%
b	Duties and responsibilities of internal audit unit	2012	36%	38.5%
c	Authorities of internal audit unit	2012	29%	30.5%
d	Internal audit unit's code of ethics that refers to code of ethics issued by Internal Audit Association in Indonesia or code of ethics that are commonly used internationally	2012	14%	18.6%
e	Requirements for auditors assigned to internal audit unit	2012	12%	13.5%
f	Responsibilities of internal audit unit	2012	22%	19.6%
g	Policy that prohibits internal auditor from having duties, positions, and activities in the company's operations, both in the parent and subsidiary companies	2012	10%	12.1%
3	Internal audit charter is signed by CEO upon approval of board of commissioners	2006	25%	27.5%
4	Internal audit head is assigned and dismissed by CEO upon approval of board of commissioners	2006	36%	42.9%
5	Internal audit head is responsible to CEO	2006	56%	58.5%
6	Disclosure on internal audit unit covers:			
a	Name	2012	55%	61.8%
b	Professional background	2012	44%	44.4%
c	Working experience	2012	43%	46.6%
d	Assignment base	2012	19%	22.6%
e	Qualification or certification as professional internal auditor (if any)	2012	14%	18.9%
f	Structure and position of internal audit unit	2012	31%	38.0%

Table 6 (continue)

g	Duties and responsibilities of internal audit unit as outlined in the internal audit charter	2012	33%	46.2%
h	Brief description of internal audit activities in the current year	2012	40%	42.2%
i	Description of the company's internal control system and internal control audit	2006	23%	34.4%
7	Description of the company's internal control system consists of at least:			
a	Financial and operational control, as well as compliance with laws and regulations	2006	40%	38.5%
b	Review of internal control system effectiveness	2012	26%	27.5%
Mean			39.5%	43.9%

In general, the level of disclosure of each component of audit committee and internal audit disclosure shows a relative increase (see Table 5 and Table 6). Audit committee disclosure shows an increase of 5.3%, from 45.2% in 2012 to 50.5% in 2013, whereas internal audit disclosure shows an increase of 3.7%, from 31% to 34.7% in 2012 and 2013 respectively. The increase, however, is still small. It was initially expected that following the introduction of the 2012 regulations, the level of compliance would increase significantly in 2013.

The level of internal audit disclosure as presented in Table 6 is also relatively low for all disclosure items (lower than 57%). The highest disclosure levels are for: internal audit charter (50%); internal auditor name (56%); and the reporting line of the internal audit to the CEO (55%). This relatively low disclosure level might be caused by internal audit regulations that do not require much information regarding internal audit activity. It was expected that the level of internal audit disclosure would increase

after the release of the revised regulations in 2012, which contained more detailed requirements.

Details of internal audit disclosure items in 2012 and 2013, as presented in Table 6, indicate that the level of disclosure is not high for all items, which are below 62%. The highest disclosures are for the: internal audit charter (50% in 2012 and 50.8% in 2013); name of the internal auditor (55% in 2012 and 61.8% in 2013); and the internal audit head who is responsible to the CEO (56% in 2012 and 58.5% in 2013). This evidence is quite similar to evidence arising from overall disclosure and audit committee disclosure. The item with the highest increase is duties and responsibilities of the internal audit unit as outlined in the internal audit charter, which was 33% in 2012, and increased to 46.2% in 2013.

## CONCLUSION

This study had analysed the corporate governance (CG) practices of public firms in Indonesia, particularly audit committee

and internal audit practices, and how these practices meet the prevailing regulations of the Indonesian Capital Market Authority (OJK). Analysis was conducted based on secondary data obtained from annual reports, to measure the current practices of audit committees and internal audits.

Based on the content analysis of annual reports, we found that the level of CG disclosure (particularly disclosure related to audit committees and internal audits) in 2012 and 2013 was relatively low: only 39.5% in 2012 and 43.9% in 2013. The previous version of regulations lacked detailed requirements, resulting in the level of disclosure varying greatly across firms. In 2012, the OJK published revised versions of these regulations, which contained more detailed requirements. Thus, it was expected the 2013 annual reports would contain more detailed and higher levels of disclosure on firms' CG practice. However, results showed that the increase in the level of disclosure in 2013 was only 4.4% indicating that the detailed requirements in the revised regulations did not automatically increase the disclosure level. This was perhaps due to the new regulations and their concurrent enforcement not yet being in place.

Based on the analysis and findings, this study offers several recommendations. This study found the level of CG disclosure is relatively low, including disclosure of certain mandatory items and thus, regulators need to enforce their regulations in order to ensure full disclosure of CG practice by Indonesian listed firms. They need to fully comply with the regulations set by the

OJK, particularly the mandatory disclosure requirements. The annual report is one of the main information sources for investors when making investment decisions. Therefore, it should contain full disclosure of CG practices.

This study has several limitations. Only CG disclosure in annual reports was examined and not disclosures made by companies through other mediums, such as through website. In order to get a more comprehensive picture, in-depth interviews should be conducted to gather additional information on why firms disclose or do not disclose certain items. This study also did not examine the impact of disclosures on investors, creditors, and other stakeholders.

#### ACKNOWLEDGEMENT

The authors gratefully acknowledge the financial support from the DIKTI (Directorate General of Higher Education, Ministry of Research, Technology and Higher Education of the Republic of Indonesia) research grant.

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## **Investigating Task-induced Involvement Load and Vocabulary Learning from the Perspective of Metacognition**

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### **ABSTRACT**

This study attempted to delineate the relationship between the knowledge and regulation of metacognition, and to show how they interact to mediate the effects of task-induced involvement load on learning vocabulary. A total of 90 tertiary-level students completed a checklist on metacognition. Subsequently, they were assigned to complete three tasks with varying degree of involvement load and to complete certain vocabulary tests. Results showed that both the knowledge and regulation of metacognition are independent constructs, but closely and significantly correlated. The learners were sub-divided into two distinct ability groups (high vs. low) based on the knowledge-of-metacognition checklist, and two distinct ability group (high vs. low) based on the regulation-of-metacognition checklist. Overall, the learners were divided into four groups: (1) low knowledge/ low regulators; (2) low knowledge/high regulators; (3) high knowledge/low regulators; and (4) high knowledge/high regulators. Learners benefited the most by engaging in a task with the highest load of involvement. However, learners with a high level of regulation of metacognition performed well in the three tasks, which suggests a mediating role of learners' regulatory ability. Relevant implications were discussed on how to effectively apply task-induced involvement load into learning new words from the perspective of metacognition.

*Keywords:* Metacognition, knowledge, regulation, involvement, word learning

### **ARTICLE INFO**

*Article history:*

Received: 25 August 2016

Accepted: 08 September 2017

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### **INTRODUCTION**

It is widely acknowledged that self-regulated learners often exhibit a high sense of self-efficacy and are cognizant of their strengths and weaknesses, and perform better in academic learning. Self-regulated learning

(SRL), oriented by metacognition, refers to the extent to which learners are engaged in the process of learning motivationally. SRL is determined by employing the parameters associated with personal process, environmental events, and behavioral attributes (Zimmerman & Schunk, 2001). The process of SRL includes: to identify a topic, set reasonable goals to examine the topic, adopt appropriate strategies to be familiar with the topic, and evaluate and modify these strategies as a deeper understanding of subject matter is developed in the learners. Therefore, empowering students to become self-regulated learners is essential, because SRL entails taking control of and evaluating one's own learning and behavior (Ziegler, Stoeger, & Grassinger, 2011). Self-regulated learning is determined by personal processes or environmental and behavioral events in a reciprocal fashion.

The present study concerns the metacognitive aspect of SRL. Metacognition, according to Flavell (1979), refers to an appreciation of the knowledge of an individual's own cognitive system, together with a regulation of relevant knowledge and skills that they require. Metacognition includes two components: knowledge of metacognition and regulation of metacognition. According to Flavell (1979), the knowledge of metacognition includes three types of awareness: declarative knowledge (the factual knowledge about what a learner is and what factors influencing his/her academic success), procedural knowledge (knowledge of completing a task), and conditional knowledge (knowledge

about discerning a logic of when to use a strategy or skill to coordinate a process of learning behaviors). The regulation of metacognition entails three skills: planning (an appropriate formulation of detailed plans and strategies and an apt allocation of resources to achieve optimum results of a task), monitoring (contemplating on one's own awareness of task comprehension, execution and performance), and evaluating (appraising the efficiency at which the task was performed). The knowledge and regulation of metacognition might interact with each other and mediate the effects of task-induced involvement load on word learning.

The Involvement Load Hypothesis, initiated by Laufer and Hulstijn (2001), suggests that effective learning of new words is contingent upon the amount of mental effort or involvement while conducting some composite cognitive activities involved in learning these words. Task-induced involvement is regarded as a motivational-cognitive construct, which consists of three dimensions: *need*, *search*, and *evaluation*. According to Laufer and Hulstijn (2001), *need*, referring to whether the prior knowledge of new words is a necessity to complete a task, is the motivational, non-cognitive dimension of the involvement. *Need* is considered moderate if imposed by the task, and strong if by the learner. *Search* and *evaluation* are categorized as the cognitive dimensions of involvement; their prime focus is on the information processing involved in the learning and remembering of a word form

and meaning (e.g., noticing new words and paying attention to them). *Search* is regarded as an attempt that individuals make to determine the meaning of unknown words encountered during a task through a dictionary or by consulting a teacher. *Search* is absent when such an effort is not required, for example, when a text is accompanied by marginal glosses for unknown words. *Evaluation*, while making a decision, refers to the comparison of a new word with already known words, or when deducing a particular meaning of the word among other meanings, or assessing its suitability in a given context. *Evaluation* is moderate when a task requires a learner to recognize differences between words provided in a given context, such as a fill-in-the-blank task, but strong when the task requires a learner to make decisions about the meaning of unknown words and combining them with known words in an original context, such as writing a sentence or composition. A task with a high level of need, search, or evaluation has a higher level of involvement load, and when the involvement load is higher, the task is deemed to be more beneficial for word learning than those with a lower involvement load (Laufer & Hulstijn, 2001; Teng, 2015; Teng & Zhang, 2015).

However, it is still unknown what are the causes of the differences in learners' word learning under the tasks of varying involvement loads. A possible explanation can be deduced from the relationship between knowledge and regulation of metacognition. For example, Schraw (1994)

showed that learners with a higher level of knowledge of metacognition performed better than their counterparts with a lower level of knowledge of metacognition. However, the knowledge of metacognition was related to the regulation of cognition only among the high monitors. Overall, these two aspects of metacognition interact with each other to explain variances in the students' learning performance, as well as in the susceptibility to comply with the embedded information in a task. Metacognition is considered essential for the acquisition of knowledge and the appropriate allocation of the cognitive resources and the effective provision of information about its status, deficits, and the current needs of knowledge for a cognitive system (Carvalho & Yuzawa, 2001). Therefore, there is a need to examine how the knowledge and regulation of metacognition interact and mediate the role of involvement load on word learning (Teng, 2017).

#### **RATIONALE FOR THE PRESENT STUDY**

Rationale for the present study begins first with the involvement load in a task and self-regulated learning appearing to be two related areas (Fox & Riconscente, 2008). For example, the task-induced involvement load attempts to measure word learning, which is based on student-centered learning. Second, previous studies have shown that knowledge and regulation of metacognition conjointly played a significant role in explaining learners' performance (Teng, 2016), including word learning and confidence

judgment (Teng, 2017). Finally, as there is a close link between metacognition and SRL, and considering that learning behavior is a product of self-generated and external sources of influence (Bernacki, Nokes-Malach, & Aleven, 2015), it is assumed that a general metacognitive ability mediates the effects of the task-induced involvement load on word learning.

Two main objectives were addressed in the present study. The first objective was to explore the relationship between the knowledge and regulation of metacognition, which is of great significance in delineating the functions of metacognition and in exploring how it mediates the individuals' cognitive system. The second objective was to assess how these two constructs of metacognition interact and mediate the effects of a task-induced involvement load on the individuals' word learning.

Three hypotheses were tested: First, a high degree of involvement load would lead the learners to perform better in the word learning. Second, participants with a higher level of regulation of metacognition would perform better than those with a lower one. Furthermore, low knowledge/low regulators and high knowledge/low regulators would be more affected than low knowledge/high regulators and high knowledge/high regulators.

## METHOD

### Research Design

A  $2 \times 2 \times 3$  (Knowledge of metacognition: high versus low  $\times$  Regulation of metacognition: high versus low  $\times$  Task-

induced Involvement: strong, moderate, and low load) factorial design was employed in the present study; and the data were subjected to analysis of variance (ANOVA). Metacognition was varied as a between-subjects factor, and task-induced involvement was varied as a within-participants factor.

### Participants

Participants were 90 undergraduate students (20 males and 70 females, between 18 and 20 years old), enrolled in three classes of first-year business English major from a university in China. They were English as a Foreign Language (EFL) students and they had been learning English for six years.

The participants needed to have an adequate level of word knowledge required for reading texts in English. Hence, prior to the commencement of the experiment, the students were tested for their overall receptive vocabulary size through a Vocabulary Levels Test (VLT) (Schmitt, Schmitt, & Clapham, 2001). The participants were expected to have a 3,000-level word knowledge for basic reading and comprehension (Hu & Nation, 2000). All participants met this requirement, as they responded correctly to at least 27 out of 30 items on the test (the cutoff point was 26 out of 30).

### Reading Materials and Task Types

The reading materials were three texts, and eight of the target words were selected from each text. The target words were of 9-11 letters. The three tasks differed

from one another in terms of the degree of involvement load. Task 1 included reading a text with marginal glosses (Index 1, lowest degree of involvement load). Task 2 required filling in blanks using a given word list which included the target words, some difficult words, and some more frequent words that the participants may already know (Index 2, moderate degree of involvement load). Task 3 required the participants to write a composition with the given words based on reading a text with marginal glosses (Index 3, highest involvement load).

Each task included the same three texts. The text in Task 1 was designed to include glosses for the target words in the margins. The text in Task 2 was designed in a way that the eight target words were replaced by equally-sized fill-in-the-blank spaces. These blanks were required to be filled from a word list following the text. The target words, along with their parts of speech (noun, verb, adjective, adverb) and a brief definition were provided in the word list. The text in Task 3 was designed to include marginal glosses as in Task 1 and the same word list as in Task 2.

## Measures

**Metacognitive assessment.** All participants completed the Metacognitive Awareness Inventory (MAI), which was developed by Schraw and Dennisson (1994). The MAI is a useful tool in assessing metacognitive knowledge and regulation. It includes two subscales. The first subscale was adopted to assess the learners' metacognitive knowledge. The second subscale was for

measuring their perceived metacognitive regulation. Both subscales have been shown to be reliable (Händel, Artelt, & Weinert, 2013). The knowledge of metacognition subscale contained 17 items, which mainly measures the learners' declarative, procedural, and conditional knowledge. Cronbach's Alpha for this subscale was 0.75. The regulation of metacognition subscale included 35 items, measuring the participants' awareness of planning, monitoring, evaluating, information management, and debugging strategies. For this scale, Cronbach's Alpha was 0.85.

The scoring system for both subscales was a five-point Likert-type scale ranging from *I totally disagree* (0) to *I totally agree* (4). Following this, the participants were required to evaluate whether each statement in the MAI was applicable to their learning experiences. The sum of all the scores of the ratings for the 17 knowledge items and 35 regulation items indicated the level of metacognition. The possible maximum scores for the knowledge and the regulation of metacognition were 68 and 140 points, respectively.

## Measure in vocabulary development.

The Vocabulary Knowledge Scale (VKS) developed by Wesche and Paribakht (1996) was adapted in the present study to measure participants' word leaning. Four weeks before the study, VKS was administered to test the prior knowledge of the target words among the participants. The learners were found to have no prior knowledge of the target words. It was presumed that after

a four-week break, the learners would not retain the target words into memory. The participants were tested for their command over the target words through the same VKS test.

In terms of the scoring system, a zero point was given if a learner reported that he or she had never seen the target words. A score of one was given if a learner indicated that he or she had seen this word before but did not know the meaning. A score of two was given when a learner provided an acceptable English synonym or a Chinese translation. As there were 24 items in each task, the possible maximum score for each task was 48 points.

The scoring for all the tests was done by three experienced raters who were not teaching the participants. First, two raters were invited independently to score the measures described above. A complete inter-rater agreement was found between MAI and VLT; while in VKS 60 discrepancies out of 2160 responses was found. The inter-agreement rate was 97%. Where there was disagreement between the first two raters, a third rater was then called upon and the final marking was made by majority opinion.

## Procedure

The entire study lasted for nine weeks, with two hours per week. The participants completed the pre-test in the first week. No testing or teaching occurred during weeks 2-5 to allow the participants time to reduce their memory of the target words. Then the participants undertook the reading treatment for weeks 6-8. To eliminate the effects of individual differences, the study used a within-subject design, in which all students were exposed to all the texts and target words, and worked on the three tasks at the end of the eighth week. In the ninth week, the participants took a post-test, which tested their word learning.

## RESULTS

### Metacognitive Assessment and Analysis

The learners were divided into two distinct ability groups based on the responses for the knowledge-of-metacognition checklist. The learners were also assigned into two groups according to their scores on the regulation-of-metacognition checklist. The details are shown in Table 1.

Table 1  
*Scores of knowledge and regulation of metacognition and related groups*

Group	N	Low load		Moderate load		Strong load	
		M	SD	M	SD	M	SD
LK	39	31.61	9.35	34.82	8.89	37.93	9.12
HK	51	35.45	9.12	38.16	8.59	41.23	8.57
LR	39	33.36	4.61	37.13	6.12	41.25	5.78
HR	51	44.85	3.15	45.15	2.59	46.51	1.97
Total	90	36.30	14.13	38.81	11.3	41.73	10.12

*Note.* LK=Low Knowledge HK=High Knowledge LR=Low Regulation HR=High Regulation

As described in Table 2, the average score for the knowledge-of-metacognition group was 33.21(SD = 5.32). There were 51 participants who scored above the mean score and were included in the high knowledge-of-metacognition group (M = 36.82, SD = 3.81), and 39 participants who scored below the mean score and were placed in the low knowledge-of-metacognition group (M = 27.32, SD = 2.97). Regarding the mean score, a significant difference was found between the high knowledge-of-metacognition-group and the low knowledge-of-metacognition group ( $t(81) = 11.52, p < .001$ ).

The mean score for the regulation-of-metacognition group was 50.21 (SD = 6.12). Of the participants, 51 were included in the high-regulation group (M = 56.85, SD = 4.81), and 39 in the low-regulation group (M = 44.32, SD = 4.13). The participants in the high-regulation group scored significantly higher than those in the low-regulation group ( $t(81) = 11.89, p < .001$ ).

Following Carvalho and Yuzawa (2001), the present study combined the knowledge-of-metacognition scores with the regulation-of-metacognition scores and divided their participants into four groups: low knowledge/low regulators (LK/LR), low knowledge/high regulators (LK/HR), high knowledge/low regulators (HK/LR), and high knowledge/high regulators (HK/HR). The cell sizes were as follows: There were 17 participants for the LK/LR group, 22 participants for the LK/HR group, 23 participants for HK/LR group, and 28 participants for the HK/HR group.

### Relationships between the Knowledge and Regulation of Metacognition

Table 2 summarizes the results of word learning. The means and standard deviations for the word learning are presented according to the groups and the involvement load in each task.

Table 2  
*General effects of involvement load on word learning*

Group	N	M	SD	Group	N	M	SD
KM	90	33.21	5.32	RM	90	50.21	6.12
HKCG	51	36.81	3.81	HRG	51	56.83	4.81
LKCG	39	27.32	2.97	LRG	39	44.32	4.13

*Note.* KM=Knowledge of metacognition RM=Regulation of metacognition  
HKCG=High knowledge-of-metacognition group  
LKCG=Low knowledge-of-metacognition group  
HRG=High-regulation group  
LRG=low-regulation group

As shown in Table 2, the high-knowledge group participants seemed to outperform the low-knowledge group participants in terms of word learning. In a similar vein, the participants with a higher level of regulation of metacognition seemed to outperform those with the lower level of regulation of metacognition.

ANOVA showed that word learning is significantly affected by the knowledge of metacognition ( $F(2, 89) = 10.04, p < .05$ ). It is evident that the high-knowledge participants were significantly better in learning target words than the low-knowledge participants. Likewise, the effect of the regulation of metacognition was also significant ( $F(2, 22) = 6.15, p < .001$ ) on word learning. This affirms that the learners in the high-regulation group outperformed their counterparts in the low-regulation group during word learning.

However, the results seem to be influenced by the Knowledge  $\times$  Regulation of Metacognition interaction. Simple effect analyses indicated that regulation of metacognition significantly affected low-knowledge participants' word learning ( $F(2, 23) = 7.15, P < .001$ ). Similarly, regulation of metacognition also had a significant effect on high-knowledge participants' word learning ( $F(2, 73) = 12.31, P < .05$ ). However, knowledge of metacognition did not significantly affect low regulators' word learning ( $F(2, 10) = 21.89, p = .58$ ). In a similar vein, knowledge of metacognition did not show a significant effect on the high regulators' word learning ( $F(2, 10) = 20.12, p = .48$ ). High performance in regulation of metacognition seemed to compensate for deficits in the knowledge of metacognition (Table 3).

Table 3  
General effects of involvement load on word learning (different ability groups)

Group	N	Low load		Moderate load		Strong load		Total	
		M	SD	M	SD	M	SD	M	SD
LK/LR	17	32.11	12.15	36.81	11.12	41.52	9.12	36.81	5.79
LK/HR	22	44.22	12.79	45.13	11.43	46.31	10.13	45.22	5.81
HK/LR	23	32.31	13.15	37.13	12.89	42.21	9.05	37.18	6.12
HK/HR	28	44.57	12.10	45.81	11.05	47.51	8.79	45.96	4.13
Total	90	38.30	10.58	41.22	11.12	44.36	9.13	41.37	11.59

**Effects of Task-induced Involvement Load on word learning**

ANOVA revealed that the task-induced involvement load has a significant effect on the word learning performance ( $F(2, 83) = 8.67, p < .001$ ). This effect was depicted by the

Regulation of Metacognition  $\times$  Involvement Loads interaction ( $F(2, 146) = 19.75, p = .32$ ). Simple effects and post hoc analyses indicated that task-induced involvement load greatly influenced low regulators ( $F(2, 83) = 9.28, p < .001$ ). However,

no significant effect of involvement load was detected for the high regulators ( $F(2, 146) = 3.15, p = .06$ ). It is evident that low regulators were more likely to significantly increase their word learning efficiency when sufficed with strong involvement load and significantly decrease it when sufficed with low involvement load. However, this variance was not significant among the high regulators. Furthermore, the Knowledge of Metacognition  $\times$  Involvement Load interaction was not significant. Overall, differences in the effects of task-induced involvement loads emerged as a function of regulation of metacognition, but not knowledge of metacognition.

## DISCUSSION AND CONCLUSION

One of the objectives in this study was to measure the relationship between knowledge of metacognition and regulation of metacognition. The findings revealed that both components of metacognition are independent constructs but closely and significantly correlated; this outcome concords with earlier studies (Brown & Kinshuk, 2016; Sperling, Howard, Miller, & Murphy, 2002). The low level of metacognition observed overall in the present study also provided evidence for a significant variance in many constituent aspects among the participants. In line with earlier studies (Carvalho & Yuzawa, 2001; Trainin & Swanson, 2005), this outcome results in a classification of the participants according to their high or low performance in the knowledge and regulation of metacognition.

The findings suggested that learners with higher levels of knowledge of metacognition and effective regulation of that knowledge performed better in word learning. This corroborates with earlier findings that metacognition is a strong predictor of high-quality learning and effective problem-solving (Blankson & Blair, 2016). One possible explanation is that learners with a high sense of metacognition are more likely to manipulate their cognitive skills, and to locate and construct new metacognitive strategies or skills to correct their weakness. Furthermore, students with a wide range of metacognitive skills seem to be able to utilize the appropriate strategies for their learning or modify the existing learning strategies and skills according to their awareness of effectiveness.

An unexpected finding that was not found in the previous studies is that high regulatory competence can compensate for deficits in knowledge of metacognition. However, high levels of knowledge of metacognition does not seem to compensate for low regulatory skills. This is apparently observable in similar word learning results between the LK/HR and HK/HR groups. However, the absence of high regulatory ability has negative effects on word learning results in the LK/LR and HK/LR group. This supports the claim that high regulatory ability, rather than knowledge of metacognition, yields more effective word learning. This is in line with Schraw (1994), but contradicts Carvalho and Yuzawa's (2001) findings that knowledge of metacognition was a strong predictor of

learning performance, as the regulation of metacognition. Particular attention needs to be paid in developing learners' regulatory ability in future teaching. Learners with high-regulatory skills set reasonable learning goals, plan accordingly based on their appropriate selection of the strategies and correct allocation of resources. They are more likely to figure out if the selected strategies are working well. They continue when the strategies work well, and make adjustments until the strategies are in tune with their learning goals. Following this, they monitor their learning performance, and evaluate the final product of their learning. Learners with low regulatory skills, in contrast, may not have explicit learning goals, and fail to effectively plan, monitor, and evaluate their learning, and deploy appropriate strategies to the situation (Barbara, Nadia, Chiara, & Cesare, 2014; Cornoldi, Carretti, Drusi, & Tencati, 2015).

In addition, the knowledge and regulation of metacognition mediate the effects of task-induced involvement load on word learning, as suggested by Teng (2017). The findings reveal that word learning is significantly affected by task-induced involvement load. This outcome is also an extension of Keating (2008), who showed that word learning is highest in the sentence writing task (strong load), lower in the reading plus fill-in task (moderate load), and lowest in the reading comprehension task (low load). The results of the present study indicate that the component of a task crucial to word learning is *evaluation*. This suggests that future teaching should

include word-focused tasks that require high degrees of *evaluation*. Therefore, it is suggested that, for self-regulated learning to be effective, students need to be able to assess and evaluate their own performance on a learning task.

A different but interesting finding in the present study is that low regulators are especially susceptible to task-induced involvement load. However, high regulators were not significantly affected by the effect of task-induced involvement load. These findings suggest that a consideration of students' regulatory level prior to assigning tasks is important. One possible explanation is that learners with high level of regulatory skills are more efficient in avoiding a distraction, perceiving responsibility for learning, and in drawing up goals, conducting self-reflection, and controlling time. This may help them attain success in word learning regardless of the varying degrees of involvement load in the tasks. As regulation operates through cognitive, motivational, and metacognitive components (Hong, Peng, & Rowell, 2009), this indicates that high regulators possess a higher level of cognitive and a metacognitive awareness, and motivational domain. As the tasks were completed independently, the motivational domain of high regulators may invoke them to value the task and have high self-efficacy for the task. This might strengthen their perseverance in dealing with difficulties, thus compensate for the deficits of low motivational and cognitive levels of the tasks.

The analytical results also suggest that the effects of task-induced involvement load on word learning are mediated by the regulation and not by the knowledge of metacognition. The pattern found for the intensity of the task-induced involvement load from the most to the least affected group was in order of LK/LR > HK/LR > LK/HR > HK/HR, similar to that found by Carvalho and Yuzawa (2001). This could be explained that the knowledge of metacognition relates to the declarative knowledge, which affects learners' knowledge about themselves, tasks, and strategies but not how strategies are appropriately selected, and resources are correctly allocated. In contrast, the task-induced involvement load affects word learning as a function of the regulatory skills of learners, perhaps because a higher level of regulation of metacognition is important while selecting the task information that may help them attain better word learning success, as discussed above.

The limitations of this study include the methodological difficulties of assessing metacognition, which was based on a self-report questionnaire. The self-report questionnaire might not have been sensitive enough to accurately measure the participants' metacognition because the output was based only on the students' recall of their academic routine. For further research, it is essential to adopt multi-method designs, particularly combining multiple concurrent tools to obtain a full and accurate portrayal of students' metacognition.

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## **Investigating the Educational Offering in a Quasi-Autonomous Thai Municipality**

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### **ABSTRACT**

Through decentralization, via national legislation since 1999, Thai municipal schools have become responsible for all areas of education, including educational facilities and infrastructure, health and lunch programs, pedagogy and teacher training, and curriculum and educational programme development. However, little research has been conducted on this process or on the results of the devolved municipal educational system. This article describes a survey of parental attitudes towards multiple aspects of the educational offering of the department of education in one of the largest municipalities in Northeast Thailand, Khon Kaen Municipality (KKM). A large-scale mixed-methodology survey investigated parents' reasons for placing their children in KKM schools and their perception of the transport of students to and from schools. It also investigated the perceived factors of quality of education. The survey found that proximity, no tuition fees, and a good environment were the principal reasons, with cost and safety being issues for transporting students. Principal Component Analysis revealed the pedagogy, education program structure, school lunch program, and educational facilities to be important to parents, with a comparison showing differences by school, some critical. The article suggests KKM institute a citizens' dialogue process for educational strategic management to implement the recommendations.

*Keywords:* Education, decentralisation, local government, municipalities, Northeast Thailand

### **ARTICLE INFO**

*Article history:*

Received: 30 August 2016

Accepted: 27 July 2017

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### **INTRODUCTION**

#### **Background**

The quality of education in Thailand is generally recognised as being at a crisis point (Maxwell & Peerasit, 2015a, 2015b, 2016).

One of the main problems is statistically significant differences between the quality of education in Bangkok and the rest of the country (Draper, 2011, 2012, 2014). These may be attributable to differences in IQ due to malnutrition, including low salt iodization (Maxwell & Peerasit, 2015a), a lack of resources, and poor teacher training (Draper, 2011, 2014), as well as problems with not teaching in or using the mother tongue (Draper, 2011, 2014). One way forward may be decentralization in order to bring about higher levels of responsiveness and efficiency. Decentralized models of educational administration, such as in Finland, which outperforms most countries in international testing despite a recent decline (Taylor, 2013), suggest educational reforms can best be implemented by dismantling central steering (Rinne, Kivirauma, & Simola, 2002) and giving local administrations and parents more choice, as well as local government units (LGUs) control over their own budgets via fiscal decentralization and, therefore, incentives for cutting costs (West & Ylönen, 2010).

In fact, since 1999, municipalities in Thailand have been increasingly important for children's education, as part of a trend at the time towards decentralization that has included other Asia-Pacific countries. Many Thai municipalities are now devolved municipalities under the main autonomy act which followed the 1997 *Constitution of the Kingdom of Thailand*, i.e., the *Act Determining Plan and Steps of Decentralization* (Ministry of the Interior,

1999). Prior to the Act, local government was more centralized and was chiefly governed by the 1953 Municipality Act, the 1955 and 1997 Provincial Administrative Organization Acts, and the 1994 Tambon [sub-district] Administrative Organization Act (Wongpreedee & Mahakanjana, 2011, p. 57). The increase in decentralization and the rise in pluralism and multiculturalism at the level of municipalities is linked to the 1997 *Constitution of the Kingdom of Thailand* and the period immediately before and following it (Connors, 2005, pp. 531-538), as well as to underlying trends including increased popularity of ethnic music, more Thai university programs studying ethnic identities, and the rise of the parliamentary system (Jory, 2000). Nonetheless, the route to this decentralization and its implementation has been problematic, with the basic paradox being that central government wishes to control the decentralization process (Nelson, 2002).

Together with the *National Education Act* of 1999 (revised in 2002; Office of the National Education Commission, 1999), the *Decentralization Plan and Procedures Act* has led to municipalities being partially responsible for their own development, including school-based management (SBM, see Gamage & Sooksomchitra, 2004) under their own education departments. Municipal schools have therefore become responsible for all areas of education, including educational facilities and infrastructure, health and lunch programs, pedagogy and teacher training, and curriculum and educational programme development.

Decentralised schools also exist under other LGUs, such as districts and sub-districts (Tambon Administrative Organizations or TAOs; see Krueathep, 2004 for a list of TAO responsibilities), though the Ministry of Education (MoE) has historically used delaying tactics to prevent this on the basis that districts and TAOs are not ready for this responsibility (National Economic and Social Development Board & Thammasat University, 2009), a position attributable to a natural inclination not to lose access to budgets and associated power. In fact, TAOs only administer pre-schools, though they do draw on their own resources to supplement MoE primary and secondary schools in their catchment areas, such as by buying computers and establishing uniform requirements, as well as financing school trips (Kamnuansilpa, Wongthanavas, Ando, & Ness, 2013, p.54). Ultimately, one of the reasons for decentralization in the case of Thailand actually appears to be not the decentralization of power but the maintenance of central effectiveness, as decentralization is not typically associated with popular participation (Dufhues, Theesfeld, Buchenrieder, & Mungkung, 2011). The interactions between the Ministry of the Interior and MoE also create complex interdependencies, especially at the secondary education level, for example the role of Education Service Areas (UNESCO, 2008).

Decentralization has meant Khon Kaen Province municipal schools serving a diverse community of Thai Lao, Thai Chinese, Central Thai, and other minority

children, have been able to engage in innovative practices such as the introduction of 'ethnic' uniforms (Draper, 2015a) and curriculums to teach the mother tongue as a subject (Draper, 2015b), though the latter is not without serious challenges (Winfield, 2016). In addition, in-service training of administrators and educators is problematic (Gamage & Sooksomchitra, 2004). Further, education administration continues to be highly politicised. In May 2016, the military government, under the National Council for Peace and Order, dissolved decentralised ESAs nationwide and replaced them with centralised Provincial Education Committees and Sub-committees, supervised by Provincial Administrative Organisations (PAOs) and chaired by unelected provincial governors, to manage primary and secondary schools. Despite these changes, quasi-autonomous municipal schools at present still operate under provincial offices of the Ministry of the Interior, the second most politically influential bureaucracy after the military (Kamnuansilpa, 2013, p. 121), while the MoE still oversees primary and secondary education through the Office of the Basic Education Commission and its core instrument, the 2008 *Basic Education Core Curriculum* (OBEC, 2008). Thus, they have not yet been affected by the NCPO re-centralisation of power, though the situation is still fluid.

Whatever the administrative structure, to what extent municipal schools provide a quality education from the perspective of key stakeholders such as parents and students is a fundamental issue, hence

Khon Kaen Municipality's (KKM) need for a survey. KKM is noteworthy in that it is situated in one of the most densely populated provinces of Northeast Thailand and is one of the most important municipalities in a region of 20 million people. It has also been recognised by the King Prajadhipok Institute for the quality of its administrative practices (Chantranusorn, Jutawiriya, & Mee-Udorn, 2014, p. 84) and has also taken innovative steps to implement mother-tongue language teaching (Winfield, 2016). It is interested in continuous improvement of its schools to benefit its citizens and maintain its reputation for two reasons; that KKM schools are seen as better than rural schools and can compete with urban MoE schools (Kamnuansilpa, Wongthanavas, Ando, & Ness, 2013, p. 53).

### Contextual Framework

The conceptual framework for the study was obtained in consultation with Khon Kaen Municipality as well as from a review of the literature and from the evaluators' own specialist knowledge. In particular, in terms of the general context of the study, the reasons for parents to send children to the KKM schools were deemed important as they exist in a state of competition with Ministry of Education schools (Kamnuansilpa, Wongthanavas, Ando, & Ness, 2013, p. 53), as was method of transport to school because of the cost (Nicaise, Tonguthai, & Fripont, 2000, pp. 23-24) and high injury and death rate on Thai roads (WHO,

2015). Focusing now on the factors in the educational process, the teaching of the core skills of Mathematics, Thai, Science, and English are of concern in Thailand (Wareerat, Rujroad, Skonchai, Wanintorn, & Sureeporn, 2016; Warotamasikkhadit & Person, 2011; Yuenyong & Narjaikaew, 2009; Noom-Ura, 2013), as are teaching and learning support materials such as textbooks and readers (Suaysuwan & Kapitzke, 2005; Lounkaew, 2013), teaching methods (Tongpoon-Patanasorn, 2011), teacher qualifications (Siribanpitak, 2011), school lunch and milk programs (Kongnoo, Loysongkroa, Chotivichien, Viriyautsahakul, & Saiwongse, 2014; Kanemasu, 2007, pp. 22-25), health promotion programs (Erawan, 2015), cost of uniforms (Nicaise, Tonguthai, & Fripont, 2000, pp. 23-24), class sizes (Noom-Ura, 2013, p.142), and study hours (*Schools*, 2015). To sum up, as some of the factors came from consultation with KKM, the result was a hybrid evaluation model in that it was contextualised and partially goals-based (see Patton, 2008), being informed by some high-priority goals; nonetheless, it did not programmatically analyse KKM educational goals. Instead, the reliance on the literature and the evaluators' own knowledge meant it was a relatively goal-free evaluation (see Stufflebeam & Coryn, 2014, pp. 347-348 for a discussion) of everyday perceived school service quality. The main approach therefore involved a survey of parents.

## **MATERIALS AND METHOD**

### **Objectives and Research Questions**

The objectives of the study were, firstly, to evaluate aspects of the context for parents and guardians to send their children to Khon Kaen Municipality (KKM) schools, namely parental reasons for sending their children to the schools and the transport experience of Thai students at the schools. Secondly, the study aimed to investigate parental perception of the factors of quality of education within Khon Kaen Municipality (KKM) schools. The study also aimed to provide recommendations for KKM regarding how to improve the educational offering. The study had two main research questions:

- (1) What is the context for the educational experience in KKM schools in terms of a) parents' reasons for placing their children in KKM schools and b) parents' perception of the transport of students to and from schools?
- (2) What are the perceived factors of quality of education provided by the KKM schools evaluated?

This study was implemented through large-scale surveying of pupils' parents.

### **Location of Study**

Khon Kaen Municipality is a local administrative organization under the Department of Local Administration of the Thai Ministry of the Interior and is located in Northeast Thailand at the centre of Khon Kaen Province. KKM is responsible for

managing education for children in the Municipality. The municipality was created by a Royal Decree effective from August 20<sup>th</sup>, 1935, and in 1995, the Municipality received another Royal Decree to formally establish KKM.

Presently, KKM is responsible for a catchment area of 46 square kilometres comprising 11 schools and nine early childhood development centres. It also has nine Pre-study Children Development Centres. There are in total approximately 600 employees, consisting of education officials, municipality school teachers, permanent employees, and contracted employees. There are in total approximately 11,200 students, inclusive of children in early childhood centres. To operate the education management, funding comes directly from the Department of Local Administration at the Ministry of the Interior, and KKM manages activities such as salaries, medical expenses, the construction of school buildings, educational materials, etc.

KKM manages education from basic study at pre-school through high school and provides education in various forms with less of a focus on teaching and learning in the classroom and more of a focus on the importance of individual differences in learning, the integration of learning, various learning forms outside the classroom, and support for the local community to take part in the development of teaching and learning. KKM gives precedence to the conservation of local culture, which has a substantial presence in the curriculum, e.g., the end of

the Buddhist Lent festival, the celebration of Sinsai, a famous epic literary work of Northeast Thailand (see Brereton, 2012); and responsibilities under the Isan Culture Maintenance and Revitalization Programme to introduce the Thai Lao language and culture as a subject (Winfield, 2016).

### The Survey

A survey method was applied to assess the quality of education of all 11 municipal schools in KKM from the perspective of parents or guardians of the pupils. The survey team developed and reviewed the questionnaire with the schools' principals to check for clarifications and sensitivity of the wording during the month of December 2015. After that, a pre-test of the questionnaire was carried out with a small group of purposively selected parents of students in schools outside of KKM. Upon the completion of the pilot, the survey team made minor adjustments

to the questionnaires concerning the logical order and the rephrasing or rewording of questions.

A total of 10,363 questionnaires, divided into two sections and with a total of 38 questions, were handed out to all pupils who were attending school on either January 4 or January 5, 2016. They were instructed to bring the questionnaire to their parents or guardians for them to respond and then return the completed questionnaire their teachers by January 11, 2016. On January 12 and 13, the survey team collected the returned questionnaires from all schools. Table 1 shows that out of the total of 10,363 students from all schools, 7,436 pupils returned the completed questionnaires, yielding a return rate of 71.8%. This is high considering the fact that parents with two or more children in municipal schools would probably have returned just one survey. Between schools, the rates range from 87.8% to 51.1%.

Table 1  
*Number of students by municipal school in KKM and the questionnaire return rate*

Name of school	Number of students*	No. of returned questionnaires	Return rate
Suansanuk	3095	2001	64.7
Watklang	2730	2249	82.4
Khomnongkoo	370	273	73.8
Bannonthun	472	340	72.0
Bannongyai	745	576	77.3
Nonnongwat	184	94	51.1
Bannonchai	650	491	75.5
Bansamlam	912	478	52.4
Bannongwang	200	140	70.0
Bantoom	433	380	87.8
Bansrithan	572	414	72.4
Total	10363	7436	71.8

All returned questionnaires were brought to the Social Survey Center, located at the College of Local Administration, for a completion and consistency check before proceeding to the next step of data entry. Since all questions were pre-coded, the required step of data entry could follow immediately. IBM's SPSS was employed for data entry and analysis, which began with a frequency count for all possible responses to check for anomalous or incorrect coding. Both descriptive and inferential statistics were employed in this survey. Percentages were used to describe the demographic and socio-economic characteristics of sampling and the general description of the perceived quality of education in the municipal schools in the opinion of the respondents. The inferential statistics used in this survey were the Chi-square test and Factor Analysis. For open-ended questions, content analysis and coding matrices were employed.

## RESULTS

### Description of Respondents

To provide a context for the main findings, this section begins with a brief description of the respondents in this survey. First, it is noteworthy that schools under the jurisdiction of the local government do not only serve the residents of KKM, as about 40% of the pupils come from areas outside KKM. Municipal schools are seen as being of higher quality than rural schools, though lower than that of MoE urban schools. Therefore, prior to their enrolment in a school, these pupils either physically

moved or they registered in a household in the municipal area with a person who was related to them in order to be eligible. In fact, a five-country study that included KKM which was conducted in 2000 found that enrolment in Khon Kaen primary and secondary schools was four-to-five times higher than it should have been, based on the city's demographics (Chanawongse, Kamnuansilpa, & Wongthanasu, 2001), causing a financial burden for KKM. This enrolling of children in urban areas is a well-known phenomenon in Thailand (Kamnuansilpa, Wongthanasu, Ando, & Ness, 2013, pp. 51-52), one which Ness (2012), citing Hirshman (1970), has described as an 'exit strategy' for the parents. As a result, children leaving a rural school and entering an urban one effectively means parents and guardians are less likely to pressure the government for better quality schools. Unfortunately, those parents left with children in rural schools may in fact be those least well prepared to lobby for improvement as they would be the ones with the worst financial resources, education, and status.

About two thirds of the respondents in this survey were female. This is understandable as women, particularly mothers, are the primary managers of family affairs in Thailand and nurture the wellbeing of their children. In terms of age, about half of the respondents were between the ages of 31 and 40 years. Young respondents, aged less than age 30, represented only one-tenth of the group, meaning that nearly 40% of the respondents were older than 40 years.

Regarding marital status and stability, as indicated in Table 3, about 72% of the respondents were married and still living with their spouses. Family disunion by separation, divorce or death of the spouse was indicated in nearly 25% of the sample. A small percentage of the sample consisted of either single mothers or foster parents. Nearly 83% of the respondents were parents of the pupils. About 11% were grandparents. Less than 6% of the respondents had assumed custodian roles for the pupils. Therefore, nearly 95% of the respondents were closely related to the pupils and thus in a good position to provide candid opinions about the quality of the municipal schools.

The majority of respondents in this survey did not enjoy a high social echelon. About three quarters of them finished lower than tertiary education. Professional and government employees together represented only slightly above one-fifth of the sample. More than three-quarters worked in other less privileged occupations. Due to this pattern of low social position, the majority had low incomes, with 68.1% of them earning not more than 20,000 THB per month. It is therefore noteworthy that this survey assesses the quality of education of the municipal schools from the perspectives of people who are less fortunate and for that reason may not be able to send their children to more privileged and more competitive MoE public schools in the urban area of Khon Kaen Province.

Table 2  
*Demographic and socio-economic characteristics of the sample*

Characteristics	n	Percentage (%)
<b>Residence</b>		
Municipal area	4449	59.8
Outside of municipal area	2299	30.9
Other district in Khon Kaen	375	5.0
Other province	313	4.2
Total:	7436	100.0
<b>Gender</b>		
Male	2483	33.4
Female	4953	66.6
Total:	7436	100.0
<b>Age</b>		
Less than 30 years	812	10.9
31 – 40 years	4006	53.9
41 – 50 years	1912	25.7
51 – 60 years	522	7.0
61 years and above	184	2.5
Total:	7436	100.0
<b>Marital status</b>		
Married and living with spouse	5343	71.9
Separated	683	9.2
Divorce	786	10.6
Widow	314	4.2
Other	310	4.2
Total:	7436	100.0
<b>Relationship</b>		
Father/Mother	6139	82.6
Grandparents	788	10.6
Uncle/Aunt	319	4.3
Brother/Sister	63	0.8
Foster Father/Mother	92	1.2
Other Relatives	35	0.5
Total:	7436	100.0
<b>Education</b>		
Below university	5564	74.8
Bachelor's degree	1602	21.5
Graduate degree	270	3.6
Total:	7436	100.0

Table 2 (continue)

Occupation		
Unskilled labour	2210	29.7
Vendor or trader	1287	17.3
Agriculture	272	3.7
Employee of a private company	1229	16.5
Professional	836	11.2
Government official	905	12.2
Other	697	9.4
Total:	7436	100.0
Income /THB		
Less than 10,000	1546	20.8
10,001 – 15,000	2826	38.0
15,001 – 20,000	689	9.3
20,001 – 25,000	937	12.6
25,001 – 30,000	475	6.4
30,001 – 35,000	522	7.0
35,001 – 40,000	196	2.6
40,000+	245	3.3
Total:	7436	100.0

### Parents' Reasons for Placing the Children in KKM Schools

In answering research question 1a), Table 3 shows the reasons for parents or guardians to send children to the municipal schools, with the top three reasons being proximity to home, the lack of tuition fees, and a good environment.

Table 3

*Reasons for sending children to schools under the jurisdiction of KKM (Multiple Responses Possible)*

Reasons	Number	Percent
Close to home	4389	59.0
No tuition fee	2796	37.6
Good environment	2300	30.9
Low extra required fees	2059	27.7
Recommended by other people	1907	25.6
No required donation	1833	24.7
Other children are studying there	1830	24.6
Being an alumnus	927	12.5

### Parents' Perception of the Transport of Students to and From Schools

The following table (Table 4) answers research question 1b) in that it reflects travel-related issues, which are closely related to the primary reason for sending children to KKM schools, i.e., proximity to home. Travel-related issues are integral to the context of Thai education because of travel costs and because Thailand has the second worst roads in the world for per capita deaths, after Libya. Each year over 24,000 people are killed on Thai roads (Look, 2016), with hundreds of thousands more injured, many of whom are students, as is discussed later.

Table 4  
*Travel-related issues*

Issue	n	Percentage (%)
<b>Mode of transport</b>		
Personal vehicle	4874	65.6
School bus	471	6.3
Public transportation with parents	321	4.3
Walking	461	6.2
Other	1308	17.6
Total:	7435	100.0
<b>Child transportation safety</b>		
Safe	6639	89.3
Unsafe	797	10.7
Total:	7436	100.0
<b>Reason for unsafe travel</b>		
Heavy traffic	278	25.8
Too far from home	64	5.9
Unsafe drivers	129	12.0
Child too young	75	7.0
Fear of abduction	54	5.0
Other	477	44.3
Total:	1077	100.0
<b>Problems or difficulties when going to school</b>		
Yes	2066	27.8
No	5370	72.2
Total:	7436	100.0
<b>Reason for problems or difficulties</b>		
Parent(s) does not have enough time	1053	58.9
Parking issues	129	7.2
Heavy traffic	338	18.9
School too far from home	99	5.5
Other	170	9.5
Total:	1789	100.0
<b>Reason for no problems or difficulties</b>		
Have transportation	371	5.7
Close to home	548	8.5
Uses public transportation	281	4.3
Children can go to school by themselves	228	3.5

Table 4 (continue)

Goes to school with parents	1378	21.3
No heavy traffic	38	0.6
No reasons given	3635	56.1
Total:	6479	100.0
<b>Respondents who prefer school transportation</b>		
Prefer	3888	52.3
Do not prefer	3548	47.7
Total:	7436	100.0
<b>Prefer transportation (previous question) and are willing to pay</b>		
Yes	3309	85.1
No	579	14.9
Total:	3888	100.0
<b>If willing to pay (previous question), how much per month</b>		
0-500 THB	2185	66.0
501-1,000	701	21.2
Over 1,000	423	12.8
Total:	3309	100.0
<b>Students trained in travelling to school safely</b>		
Yes	6836	91.9
No	600	8.1
Total:	7436	100.0

The percentage of respondents and their willingness to pay for school transportation are also reported in Table 4. This table shows that 52.3% of respondents prefer to have the school provide transportation while 47.7% do not wish to use school transportation. The latter group responded that it is not important for them because they would rather accompany and/or drive their children rather than having their children take the school bus. Some also said that their homes are near the school and they

do not require school transportation. While 85.1% of the respondents are willing to pay for transportation, most felt that the bus fee should be dependent on their income and the distance from their home to the school. The table above also shows that 66% of parents would prefer to pay not more than THB500 per month, an additional 21.2% would be willing to pay THB501-1,000, and a further 12.8% would be willing to pay in excess of THB1,000. An additional question on whether parents or guardians felt students had been trained in traveling to school safely found 8.1% disagreed, indicating room for potential improvement.

### Perceived Factors of Quality of Education Provided by KKM Schools

To answer the second research question, a threshold analysis was conducted of the respondents' perception of quality of education of the municipal schools by demographic and socio-economic characteristics, using a threshold of 80% for 'High Quality'. Table 6 shows the results of the threshold analysis applied to the respondents' perception of quality of education of the municipal schools by demographic and socio-economic characteristics, using a threshold of 80% for 'High Quality'.

Table 5  
*Perception of quality of education of schools under the jurisdiction of KKM by demographic and socio-economic characteristics*

Characteristics	Quality of Education Threshold		Total: n (%)
	Perceived as Low Quality: n (%)	Perceived as High Quality: n (%)	
<b>Schools**</b>			
Suansanuk School	225 (11.2)	1776 (88.8)	2001 (100.0)
Watklang School	339 (15.1)	1910 (84.9)	2249 (100.0)
Khomnongkoo School	30 (11.0)	243 (89.0)	273 (100.0)
Bannonthun School	26 (7.6)	314 (92.4)	340 (100.0)
Bannongyai School	46 (8.0)	530 (92.0)	576 (100.0)
Nonnongwat School	4 (4.3)	90 (95.7)	94 (100.0)
Bannonchai School	30 (6.1)	461 (93.9)	491 (100.0)
Bansamliam School	19 (4.0)	459 (96.0)	478 (100.0)
Bannongwang School	9 (6.4)	131 (93.6)	140 (100.0)
Bantoom School	13 (3.4)	367 (96.6)	380 (100.0)
Bansrithan School	18 (4.3)	396 (95.7)	414 (100.0)
<b>Total:</b>	<b>759 (10.2)</b>	<b>6677 (89.8)</b>	<b>7436 (100.0)</b>
<b>Place of Residence</b>			
Municipal area	431 (9.7)	4018 (90.3)	4449 (100.0)
Outside of municipal area	250 (10.9)	2049 (89.1)	2299 (100.0)
Other district in Khon Kaen	45 (12.0)	330 (88.0)	375 (100.0)
Other province	33 (10.5)	280 (89.5)	313 (100.0)
<b>Total:</b>	<b>759 (10.2)</b>	<b>6677 (89.8)</b>	<b>7436 (100.0)</b>

Table 6 (continue)

Gender			
Male	250 (10.1)	2233 (89.9)	2483 (100.0)
Female	509 (10.3)	4444 (89.7)	4953 (100.0)
Total:	759 (10.2)	6677 (89.8)	7436 (100.0)
Age*			
Less than 30 years	65 (8.0)	747 (92.0)	812 (100.0)
31 – 40 years	424 (10.6)	3582 (89.4)	4006 (100.0)
41 – 50 years	221 (11.6)	1691 (88.4)	1912 (100.0)
51 – 60 years	37 (7.1)	485 (92.9)	522 (100.0)
61 years and above	12 (6.5)	172 (93.5)	184 (100.0)
Total	759 (10.2)	6677 (89.8)	7436 (100.0)
Education**			
No university degree	502 (9.0)	5062 (91.0)	5564 (100.0)
Bachelor degree or higher	257 (13.7)	1615 (86.3)	1872 (100.0)
Total:	759 (10.2)	6677 (89.8)	7436 (100.0)
Occupation**			
Unskilled Labour Employment	158 (7.1)	2052 (92.9)	2210 (100.0)
Vendor or Trader	141 (11.0)	1146 (89)	1287 (100.0)
Agriculture such as farming/fishing / livestock	20 (7.4)	252 (92.6)	272 (100.0)
Employee of a private company	142 (11.6)	1087 (88.4)	1229 (100.0)
Professional (For example doctor, lawyer, architect, engineer or self-employed etc.)	122 (14.6)	714 (85.4)	836 (100.0)
Government official (Including state owned enterprises)	105 (11.6)	800 (88.4)	905 (100.0)
Other	71 (10.2)	626 (89.8)	697 (100.0)
Total:	759 (10.2)	6677 (89.8)	7436 (100.0)
Marital status			
Marital stable	539 (10.1)	4804 (89.9)	5343 (100.0)
Marital unstable	220 (10.5)	1873 (89.5)	2093 (100.0)
Total:	759 (10.2)	6677 (89.8)	7436 (100.0)
Income**			
Less than 20,000 THB	425 (8.4)	4636 (91.6)	5061 (100.0)
20,001 THB and above	334 (14.1)	2041 (85.9)	2375 (100.0)
Total:	759 (10.2)	6677 (89.8)	7436 (100.0)
Relationship**			
Parents	669 (10.9)	5470 (89.1)	6139 (100.0)
Grandparents	45 (5.7)	743 (94.3)	788 (100.0)
custodian	45 (8.8)	464 (91.2)	509 (100.0)
Total:	759 (10.2)	6677 (89.8)	7436 (100.0)

Note. \* = p-value < 0.01, \*\* = p-value < 0.001

Table 6 shows the subset of those respondents who perceived that KKM schools are high quality, broken down by detailed quality indicators, where 1 = Yes and 2 = No. In order of subjects taught, respondents perceived that mathematics was taught best, followed by Thai, science, and English.

Table 6  
*Percentage of respondents who perceived That KKM schools are high quality by detailed quality indicators (N=7,436)*

Indicators	Number	Percentage (%)
Sufficiently teaches mathematics	7289	98.0
Provides learning support materials to school pupils	7288	98.0
Sufficiently teaches Thai	7258	97.6
Teachers' qualifications	7210	97.0
Appropriate teaching methods	7167	96.4
Provides nutritional lunch	7116	95.7
Provides health service	7108	95.6
Provides school uniform	7071	95.1
Appropriate class size	7013	94.3
Sufficiently teaches science	7008	94.2
Appropriate hours of study	6958	93.6
Appropriate teaching materials	6954	93.5
Provides school milk	6937	93.3
Sufficiently teaches English	6769	91.0
Comparable to Ministry of Education schools	6757	90.9

A Chi-Square analysis was then conducted of respondents who perceived their children's education as high quality and low quality against a wish to transfer. The result, Table 7, illustrates that respondents who viewed the quality of education as low were more likely to wish to transfer their children to MoE schools, as might be expected.

Table 7  
*Percentage of respondents who expressed a wish to transfer their children to MOE schools*

Wish to Transfer	Perception		Total
	Low quality: n (%)	High quality: n (%)	
Yes	435 (57.3)	2817 (42.2)	3252 (43.7)
No	324 (42.7)	3858 (57.8)	4182 (56.3)
Total	759 (100.0)	6675 (100.0)	7434 (100.0)

Chi-Square = 63.2, df=1, p-value <0.001

Bartlett’s Test of Sphericity was employed, which confirmed ( $p < 0.01$ ) the data were suitable for factor analysis. For goodness of fit, the Kaiser-Meyer-Olkin test was employed, with a resulting value of 0.834. Responses to the key variables were therefore examined by

Principal Component Analysis (PCA) to determine the main factors involved (Table 8). PCA was employed because it reduces observed variables to a smaller set of important uncorrelated composite variables and therefore eliminates the problem of multicollinearity.

Table 8  
Results of variables extraction using principal component analysis

Variables	Component			
	1	2	3	4
Appropriate teaching methods	.814			
Appropriate teaching materials	.786			
Teachers qualifications	.760			
Sufficiently teaches mathematics		.695		
Sufficiently teaches Thai		.629		
Sufficiently teaches science		.597		
Appropriate hours of study		.496		
Comparable to MOE schools		.479		
Sufficiently teaches English		.460		
Provides school milk			.824	
Provides nutritional lunch			.775	
Provides school uniform				.632
Appropriate class size				.630
Provides learning support materials				.438
Provides health service				.428

*Note.* Rotated by Varimax method with Kaiser Normalization. Rotation converged in 5 iterations. For factor extraction, the Kaiser criterion was applied, with the factors having Eigenvalues of 3.646, 1.504, 1.145, and 1.009.

The four factors identified were pedagogy (Factor 1), educational program structure (Factor 2), school lunch program (Factor 3), and learning facilities (Factor 4). The 11

municipal schools were then re-examined in the light of each of these factors, providing a means of comparison, with the following results:

Table 9  
Comparative factor scores of perceived quality of education by schools

Schools	Factors Pedagogy	Educational Program Structure	School Lunch Program	Learning Facilities
Suansanuk	-10.77	-30.37	210.32	-237.11
Watklang	26.74	-1.07	-449.97	-108.95
Khomnongkoo	-119.49	-164.23	188.49	76.63
Bannonthun	-44.82	-5.08	177.07	156.21
Bannongyai	-163.02	37.90	147.71	271.25
Nonnongwat	43.95	91.69	171.71	312.72
Bannonchai	43.43	-52.41	218.12	209.97
Bansamlam	36.96	80.04	174.12	272.20
Bannongwang	-86.36	-36.66	122.14	338.34
Bantoom	95.59	98.35	234.38	267.80
Bansrithan	86.52	83.41	197.48	187.18

This was then plotted to a graph for easier analysis. The results are in Figure 1.

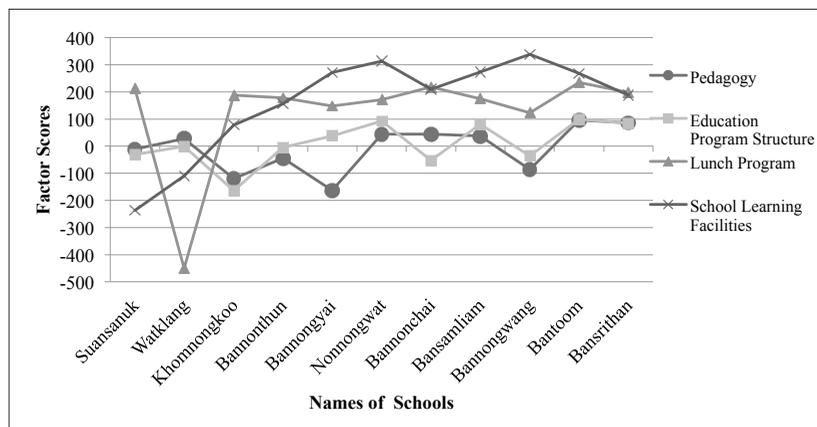


Figure 1. Comparative factor scores of perceived quality of education by school

Given that the methodology involved a survey, this approach enables a comparison by factors as well as a relative comparison of each school, allowing KKM to see the strengths and weaknesses of each school and therefore prioritise resources. It can be readily seen that the municipal schools

scored well for the Lunch Program except for Watklang School, which does not provide a school lunch. Municipal schools also generally scored well for School Learning Facilities, except for two schools, Suansanuk School and Watklang School. Municipal schools were rated less highly

for both Pedagogy and Educational Program Structure, which is related to pedagogy, as shown by considerable convergence in the two factors in nine of the eleven schools. This relative comparison of factors and schools forms the basis for discussing the results and devising recommendations.

## DISCUSSION

In order to better understand the survey results and devise recommendations for the schools in this ethnically diverse community, two interviews were conducted, on March 29 and May 30, 2016, with Mr. Chatchawan Phonamontham, Deputy Mayor of KKM, together with senior staff from KKM's Department of Education. This provided a greater context for understanding to what extent the findings answered the research objectives. The relatively positive response in the case of school learning facilities was explained by the fact that school infrastructure, primarily classrooms, but also playgrounds, and toilets, had been the first priority of KKM when setting up the municipal schools. KKM's own architect discussed infrastructure requirements with school boards and designed and implemented common municipal infrastructure for the schools. Class sizes were dictated by classroom size and KKM education department policy and were generally not seen as a problem. However, in the open-ended component of the survey, 13.7% of respondents indicated that school infrastructure should be enhanced, with another 5.2% asking for sports and recreation facilities to be upgraded, indicating room

for improvement. Improvement in school facilities should follow international best practices in the areas of school building codes and school structural, infrastructural and environmental vulnerabilities, such as the Hyogo Framework for Action (Unicef et al., 2013), which Thailand endorses nationally.

Regarding the positive perception of school lunches, KKM prioritizes health promotion via school lunch and school milk programs and has recently introduced a limited breakfast program. This is in response to the poor socio-economic backgrounds of its children. Its health check program, a collaborative venture involving the Municipal Education Department, the Municipal Health Department, and Khon Kaen Hospital, the provincial hospital, at present extends to all primary (Grades 1-6) students. The program especially targets students with behavioural disorders such as ADD as well as those with lower IQs, and in order to assist such students, it has a memorandum of understanding with the provincial centre for mental health. The majority of respondents (95.6%) are aware of this program, which is well received by parents and guardians and should be continued and developed. However, development should be carefully targeted due to insufficient funds for a comprehensive program.

Lower scores for pedagogy and educational programs may be attributed to two reasons. Firstly, municipal schools have historically scored lower than MoE schools, which can self-select students. For

this reason, they are sometimes perceived by parents to be inferior to MoE schools, thus they may be rated less highly by respondents. In fact, the response to one survey question indicated that an encouraging 90.9% of respondents viewed the quality of municipal schools as comparable to that of MoE schools, meaning only 9.1% still viewed them as inferior. The second reason is that the intake of municipality schools is of a lower calibre, as municipality schools are obliged to accept all eligible applicants. This effect, together with the lower socio-economic background compared to MoE schools, can create a disparity between the role that schools see for themselves and the role parents and guardians see schools playing. This is exacerbated in the case of municipal schools in the Northeast by two additional social factors, namely high rates of parental urban migration (for example to Bangkok) for work, leaving children with grandparents who may be functionally illiterate (Jampaklay et al., 2012), and the phenomenon of teen mothers, with Thailand having the second highest rate of teen pregnancy in Asia (Unicef, 2015, p. 9). The interviews with KKM senior managers indicated that municipal schools see themselves as directly contributing towards roughly one-third of a student's academic progress, with one-third coming from the pupils themselves and one-third from parents or guardians. However, in the opinion of senior managers, parents or guardians of children see schools contributing approximately 60% of a child's

progress, with 20% each from the pupils themselves and from guardians.

In terms of improving educational program structure, the major problem appears to be that students may not understand the syllabus and content. KKM has attempted the design of common tailored curricula for all municipal schools, including Isan language, the mother tongue of the majority of its students. However, one problem is incorporating analytical and critical thinking aspects in educational programs and then teaching it. This, in turn, is due to traditional methods of teacher training and the fact that O-NET (Grade 9) standardized tests are principally multiple choice, hence parents and teachers can be more motivated to prepare for tests. Moreover, for older teachers, the concept of moving away from rote learning and towards teaching analytical and critical thinking skills can be difficult.

Additionally, 13.7% of respondents called for improvement of the educational program so that it is easier to understand, with a further 5.6% calling for more teaching of foreign languages. KKM should focus more resources on pedagogy and educational program structure, except at Suansanuk and Watklang Schools, where school learning facilities need to be improved. This is, in fact, underway. KKM will close the secondary grades in Suansanuk School in 2017 in order to specialise as a primary school, and it will close the primary grades in Watklang School in the same year in order for it to specialise as a secondary school.

In response to a question regarding whether there is sufficient teaching of English, 9.0% stated that the amount of English was insufficient, thus English is one language to focus on. In a recent article, Teng and Singwonsuwat (2015) summarize that problems with Communicative Language Teaching (CLT), the officially promoted means of teaching English in Thailand: include a lack of sustained professional development and teacher fluency; insufficient time to implement CLT activities; a preference for accuracy over fluency; the fact that CLT may be contrary to Thai culture as it involves questioning; and misconceptions that CLT requires native-speaker norms. Focusing on ameliorating these areas may thus provide an avenue for improvement in English language pedagogy. Other language offerings may potentially include Chinese, a priority for the government (MoE, n.d.) and Lao, the language of the nearest ASEAN neighbour, as suggested in the original *ASEAN Sociocultural Community Blueprint*, which recommends the teaching of neighbouring languages (ASEAN Secretariat, 2009, p.2).

In response to pedagogical requirements, KKM has introduced continuous annual training for its teachers in all subject areas over the past three years. For example, in English, traditionally a very low performing subject with weak teacher knowledge and teacher skills being a problem. Municipal teachers were tested three years ago according to the Common European Framework of Reference (CEFR), ahead of the CEFR test conducted by the MoE for

its teachers in 2015 (*English*, 2015). They were then allocated individual training development pathways. The result has been that municipal schools, while their students still score lower than MoE schools, have improved more than MoE schools over the last three years, though admittedly from low baselines in some subjects. As only 5.1% of respondents called for municipality schools to improve the quality of teachers, this should be a secondary priority after improving educational program structure. Some parents may not be aware of these developments, suggesting a need for better public relations.

## CONCLUSION AND RECOMMENDATIONS

The following conclusion and recommendations are tailored for KKM municipal education but should also be considered for municipal schools in other Thai provinces and for schools in similar systems in Southeast Asia. KKM should publicize the summary results of this survey in the form of a brochure in order to inform parents and guardians and begin a citizens' dialogue process for educational strategic management, as recommended by Wongthanavas and Ranad (2012), including in the area of transport-related issues. Specifically, KKM should be open and transparent about its plans for improved pedagogy, education, and educational program and curriculum structure. It should show how its students' academic results have improved compared to MoE schools, as evidenced by official MoE 2015 educational

attainment results on standardized tests for 2013-2015, i.e., at a faster rate in all subjects over the past three years. It should also explain how lower scores compared to the national average is a regional problem, a result of compounding effects related to socio-economic background, diseases of poverty such as malnutrition, and IQ and cognitive behavioural problems (Draper, 2011, 2014), i.e., the uneven development between Bangkok and other areas, especially in the Northeast (Glassman & Sneddon, 2003; Doner, 2009). Moreover, it should explain the benefits and results of its teacher and curriculum development programs. In particular, research indicates training

programs for administrators should include ‘contemporary administrative leadership’, ‘school and community relations’, ‘effective communication and decision-making’, ‘management of human resources’, and ‘theory and practices of curriculum development’ (Gamage, 2004), as well as an appropriate understanding of administrators’ roles (Gamage & Pang, 2003, p. 39). In addition, it should investigate and address the low score for pedagogical and educational program structure at Khomnongkoo School, as well as the low score for pedagogy at Bannongyai School. Figure 2, below, highlights specific areas for improvement for each school.

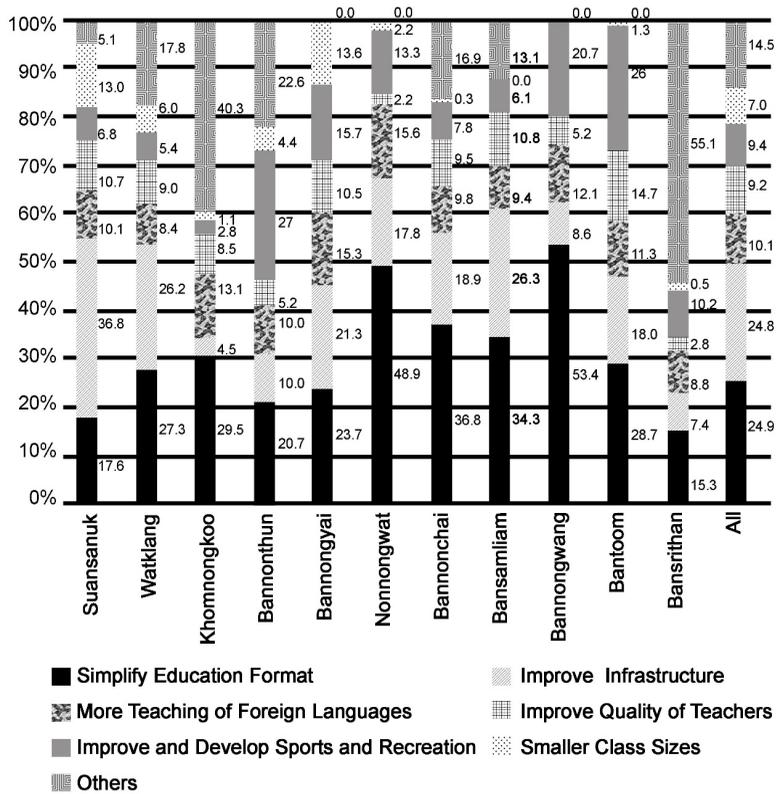


Figure 2. Recommendations for program improvement by school

Analysis of descriptive statistics revealed additional, specific child-safety issues which KKM schools should prioritize. Specifically, 10.7% of respondents reported that it was unsafe for their children to travel to school. Analysis of open-ended responses revealed 3.7% of total respondents were concerned about too many cars in the urban environment, while a further 1.7% were concerned about motorists driving too fast, and 1.0% stated that their children were too young to travel alone. This is a serious problem, as seven children are killed on Thailand's roads every day, with only 7% of the more than a million children riding to school as passengers on parents' or guardians' motorcycles wearing crash helmets (Silverman & Billingsley, n.d., p. 37). According to the World Health Organization (WHO, 2015), Thailand experiences double the average global per capita number of approximately 18 road deaths per 100,000 population per year, i.e., 36.2 deaths/100,000. In KKM, in one hospital's emergency room alone, approximately 10,000 road traffic injured patients visit per year, of whom 4,000 are admitted, with 4.6% of these being permanently disabled (WHO, 2015, p.14). Students, many of whom use motorcycles, therefore face the constant possibility of being injured during their travel, which places an onus of care on municipal schools.

KKM should therefore consider safe crossing programs using well-lit zebra crossings with wardens in mornings and afternoons together with a publicity

campaign advising motorists to slow down near schools, including signs and radio adverts. In addition, students should be encouraged to wear motorcycle helmets in cooperation with the Save the Children and AIP Foundation '7 Percent Project' to increase motorcycle helmet usage to 60%. On a similar issue, 27.8% of respondents stated that there were problems with their children commuting to school. Specifically, 14.2% of parents stated that they did not have enough time to take their children to school, with a further 4.5% mentioning the problem of traffic jams. KKM already provides students with subsidized use of the public transport system as well as a tailored school bus system. However, the latter can only be expanded if additional funding is found.

Finally, it would also be informative to conduct a similar, replication survey of MoE urban schools, which are in competition with KKM schools, in order to compare the educational program structures, lunch programs, school learning facilities, and pedagogy in more depth, such as the number and professional background of teachers. Thai teachers' views on these four issues, as well as on teaching and learning problems, should also be solicited.

## ACKNOWLEDGMENTS

The authors would like to acknowledge the assistance of Ms. Jitjira Chaiyarit, Statistical expert at the Clinical Epidemiology Unit, School of Medicine, Khon Kaen University.

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## **Uncritical Inference Test in Developing Basic Knowledge and Understanding in the Learning of Organic Spectroscopy**

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### **ABSTRACT**

The learning of spectroscopic techniques for structural elucidation of unknown compounds is of profound importance to students. At present, there have been limited exercises associated with basic knowledge in the organic spectroscopy course. In this paper, through the implementation of Uncritical Inference Test (UIT) along with the teaching of organic spectroscopy course, this activity has enabled students to revise on their basic knowledge and understanding, as well as to enable the course instructor to check and rectify any weaknesses in the subsequent lessons. Three case studies based on lessons associated with Mass Spectroscopy (MS), Infrared (IR) and Nuclear Magnetic Resonance (NMR) were designed for this study. Based on the students' reflective writing, the UIT has promoted several positive learning outcomes, which includes a deeper understanding of a concept, improved thinking skills, motivated to study, fun-filled learning, peer learning and autonomous learning, which further encouraged the use of UIT in the teaching of other subjects.

*Keywords:* Uncritical inference test, Basic knowledge and understanding, Organic spectroscopy, Reflective writing

### **ARTICLE INFO**

*Article history:*

Received: 05 September 2016

Accepted: 18 July 2017

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### **INTRODUCTION**

Organic spectroscopy is an important course in the undergraduate chemistry program as it has wide applications encompassing all fields of chemistry. (Gurst, 1981; Sweeting, 1998) Currently, there is an effort to

introduce the topic of Nuclear Magnetic Resonance (NMR) into the content of high school curricula, which is indicative of its significance in research and teaching. (Bonjour, Hass, Pollock, Huebner, & Frost, 2017) The NMR spectroscopy when used in complement with other organic analytical techniques, such as Infrared (IR) and Mass Spectrometry (MS), enables structural elucidation of unknown compounds (Kandel & Tonge, 2001). The organic spectroscopy course is a key subject and it is commonly taught to students in their second year of study, both in the classroom and laboratory. (Donald, Lampman, & George, 1988; Feist, 2004; Goodrich, Parker, & Phelps, 1993; Horowitz, 2000; Svoronos & Sarlo, 1993)

The organic spectroscopy course could be difficult for students to learn as it requires not only the understanding of theories, but also a lot of practice in spectra problem solving. (Karatjas, 2014) As a result, students have developed a negative attitude towards this subject as there has been limited availability of spectral exercises and lack of spectral analyzing questions in the exams for students to attempt and relate to their theoretical knowledge. (Angawi, 2014; Merlic, Fam, & Miller, 2001) To this end, efforts have been made to overcome this situation by supplementing methods to help students to master structural elucidation skills. (Graham, McIntee, & Schaller, 2016; McClusky, 2007; Wist & Patiny, 2012) However, exercises that enable students to test their basic knowledge associated with IR, NMR and MS are still lacking.

Our approach to organic spectroscopy teaching is consistent with the goals reported in a previous publication, which is to enable students to develop basic understanding associated with IR, NMR and MS, to motivate students' learning, recall and relate previous knowledge in problem solving and also to develop their thinking skills required in analyzing problems. (Iler, Justice, Brauer, & Landis, 2012; Schoffstall & Gaddis, 2007) Previously, the Uncritical Inference Test (UIT) activity was implemented in the author's classroom to instill deeper learning and interest in the basic organic chemistry course among students and the result showed that students developed positive learning through this activity. (Cha, Kan, & Chia, 2016; Kan, Cha, & Chia, 2015) In this paper, we would like to report on the implementation of the UIT along with the teaching of organic spectroscopy in the author's classroom. Apart from cultivating interest and creating deeper learning among students in this course, the authors would like to reinforce basic knowledge and to check on students' understanding of previous lessons, so that the course instructor can rectify the students' misconception and weaknesses in the subject. The students' learning outcomes were also investigated as described in this paper.

## **MATERIALS AND METHOD**

This activity was conducted for the 90 students enrolled into the organic spectroscopy course, semester II 2016/17 session, at the Universiti Malaysia

Terengganu, and have not participated in the UIT activity. This course comprised of one two-hour lesson and one one-hour lesson per week for 14 weeks. Before conducting the UIT activity, students have learnt the basic knowledge associated with NMR, IR and MS from the class instructor. The IR spectrum was obtained from an experimental data performed at the Universiti Malaysia Terengganu and  $^1\text{H}$ - and  $^{13}\text{C}$ - NMR spectra were simulated from the Chemdraw® software. The UIT activity was conducted after each lesson and the last 15 mins of the lecture was reserved for this activity. Students were given a set of statement and a case study at a time for them to review on the previous lesson. They were required to decide on a statement based on the information presented whether it is true, false or not sure. Students were required to mark true if a statement is true based on the case study and facts. A false statement is neither supported by facts nor information as provided in the case study. On the other

hand, a “not sure” answer is indicative of a statement that could be either true or false to a certain degree. In total, three sets of case studies were developed for this study and a closed book session was conducted throughout the whole activity. Students were allowed to discuss their answer with their peers. After 10 mins, the course instructor invited students to share their answers during the open discussion session. Finally, all the answer scripts were collected at the end of the activity and analyzed by the course instructor.

In order to review the students' feedback on this activity, students were encouraged to submit an anonymous reflective writing, though it was not compulsory. These were collected after all three UIT case studies were conducted. A systematic network was built based on the collected reflective writing so as to understand the effectiveness of this activity in organic spectroscopy course. In total, 82 students participated in the reflective writing.

## RESULTS AND DISCUSSION

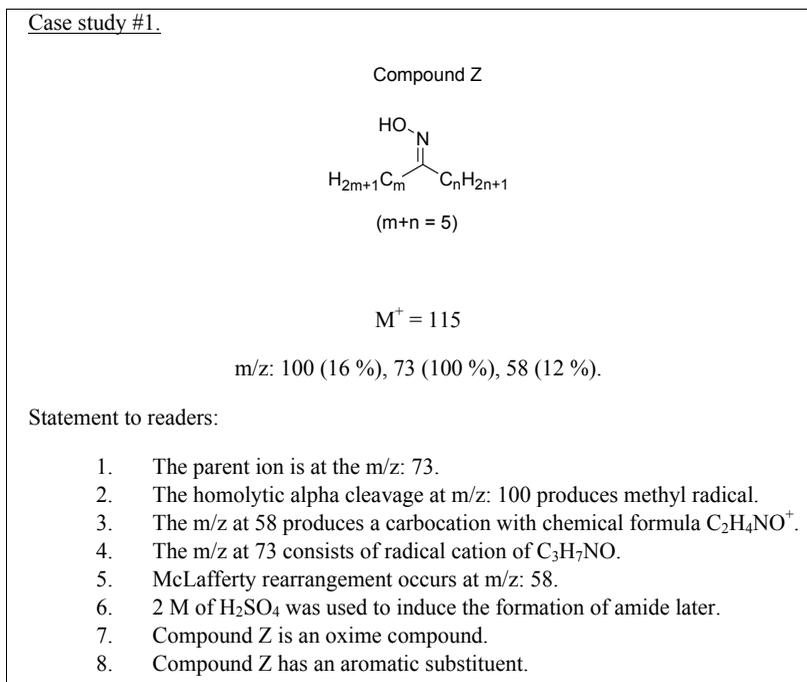


Figure 1. The GC-MS data of compound Z in case study 1

After the end of the MS lesson, UIT#1 (Figure 1) was carried out with an intention to recapture students' basic knowledge in this subject. As the discussion progressed, students showed enthusiasm by actively participating and exchanging views, thereby creating an active learning environment. After 10 mins of discussion, students were

invited for answers and to provide their reasoning for the answer chosen. To further promote intellectual exchange, the course instructor directed the questions to the class for alternative ideas and then provided the correct answers (Table 1), along with the explanation for each statement at the end of each UIT activity.

Table 1  
*Students' response to the statements in case study 1*

Statements	Number of individuals		
	True	False	Not Sure
1. The parent ion is m/z: 73	17	83*	0
2. The homolytic alpha cleavage at m/z: 100 produces methyl radical.	53*	37	0
3. The m/z at 58 produces a carbocation with chemical formula $C_2H_4NO^+$ .	52*	38	0
4. The m/z at 73 consist of radical cation of $C_3H_7NO$ .	36*	54	0
5. The McLafferty rearrangement occurs at m/z: 58.	47	43*	0
6. 2 M of $H_2SO_4$ was used to induce the formation of amide later.	4	0	86*
7. Z is an oxime compound.	88*	2	0
8. Z has an aromatic substituent.	3	87*	0

\*correct answers

In case study 1, it was encouraging to note that the majority of students were able to answer question 1 correctly as evident in the classroom discussion and in the collected answer scripts. However, about 19% of the students developed misconception between parent ion and base peak. Students thought that the m/z at 73 with 100% abundance was the parent molecular ion. The misconception was later explained in the class by the course instructor. Students found it challenging to work out the chemical formula of compound Z according to the students' comment during the open discussion in the class. Most of the students managed to work out the chemical formula by screening a combination of possibility (m:n = 1:4 or 2:3) and matched it to the fragment in the GC-MS spectrum. The correct answer is m:n = 1:4 or 4:1. In questions 2 and 3, students' understanding on the alpha homolytic cleavage was evaluated here. Students were able to comprehend this concept as evident in the students' answer

scripts, about 59% and 57% of the students marked the correct answer for questions 2 and 3 respectively. In questions 4 and 5, the percentage of students who answered correctly was low, which was recorded at 40% and 48%, respectively. Some students explained that they were unable to recall the concept of McLafferty rearrangement during the classroom discussion. Students' inability to recall facts from previous lessons was consistent with a previous publication (Bligh, 2000; Kiewra, 2002), where without regular revision, students' knowledge retention declined 20% after 3 weeks. To overcome this problem, the course instructor advised students to make regular revision on previous lectures for sustainable memory. For questions 6, 96% of the students marked the correct answer, where they realized that there was insufficient information regarding the oxime and sulphuric acid reaction and thus marked "not sure" as answer. For questions 7 and

8, the percentage of students who marked the correct answers were recorded at 98% and 97%, respectively. Students realized that compound Z is an oxime and the total number of carbon for compound Z is five, as evident in their answer scripts. As a result, this has eliminated the possibility of

having benzene substituent in compound Z. Overall, students responded well to this activity and showed great enthusiasm to learn more about organic spectroscopy. Figure 2 shows a sample of a student's answer in the UIT activity.

statement to readers:

1. The parent ion is  $m/z$ : 73.
2. The homolytic alpha cleavage at  $m/z$ : 100 produces methyl radical.
3. The  $m/z$  at 58 produces a carbocation with chemical formula  $C_2H_4NO^+$ .
4. The  $m/z$  at 73 consists of radical cation of  $C_3H_7NO$ .
5. McLafferty rearrangement occurs at  $m/z$ : 58.
6. 2 M of  $H_2SO_4$  was used to induce the formation of amide later.
7. Compound Z is an oxime compound.
8. Compound Z has an aromatic substituent.

Answer:

1. True	False	Not Sure	Answer: $m/z$ : 73 base peak
2. True	False	Not Sure	Answer: After removal of $CH_3$ $m/z$ from 115 to 113
3. True	False	Not Sure	Answer: $C_2H_4NO^+$ produce $m/z$ 57
4. True	False	Not Sure	Answer: $C_3H_7NO$ produce $m/z$ 73
5. True	False	Not Sure	Answer: McLafferty only focus ketone & aldehyde
6. True	False	Not Sure	Answer: -
7. True	False	Not Sure	Answer: Oxime structure match with compound
8. True	False	Not Sure	Answer: not an aromatic substituent

Figure 2. One of the students' sample answer to case study 1 in the UIT activity

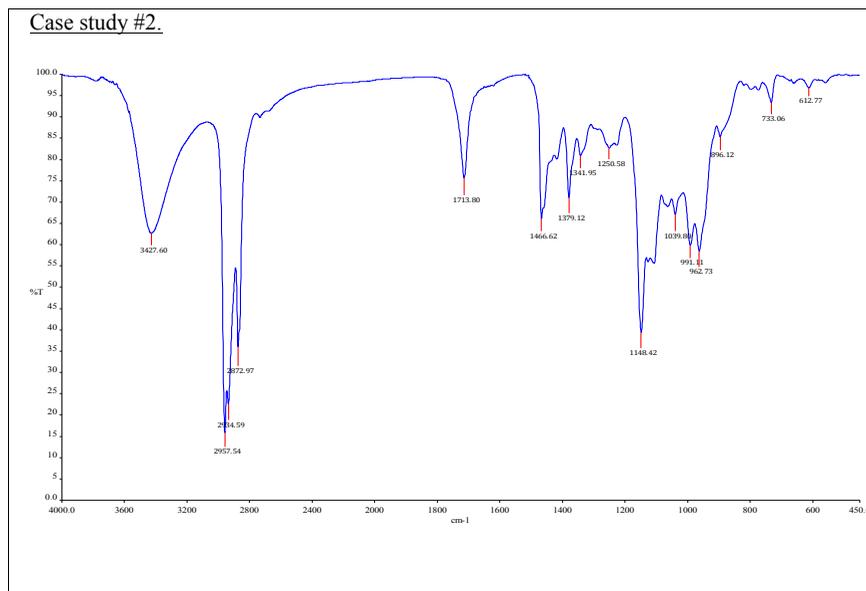


Figure 3. IR spectrum of compound X

Case study 2 (Figure 3) was designed and directed to students so as to revise their basic understanding on the IR topic. After the completion of the IR lesson, students' understanding on the IR topic was evaluated in the UIT activity. Based on Table 2, students had no difficulty in answering statements 9 to 16, where they were able to justify their answers during the classroom discussion. Based on Table 2, students marked the correct answers for most questions, except for question 14 which required students to have a deeper understanding of the statement. About 87% students marked the correct answer for question 9 and made the correct justification as evident in their answer scripts. It was encouraging to notice that 93% of the students were able to understand the IR absorption by alcohol O-H functional group

(question 10). The course instructor then further elaborated that the alcohol O-H stretch has a broad signal from 3600 to 3200  $\text{cm}^{-1}$ , while carboxylic acid O-H stretch shows an even broader signal from 3400 to 2400  $\text{cm}^{-1}$ . A few students were unable to differentiate between an alcohol O-H stretch and a carboxylic O-H stretch and thus marked "not sure" as the answer. This was evident in one of the student's answer scripts as shown in Figure 4. For question 11, 91% of the students were able to determine the correct answer, either by positive identification thinking that the broad and singlet signal at 3427  $\text{cm}^{-1}$  was due to alcohol O-H stretch or through negative identification thinking that a tertiary amine does not show any N-H stretch in IR spectroscopy, thus marked "false" as the correct answer. Likewise, students did not

have difficulty in distinguishing the IR absorption by  $sp^2$  and  $sp^3$  C-H stretch, which occurs at  $3100-3000\text{ cm}^{-1}$  and  $3000-2850\text{ cm}^{-1}$ , respectively. For questions 12, 13 and 15, the percentage of students who marked the correct answer were recorded at 86%, 80 % and 88 %, respectively. For question

14, 96% of the students realized that there was insufficient information to confirm that compound X is hept-1-ol, therefore marked “not sure” as the answer. Last but not least, 92% of the students have marked the correct answer for question 16, which was related to the proton-deuterium exchange reaction.

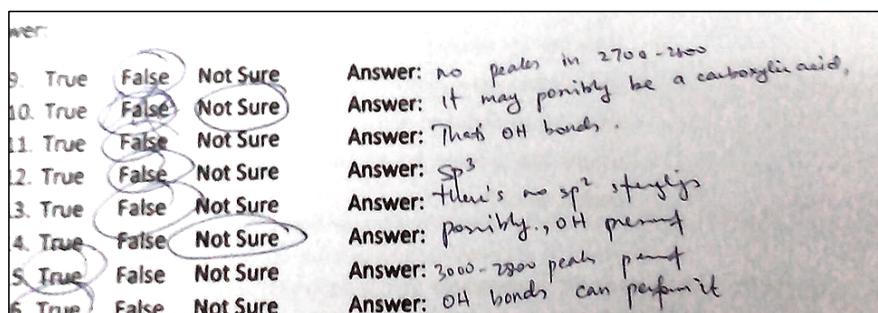


Figure 4. One of the students' answer to case study 2 in the UIT activity

Table 2  
Students' response to the statements in case study 2

Statements	Number of individuals		
	True	False	Not Sure
9. Compound X is an aldehyde compound.	12	78*	0
10. Compound X is an alcohol compound.	84*	2	4
11. The broad and singlet signal at $3427\text{ cm}^{-1}$ is due to the presence of tertiary amine.	8	82*	0
12. The IR absorption at $2957-2871\text{ cm}^{-1}$ is due to the $sp^2$ C-H stretching	23	77*	0
13. The benzene substituent is present in compound X	18	72*	0
14. The compound X is hept <sup>1</sup> -ol.	4	0	86*
15. The compound X possess $sp^3$ carbon.	79*	11	0
16. Compound X is capable to undergo the hydrogen-deuterium exchange reaction.	83*	7	0

\*correct answers

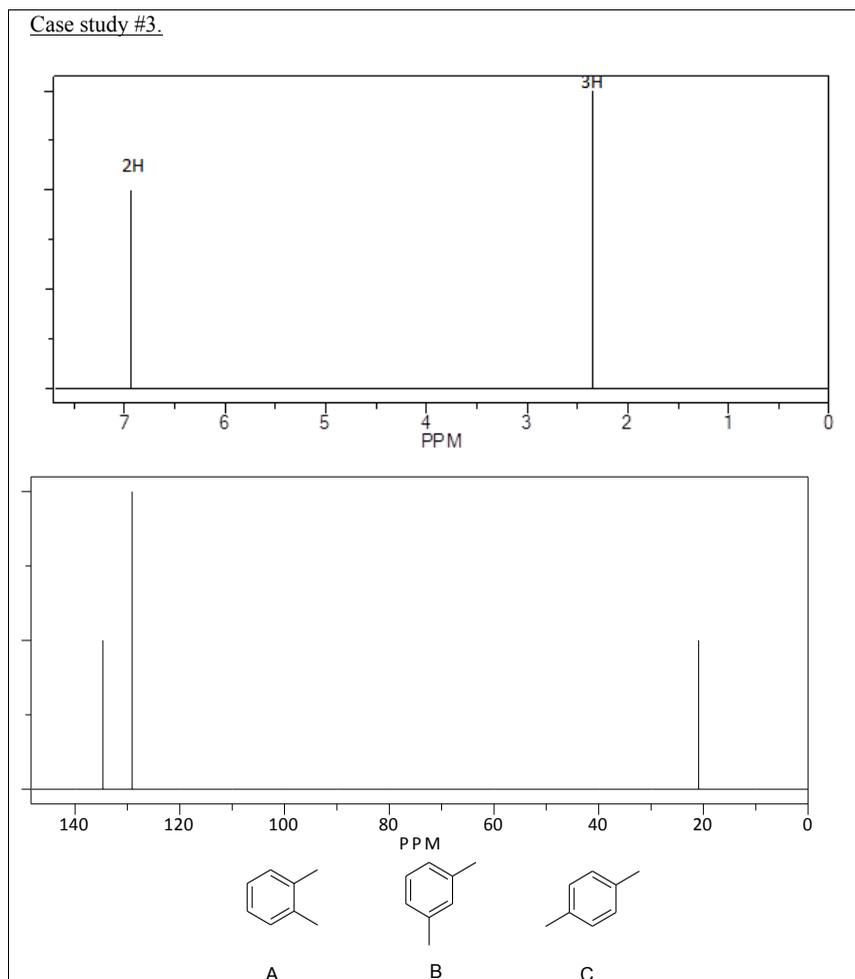


Figure 5.  $^1\text{H}$  and  $^{13}\text{C}$ -NMR spectra of Compound Y

In case study 3 (Figure 5), 10 statements were formed based on the  $^1\text{H}$ - and  $^{13}\text{C}$ -NMR spectroscopy chapter and students need to have prior knowledge on this topic before answering these statements. Undoubtedly, all A, B and C structures possess at least a plane of symmetry, therefore the correct answer for question 25 is “true”. Based on Table 3, 98% of the students marked the correct answer for this question. For questions 17 to 22, students’ basic understanding in organic

chemistry was examined, which required them to identify the number of plane of symmetry and relate this to the number of different magnetic environment of proton and carbon in structures A to C. The number of different magnetic environment of proton for structures A to C are 3, 4 and 2 respectively, thus statements 17 to 19 are true. Students who have marked the correct answer were recorded to be at 76%, 81% and 91% respectively, as reflected in their

answer scripts together with the appropriate explanation to their answers. On the other hand, 73%, 78% and 74% of the students have clear understanding of the number of different magnetic environment of carbon in structures A to C (statements 20 to 22), which are 3, 5 and 4 respectively. On the contrary, students did not have difficulty in choosing the correct answers for questions 23 and 24, as indicated by the fact that 79% and 98% of the students' answers were correct. Finally, based on the information

in the spectra, students were asked to match the correct structure to the spectra provided (statement 26). It was promising to note that 84% of the students marked the correct answer. Overall, students gave a good appreciation to the objective of the UIT activity in the organic spectroscopy course, which was to enable them to revise their basic knowledge, recall and to apply previous knowledge in problem solving. Figure 6 shows one of the student's sample answers for case study 3.

Table 3  
Students' response to the statements in case study 3

Statements	Number of individuals		
	True	False	Not Sure
17. Structure C has two different magnetic environment of protons in the <sup>1</sup> H-NMR.	68*	22	0
18. Structure B has four different magnetic environment of protons in the <sup>1</sup> H-NMR.	73*	27	0
19. Structure A has three different magnetic environment of protons in the <sup>1</sup> H-NMR.	82*	8	0
20. In the <sup>13</sup> C-NMR, structure C has three magnetic environment of carbons including non-protonated carbons.	66*	24	0
21. In the <sup>13</sup> C-NMR, structure B has three magnetic environment of carbons including non-protonated carbons.	20	70*	0
22. In the <sup>13</sup> C-NMR, structure A has three magnetic environment of carbons including non-protonated carbons.	24	66*	0
23. Structure B and C can be distinguished using NMR spectroscopy.	71*	29	0
24. The <sup>1</sup> H-NMR spectrum of compound Y shows the presence of methyl signals.	88*	2	0
25. All the structures A, B and C possess at least a plane of symmetry.	87*	3	0
26. The <sup>1</sup> H- and <sup>13</sup> C-NMR spectrums of compound Y match with the structure of B.	14	76*	0

\*correct answers

Question	True	False	Not Sure	Answer
17.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Answer: only 2 H-environment, then symmetry
18.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Answer: as shown in figure
19.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Answer: "
20.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Answer: "
21.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Answer: There's 5, as shown in figure
22.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Answer: There's 4 "
23.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Answer: They show different number of signals.
24.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Answer: 3H group present
25.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Answer: as shown in figures
26.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Answer: it's C, because 13C time shows 3 signals not 5. if shows 2 H environment, not 4.

Give your comment about how this activity helps you to learn about organic spectroscopy.

Figure 6. A student's sample answer for case study 3

### Analysis on Students' Reflective Writing

Prior to the commencement of this activity, the author has thought about using pre- and post-testing which would ideally be a good measurement or assessment to gauge student's understanding before and after the administration of UIT in the organic spectroscopy course. However, considering the fact that there was only one organic spectroscopy class, with no other similar course taught in parallel by the same lecturer or by the author's colleagues during the same period, the pre- and post-testing offers little useful information in our study if there is no control group. In contrast, the author has employed reflective writing as a tool to understand students' perspective on this activity. It is imperative for students to have self-realization that they are responsible in their own learning by active participation, understand the changes in their learning under the intervention and the progress they made by reflecting deeply on this activity. The pre- and post-testing would only allow the researchers to keep the growth and

challenges to themselves most of the time. The analysis should also be made valuable to both researchers and students. In this case, by having students to submit a reflective writing, students are able to reflect about their own learning progress, strengths, weaknesses and celebrate their growth. The author believed that a reflective writing would allow students to be more confident in their ability to learn.

Students' feedback on the UIT activity in the spectroscopy course was analyzed and a systemic network (Figure 7) was formed in an attempt to learn about the benefits of the UIT activity towards students' learning. In Figure 7, students' feedback was analyzed and categorized based on Bloom's taxonomy. In the cognitive domain, 8 students responded that the UIT activity have benefited them in previous knowledge recall (C1), such as revision on the previous knowledge associated with MS, IR and NMR. It was noteworthy that 37 students responded that this activity enabled them to think deeply in the concepts associated

with IR, MS and NMR and to apply them in problem solving (C2). On the other hand, two students have benefited in developing thinking skills which enhanced their decision making (C3). Undoubtedly, one needs to be equipped with a strong basic understanding of a subject, recall and to apply it in problem solving.

In the affective domain, students who participated in this activity were motivated as reflected in 27 students' reflective writing (A1). Three students experienced joy in studying the organic spectroscopy course incorporated with the UIT activity (A2). In the group learning domain, three students have benefited from their peers (peer learning) (G1). Finally, this activity has positively aided two students to study independently as reflected in their reflective

writing (G2). Figure 8 shows a student's reflective writing on the implemented UIT activity and some students' comments on the UIT activity are included as follows:

*It is helpful to get better understanding of this organic spectroscopy course. To think critically to get an accurate answer.*

*This activity gives me flash back memories of what I've learnt in chapter 1, as well as other chapters too.*

*Managed to perform problem solving by discussing with fellow friends.*

*This activity enables me to improve my thinking skills and apply all the skills that I learnt to determine a chemical structure.*

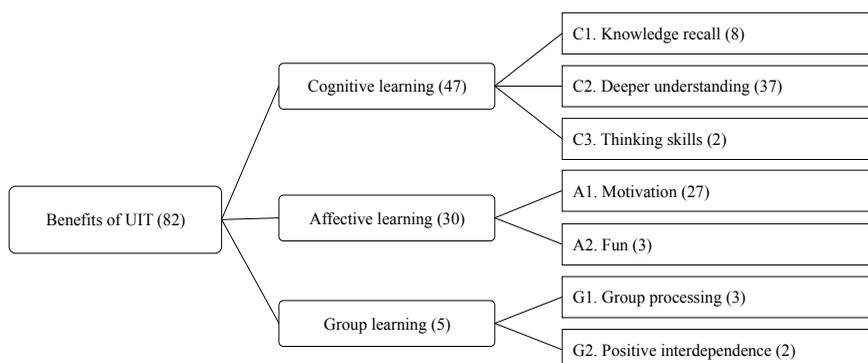


Figure 7. Students' feedback on the UIT activity as represented by the network diagram

*This activity really helps me a lot in understanding concept that being applied. Plus, it is also fun to think more critical to ~~have~~ get the answer.*

Figure 8. A sample of student's reflective writing towards the implemented UIT activity in the organic spectroscopy course

## CONCLUSION

Three case studies associated with the MS, IR and NMR lessons were directed to students to reinforce their basic understanding in these topics. Through the incorporation of UIT activity in the classroom teaching of organic spectroscopy course, it has promoted several positive learning outcomes, which includes a deeper understanding of a concept, improved thinking skills, motivated to study, fun-filled learning, peer learning and autonomous learning. It has also helped students to revise on their basic understanding in the organic spectroscopy course and monitor their learning progress, as reflected in their reflective writing. The current study has proved that UIT can be applied not only in the teaching of basic organic chemistry but also in promoting understanding in organic spectroscopy. This will further encouraged the use of UIT in the teaching of other subjects.

## ACKNOWLEDGEMENT

The authors would like to extend their acknowledgement to Universiti Malaysia Terengganu and also to the students who participated in this activity.

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## **EFL Advanced Adult Learners' Use of English Modals in Narrative Composition**

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### **ABSTRACT**

This study was conducted to investigate the use of modals in narrative writing of English for foreign advanced adult learners. This study had two objectives: first, to determine the distribution pattern of modals and, second, to see if the participants used the modals accurately in their compositions. This was a learner corpus study, based on students' writings. The participants in this research were 136 randomly selected adult advanced learners attending English learning programs in six English institutions in Shiraz, Iran. The data used in this study were obtained from the written data consisting of compositions, which volunteers need to write. The study applied the qualitative method, which was supplemented with some descriptive statistics from a concordance. The WordSmith Tools, Version 4.0, was used for the purpose of this research. It was found that there were some discrepancies in the frequency of modals used by native speakers and the ones used by our EFL advanced students. In addition, students were rather competent in producing modals syntactically but simplification features were also detected in these learners' compositions as a means to overcome their limitations in using modals in English.

*Keywords:* EFL learners, Corpus linguistics, Discourse analysis, Narrative writing

### **ARTICLE INFO**

*Article history:*

Received: 05 September 2016

Accepted: 18 July 2017

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### **INTRODUCTION**

Learners having problems in writing may encounter a number of difficulties in various facets of writing, including the appropriate use of grammar, punctuation, capitalization, spelling, and some other basic and initial aspects of writing (Ghabool, Edwina, &

Kashef, 2012). In this research, however, modals have been chosen as one of the most problematic grammatical items. These problematic features of modals, as mentioned by some researchers and linguists (Celce-Murcia & Larsen-Freeman, 1983; Hoyer, 1997; Thornbury 1999; Wong, 1983), are attributed to a number of factors, including the forms and semantic functions of modals, the deficiency of a thorough description of their pragmatic use in grammar books, especially textbook materials, teachers' lack of proper knowledge of conveying modals to students, and, finally, the lack of learners' exposure to the matter.

Concerning their form and meaning, modals play a crucial role in learners' language application. However, literature has revealed the fact that ESL/EFL students encounter difficulties in terms of comprehending and applying the English modal system correctly (Khojasteh, 2011; Khojasteh & Kafipour, 2012a, 2012b). The problem lies in the surface locations of the modals, their wide range of meanings, and in associating the right modals with the right meanings (Cook, 1978). Wong (1983) also says that the English language system of modal auxiliaries is so complex that the same modals are utilized in order to express various notions of "possibility," "certainty," "probability," "ability," "obligation," "permission" and "inclination." Besides, although the modals are often used to make requests or offers, or express obligation, necessity, etc., their semantic complexities have posed a challenge to both semantic theory (Boyd & Thorne, 1969; Marino,

1973) and descriptive grammar (Palmer, 1965; Quirk, Greenbaum, Leech, & Svartvik, 1985).

As evident from the above discussion, not only modal forms, but also their semantic functions are troublesome for teachers, particularly when they try to convey knowledge on modals to their ESL students (Palmer, 1990). This fact might have been emphasized by previous pieces of research, which concluded that textbooks do not precisely exhibit modals (Hyland, 1994; McEnery & Kifle, 2002). In short, modal auxiliaries are considered difficult structures for learners that have often been misconceived in English language textbooks. Furthermore, Hyland (1994) offers the following conclusions: "For the most part, modal expressions are simply introduced without system or comment and are summarily dealt with in a single exercise which fails to emphasize either their function or importance. Generally, the range of modal verbs addressed and the information provided on their use is inadequate" (p. 247). Moreover, according to Wong (1983), another reason that makes learning modals difficult for learners may be the learners' limited exposure to various modal verbs and their applications, leading to an excessive use by teachers of one form or function in comparison with others. Since modal auxiliaries are very difficult, they are more likely to be specifically impacted by the input and instruction quality learners receive on them (Khojasteh & Reinders, 2013).

In order to mitigate the uneasiness regarding the use of modals, conducting a corpus-based study on learners' production may meet the ends of language teaching. Such a study will be able to push learners toward a standardized form of language use and communicative competence. Moreover, if the major purpose of EFL teaching is for learners to communicate effectively and accurately, it is of utmost importance for them to be exposed to the full set of meanings that focal modals can have. As such, Mukundan and Khojasteh (2011) advocated the significance of learners' exposure to different modal phrase structures so that they can effectively communicate in various situations.

It is vital to undertake this research since: a) textbook writers might provide learners with incorrect information regarding the range of modal language available to them; b) many grammarians and applied linguistic researchers emphasize the fact that modal auxiliary verbs are considered one of the most problematic structures to be used by second and foreign language learners and to be taught by teachers whose first language is not English; and c) students' abilities to understand and use modals appropriately play an important role in their academic success, and, finally; d) despite their obvious importance, there has been surprisingly little research on errors learners make while using the language in Iran.

Consequently, the current study was conducted to determine the distribution pattern of modals. Additionally, the researchers attempted to find out whether

participants used the modals accurately with respect to their syntactic features in their compositions. This corpus-based study is an attempt to provide researchers with an overview of the difficulties the learners' encounter while using modals auxiliaries. Thus, the following research questions were posed:

1. What are the usage patterns of modal auxiliaries by advanced adult EFL learners of English?
2. What types of errors do advanced adult learners of English make in their use of modal auxiliaries?

## LITERATURE REVIEW

Tenuta, Oliveira and Orfanó (2012) in Brazil, in a comparative study, analyzed the application of modal auxiliaries between a learner corpus of Brazilian Learners of English (CABrI) and the Louvain Corpus of Native English Essays (LOCNESS). CABrI consists of academic essays written by advanced students from the Liberal Arts course. Till the date of the investigation, CABrI included around 36,187 words. The Louvain Corpus of Native English Essays contains essays written by American and British speakers, ranging from academic to literary texts. The selected texts for composing the sub-corpus belonged to the American argumentative section. The LOCNESS sub-corpus used in this study contained 60,241 words. The result of analysis showed the predominance of epistemic modals in both corpora, with differences in the expression of this type of modality. In the corpus of non-native

speakers, there was a greater variety of modal verbs, whereas in the corpus of native speakers, there was predominance of adverbs with modal meanings.

In a study by Manaf (2007) in Malaysia, the use of modals was investigated in two written tasks by Form 4 Malaysian secondary school ESL learners. This study was done with the purpose of examining English modal utilization at the syntactic and semantic levels. The data for this study was made available by the EMAS Corpus. The results demonstrated that the two modals, *would* and *shall*, which were not required in the syllabus, were found in the narrative compositions. The secondary school English Language syllabus indicated the attribution of distinct meanings to the modals; however, the study revealed that the students frequently applied only a few similar modals for these various functions. The outcome of the study revealed insufficiencies in the syllabus as reason students encountered problems.

Kader, Beigi and Vaseghi (2013) applied Form 4 and college students' argumentative compositions, which were extracted from the Malaysian Corpus of Students' Argumentative Writing (MCSAW). The population for this study was drawn from Malaysian ESL learners. The corpus for this study included 406,500 running words (tokens), which were picked to determine the utility of English modals regarding their functions and frequency. A total of 1,010 students (404 males and 606 females) wrote compositions. In order to analyze the collected data, this research made use

of discourse analysis and some descriptive statistics using WordSmith Tools, Version 4.0. The results of the study showed that, in argumentative compositions, Form 4 and College students used *can* and *will* more frequently compared to the other modals. In addition, the results revealed greater use of the present tense form of modals than their past tense form. Finally, it was also shown that the most frequently applied modals in Form 4 and College students' compositions were the modals of "ability." For the sake of teaching and learning improvement and an effective application of modal auxiliaries among ESL learners, all the central modals must be emphasized repetitively to enhance students' perception of modal functions.

Mukundan, Saadullah, Ismail, and Zasenawi (2013) studied the use of modals in argumentative written tasks among Form 5 Malaysian secondary school ESL students. The data used in this study was gathered from the MCSAW (Malaysian Corpus of Students' Argumentative Writing) Corpus. The corpus consists of 406,500 running words (tokens). The compositions were written by 1010 students. The sample size of the sub-corpus was determined in accordance with Krejcie and Morgan (1970). The purpose of the study was to investigate the application of English modals at the syntactic level from data presented in the MCSAW Corpus. The research was conducted using a qualitative technique through discourse analysis, assisted by a concordant descriptive statistics. The research findings exhibited that Malaysian students did not have much problem utilizing

modal verbs grammatically in argumentative writing. It was also found that Malaysian students tend to use a lot of modals in their writings, allowing the conclusion that in spite of semantic incorrectness majority of students could use syntactically accurate modals in their statements.

Viana (2006) was concerned with the use of modals in compositions by Brazilian advanced EFL learners. To this end, compositions written in English were collected from three private language schools situated in six different parts of the city of Rio de Janeiro, Brazil. As the study focused only on advanced students, only those who were attending the last two terms in each of the three language courses were selected as participants. The collected compositions varied greatly in terms of their length. The shortest one had 112 words and the longest, 478 (average 288 words). As the research corpus was compared to the academic prose register studied by Biber, Johansson, Leech, Conrad and Finegan (1999), the divergence became apparent, with findings indicating that the participants wrote in a non-proficient way, contradicting previous expectations.

McDouall (2015) argued that, although searching into the L2 acquisition of modality was usual, there are few studies about the L2 acquisition of English modal auxiliaries for adult Korean learners. Through a corpus-based study, he attempted to fill this gap by determining how English modal auxiliaries are applied by adult learners of English with a Korean L1 background (L2-learners).

To this end, two corpora were used: a) the Sookmyung University Corpus of Advanced L2 English (SMU corpus), compiled by Bill Rago of Sookmyunh University, in Seoul, and b) the Yonsei University Corpus of L2 English at intermediate level (Yonsei corpus), compiled at Yonsei University in Wonju. The corpora were collected by collating soft-copies of assignments which learners completed in their course. The SMU corpus consisted of written assignments by Korean graduate students completing an MA in TESOL at Sookmyung Women's University, while the Yonsei corpus consisted of written assignments by Korean undergraduate students completing lower-intermediate to upper-intermediate conversation and writing courses. The Corpus of Contemporary American English (Davies, 2008) was used as a reference. A part of written academic English by speakers of American English consisting of almost 86 million words was, in particular, employed for comparison. The tools used to examine the SMU and Yonsei corpora were AntConc 3.2.4w, and the Stanford POS tagger. The study suggested a qualitative interpretation of the data, referring to typological distinctions which existed between usage of modals which influence modal application, and cognitive factors which influence adult SLA of English and Korean systems.

Khojasteh and Reinders (2013) pointed out that modal auxiliary verbs (e.g. could, might) were cases of a problematic structure for many learners. They were both

particularly complex semantically and there was no one-to-one correspondence with the students' L1, especially in the context of Malaysian learners. In other words, they are good examples of a structure for which successful acquisition depends to a large extent on the quality of the input and instruction. Their study analyzed 230,000 word corpora of Malaysian English textbooks and showed that the relative frequency of the modals differed with that of the native speaker corpora (e.g. with British National Corpus, hereafter BNC). Khojasteh and Reinders (2013) also compared the learner corpus of Malaysian Form 4 learners with the textbook corpus and concluded that no direct relationship existed between the frequency of presentation of modal auxiliaries in the textbooks and their use by students in their writing. They also reported presence of a very large percentage of errors in their written work.

## **METHODOLOGY**

### **Design**

The design of this research is discourse analysis using qualitative techniques to: a) identify the forms depicted by modals; and b) find out whether the modals used are accurate syntactically and whether students are using other alternatives in instances where modals are absent or inappropriately used. The research was supplemented with descriptive statistics derived from a concordance in order to identify the distribution of modals used by students in writing.

### **Participants**

As mentioned earlier, this is a learner corpus study based on students' writing. The participants in this research were 136 randomly selected adult advanced learners attending English learning programs in six English institutions in Shiraz. Participation in this research project was voluntary. Students of all classes were given a volunteer sign-up sheet to acknowledge willingness to participate.

### **Instrument**

The WordSmith Tools, Version 4.0, consisting of Concord, WordList, and Keywords was used in this research. Another instrument used in this study was the students' narrative writings. In order to build this learner corpus, each student's composition was typed carefully and converted into a Tagged Image File (TIF) format. The files were then saved and put through the Optical Character Recognition (OCR) software which converted all TIF files into text files (.txt). The .txt files were then saved and renamed according to the individual student's compositions. These .txt files were then analysed using WordSmith.

### **Data Collection Procedure**

The purpose of this study is to detect, understand and gain insight into how EFL students used modals in their written work. Data was obtained from the written compositions. Furthermore, since the occurrence of tenses and aspects in a discourse are likely to be influenced by

its genre (Lenko-Szymanska, 2007), the decision to choose narratives—both fiction and non-fiction— allows for wider scope in investigating modal auxiliaries used in the past and present tenses. Therefore, “The Happiest Day of My Life” was chosen as a topic as it gave students a choice to either describe a non-fictional happy day or write a piece of fiction, in the form of a short story. It is important to note that all the compositions were written in the classroom (without using a dictionary) under the supervision of the students’ English teacher and one of the researchers of this study.

#### Data Analysis Procedure

For the first research question, “What are the usage patterns of modal auxiliaries used by advanced adult learners of English?”, the frequency count was obtained by keying in nine central modals for the grammatical data to be further analyzed. For the second research question, “What types of errors do advanced adult learners of English make in their use of modal auxiliaries?”, the researchers only focused on the grammatical accuracies and inaccuracies in the sentences constructed with modals by the EFL advanced learners. This analysis was based on the framework adopted by Mindt (1995):

- (a) Modal + bare infinitive (e.g. We will miss you)
- (b) Modal + passive infinitive (e.g. It will be published)
- (c) Modal + progressive infinitive (e.g. You’ll not be seeing him anymore)
- (d) Modal + perfect infinitive (e.g. The total population will have increased)
- (e) Modal + perfect passive infinitive (e.g. No harm will have been done)

Based on the above-mentioned structures, the researchers coded the occurrence of each modal auxiliary. Code was assigned for *C* (Accurate Syntactically) and *In* (Inaccurate Syntactically). This can be seen in the sample shot below which shows the accurate and inaccurate coding of the modal *can*. After coding, which in itself was analytical, the researchers undertook several additional steps. These steps, too, were taken within the framework of the research question. At first, the findings identified during the coding were summarized and then the patterns were identified and articulated. Then, these patterns were compared and contrasted with the results of major corpus-based findings on modal verb phrase structures such as Kennedy’s (2002), and Mindt’s (2000, 1995).

N	Concordance	Set	Tag	Word #	t	#	os	#	os	#	os	File	%
1	years ago. When my father told me you can enter to your favorite school. That	22	1	2%	0	6%	0	6%	0	6%	0	g:\note\97.txt	25%
2	day in your life. I become happy that can help another person. Time of that my	10	1	7%	0	0%	0	0%	0	0%	0	g:\note\92.txt	20%
3	god and I may become happy. And I can hear sounds my emotion.	152	10	0%	0	7%	0	7%	0	7%	0	g:\note\90.txt	96%
4	He might not be alive any more. I can talk with my god and I may become	140	9	3%	0	0%	0	0%	0	0%	0	g:\note\90.txt	89%
5	into water and saved him. Then he can breathe. He might not be alive any	130	8	0%	0	3%	0	3%	0	3%	0	g:\note\90.txt	82%
6	more. I know that I can do my job and I can be a doctor I am happy and if I study	21	1	1%	0	3%	0	3%	0	3%	0	g:\note\90.txt	13%
7	be pessimistic any more. I know that I can do my job and I can be a doctor I am	15	1	1%	0	0%	0	0%	0	0%	0	g:\note\90.txt	10%
8	future. So by achieving to their wishes I can thank them for every thing. But I	87	6	4%	0	6%	0	6%	0	6%	0	g:\note\9.txt	83%
9	life. And when I become a dentist and I can get my first salary I could help to	29	2	3%	0	9%	0	9%	0	9%	0	g:\note\9.txt	28%
10	If I pass in university entrance exam I can be a successful person. It is the	8	0	7%	0	8%	0	8%	0	8%	0	g:\note\9.txt	8%
11	I have not a lot of days like that, so I can speak about this in summer or in	19	0	0%	0	7%	0	7%	0	7%	0	g:\note\89.txt	15%
12	I go to the very good university. When I can make my mother happy. Because	18	1	0%	0	1%	0	1%	0	1%	0	g:\note\87.txt	22%
13	them! Tomorrow we went swim. I can not forget this note and may be my	84	9	1%	0	8%	0	8%	0	8%	0	g:\note\86.txt	89%
14	We won't be the same as each other. I can not possible. We should think to	73	6	0%	0	0%	0	0%	0	0%	0	g:\note\85.txt	68%
15	I don't have any hope in my life... I can not say my feeling I might impose	42	2	4%	0	4%	0	4%	0	4%	0	g:\note\83.txt	68%
16	son was born I became so happy and I can not forge that day. Babies are gift	11	0	3%	0	4%	0	4%	0	4%	0	g:\note\81.txt	12%
17	the big test I have more free time and I can doing more thing in free times & the	98	6	2%	0	4%	0	4%	0	4%	0	g:\note\80.txt	73%
18	The nearest day in the future that I can mention, is the day that I graduate	30	2	3%	0	3%	0	3%	0	3%	0	g:\note\80.txt	23%
19	a day that I finish my education then I can do what ever I want to do.	128	7	2%	0	4%	0	4%	0	4%	0	g:\note\8.txt	95%
20	leave this boring country. You know if I can go to the other country I will be	102	7	5%	0	5%	0	5%	0	5%	0	g:\note\8.txt	77%
21	in my whole life. The other thing that can make me happy is leaving Iran. I	78	5	0%	0	7%	0	7%	0	7%	0	g:\note\6.txt	58%
22	don't study. I want to find a day that I can have some time to get some rest. If I	44	3	9%	0	2%	0	2%	0	2%	0	g:\note\6.txt	30%

Figure 1. The snapshot of search result for modal “can”

### Inter-rater Reliability

Reliability has been defined as the extent to which a measuring procedure yields the same results following repeated trials (Carmines & Zeller, 1979). When a coding system is applied by a human coder in content analysis, Neuendorf (2002) believes that at least one more coder is required to provide validation of the coding scheme. The criteria for choosing a coder for this study was the fact that this study was chiefly concerned with grammatical aspects, requiring, as a coder, an experienced English teacher who had mastery over grammar. Hence, in this study a reliable coder was chosen to work on the corpus besides the researchers. The inter-coder reliability was checked with the Cohen Kappa coefficient, where higher values indicates better reliability. For this study, a TEFL PhD student at Tehran University, with more than nine years of experience in teaching English, was chosen. He was the most qualified person for this academic task because he taught writing and analyzed different grammatical aspects

in students' compositions at the Master's and PhD levels.

The analysis of coding took two months for the inter-coder to code the entire data. Once the coding was done, SPSS was run to calculate the Kappa value. By convention, a Kappa > 0.70 is considered an acceptable inter-rater reliability. The Kappa value for modal verb phrase structures was 100% and for semantic functions 90%.

### RESULTS

The analysis of data is explained in detail below according to the research questions.

#### Research Question One

What are the usage patterns of modal auxiliaries used by advanced adult learners of English?

For this question, the researchers first keyed in nine modal auxiliary verbs including their negative forms one by one to study their distribution within EFL advanced learner corpus.

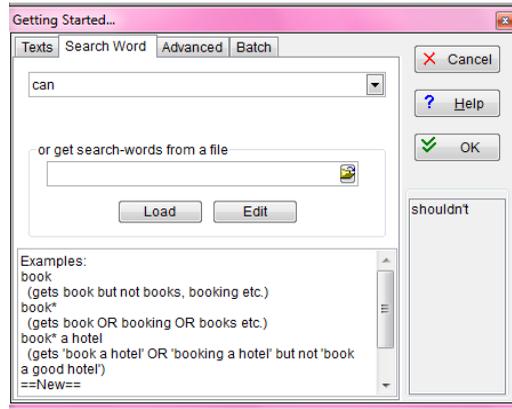


Figure 2. The snapshot of Search word “can”

The modal auxiliary can was keyed in (Figure 2) and then the negated forms cannot, and can't were tagged, as seen in the sample shot below (Figure 3). As shown,

in the case of modal can, there were only 25 instances of the modal can not although this kind of spelling is not the preferred one. There were no instances of the modal can't.

N	Concordance	Set	Tag	Word #	# of	# of	# of	# of	File	%
1	was so boring. I hate this days you can not trust nobody and nothing. All	N		21	2.8%	0.2%	0.2%	0.2%	g:\note\39.txt	19%
2	you never think they will go and you can not be with them forever. Being with	N		121	4.0%	0.8%	0.8%	0.8%	g:\note\46.txt	88%
3	So it might dangerous for us. We can not understood what they want to	N		86	6.0%	0.3%	0.3%	0.3%	g:\note\45.txt	84%
4	grand father opened his eyes and we can not imagine he got better. That day	N		81	9.7%	0.5%	0.5%	0.5%	g:\note\30.txt	85%
5	I can not say! Student in this situation can not answer this question! What can	N		9	1.0%	0.7%	0.7%	0.7%	g:\note\8.txt	7%
6	We won't be the same as each other. It can not possible. We should think to	N		73	6.0%	0.0%	0.0%	0.0%	g:\note\85.txt	68%
7	learning how to drive is so hard and I can not learn it. One day I decided to	N		31	2.2%	0.9%	0.9%	0.9%	g:\note\24.txt	27%
8	I saw imam reza I become very happy. I can not said anything because I always	N		10	1.1%	0.7%	0.7%	0.7%	g:\note\31.txt	15%
9	I don't have any hope in my life... I can not say my feeling I might improve	N		42	2.4%	0.4%	0.4%	0.4%	g:\note\83.txt	68%
10	I can not say! Student in this situation ca	N		2	0.0%	0.1%	0.1%	0.1%	g:\note\8.txt	0%
11	something and I didn't know what now I can not trust no body i should think	N		40	2.3%	0.5%	0.5%	0.5%	g:\note\118.txt	34%
12	He knew that the things that I can not say them he could feel them	N		24	2.1%	0.9%	0.9%	0.9%	g:\note\71.txt	29%
13	son was born I became so happy and I can not forge that day. Babies are gift	N		11	0.3%	0.4%	0.4%	0.4%	g:\note\81.txt	12%
14	teacher that I have had up to now. I can not forget that day and my teacher	N		83	7.7%	0.5%	0.5%	0.5%	g:\note\4.txt	78%
15	and they walked in my neve. Actually I can not tolerated them any more our lov	N		44	2.1%	0.6%	0.6%	0.6%	g:\note\59.txt	55%
16	day will be my best day in my life and I can not wait for it.	N		104	4.7%	0.6%	0.6%	0.6%	g:\note\42.txt	96%
17	now I just work and work and work. I can not do whatever I did on those days.	N		72	6.7%	0.0%	0.0%	0.0%	g:\note\67.txt	89%
18	know why god created world I know I can not interfered to gods work but I am	N		54	4.1%	0.6%	0.6%	0.6%	g:\note\39.txt	56%
19	I could not see my parents tears. I can not talk or did nothing because I was	N		16	1.5%	0.5%	0.5%	0.5%	g:\note\36.txt	25%
20	I like to achieve to every thing may be i can not achieve to every thing. I do not	N		77	4.1%	0.2%	0.2%	0.2%	g:\note\2.txt	80%
21	better in future. now i'm writing these i can not imagine that i am so good.	N		98	1.3%	0.3%	0.3%	0.3%	g:\note\119.txt	93%
22	good partly I like win the game, but I can not win the game so I came to	N		73	3.9%	0.8%	0.8%	0.8%	g:\note\101.txt	77%
23	university. I won't afraid of somebody i can not let anybody make some	N		98	2.0%	0.5%	0.5%	0.5%	g:\note\118.txt	84%
24	them! Tomorrow we went swim. I can not forgot this note and may be my	N		84	9.1%	0.8%	0.8%	0.8%	g:\note\86.txt	89%
25	suddenly we understood that the car can not move so my father called	N		117	6.7%	0.2%	0.2%	0.2%	g:\note\50.txt	71%
26	That is so amazing. Believe me. you can try it. May be you accept my idea	N		78	7.1%	0.7%	0.7%	0.7%	g:\note\37.txt	86%
27	future. So by achieving to their wishes I can thank them for every thing. But I	N		87	6.4%	0.6%	0.6%	0.6%	g:\note\9.txt	83%
28	can be your best day in life and you can thank god for having good and health	N		69	1.5%	0.8%	0.8%	0.8%	g:\note\105.txt	78%
29	He might not be alive any more. I can talk with my god and I may become	N		140	9.3%	0.8%	0.8%	0.8%	g:\note\90.txt	89%
30	accepted in medical university. then I can take my degree and go to the	N		94	6.7%	0.8%	0.8%	0.8%	g:\note\7.txt	79%
31	for us. We went to the pool and can swam here. There was a water park	N		62	6.0%	0.3%	0.3%	0.3%	g:\note\3.txt	64%
32	day. I should accepted in university. I can study book more for accepting it.	N		21	3.3%	0.9%	0.9%	0.9%	g:\note\104.txt	49%

Figure 3. The snapshot of search result for modal “can”

The rest of the modals including their negation forms were keyed in one by one.

The results can be seen in the following table.

Table 1  
The distribution of modal auxiliary verbs in EFL learner corpus

Modal	Frequency	Total
Can	68	93
Cannot	25	
Can't	0	
Could	66	89
Could not	20	
Couldn't	3	
Will	73	78
Will not	1	
Won't	4	
Should	50	63
Should not	13	
Shouldn't	0	
Would	31	34
Would not	3	
Wouldn't	0	
May	28	32
May not	5	
Might	17	28
Might not	11	
Must	11	12
Must not	1	
Mustn't	0	
Shall	0	0
Shall not	0	

Table 1 shows in the descending order the modals used by EFL advanced students were *can* (93 instances), *could* (89), *will* (78), *should* (63), *would* (34), *may* (32), *might* (28), and *must* (12). Out of 9 modal auxiliaries, there was only the modal, shall, which has not been used even once by our EFL learners. It is worth mentioning that of all the negative forms, the most used modal is *can* with 25 instances, followed by *could* by 23 instances, *should* with 13, *might* with

11, *will* and *may* with 5, *would* with 3, and *must* with 1 instance.

## Research Question Two

What types of errors do advanced adult learners of English make in their use of modal auxiliaries?

To get to the root of the above classification in terms of EFL advanced learners, the researchers examined all the sentences in which there was a modal including the negation form to find the inaccurate verb form in each sentence. For example, in one of the sentences that one EFL advanced student wrote, "mashhad was a big city so we might lost some places", the researchers considered this as an inaccurate sentence and tagged it as IN (stands for inaccurate) in the concordance line in WordSmith software. Based on Mindt classification, the results are presented in the following table.

Table 2  
Distribution of syntactically accurate and inaccurate modals

Modals	Accurate	Inaccurate
Can/Cannot/can't	82	11
Will/ will not/ won't	63	15
Could/Could not/ couldn't	75	14
May/May not	27	5
Should/ should not/ shouldn't	52	11
Would/ would not/ wouldn't	32	2
must/ must not/ mustn't	10	2
Might/ might not	23	5
Shall/ shan't	0	0
Total	364	65

As it can be seen in the Table 2, 364 out of 429 modals used by EFL advanced students were syntactically accurate and 65 modals were syntactically inaccurate which make about 15.15% of the all the modal tokens that were used. This shows that Iranian advanced EFL students are somewhat competent in using modal verbs. However, when the errors are analyzed further, it was revealed that the majority of the errors occurred with the verb forms where the basic form of the verb should have been used after the modal verb. These errors can be seen in the following sample sentences.

- (1) May be I could accepted in Olympiad.
- (2) It might been a little strange for you, but my phone ring and they told me that I won a prize in the lottery.
- (3) I will liked to go to the Azad University but my father dislikes it.

So we can see here that this type of error is categorized into: modal + wrong verb forms: non-infinitives. 7 out of 11 errors made in the case of can were in this category. The other 4 errors belonged to this category: modal+ a non-verb word/ lack of verb.

This can be seen in the following sample sentences.

- (4) It can not possible.
- (5) I can no trust nobody.
- (6) think the characteristic of people can a good reason for being happy.

These two types of errors are also common in terms of other modals. For example, in terms of *will*, 11 of the errors belonged to modal + wrong verb forms: non-infinitives category and 4 of them again belonged to modal+ a non-verb word/ lack of verb category.

- (7) My sister is very clever and she will gets an important person for my work.
- (8) ... and I know it will comes as soon as my imagination.
- (9) I will happier than now.

Since the same is true in terms of other modals, there is an attempt to avoid repetition. . The researchers also checked on the kind of modals advanced EFL students used in each category related to Mindt's (1995) classification. The results are shown below.

Table 3  
*Result of syntactically accurate and inaccurate modals*

Modal	Type a Modal + bare inf	Type b Modal + passive inf	Type c Modal + progressive inf	Type d Modal + perfect inf	Type e Modal + perfect passive inf
Can	82	0	0	0	0
Will	67	0	0	0	0
Would	32	0	0	0	0
Could	87	0	0	0	0
Should	39	0	0	2	0
May	22	0	0	0	0
Must	8	0	0	0	0
Might	18	0	0	0	0
Shall	0	0	0	0	0

As it can be seen here, the only type that advanced EFL students have used in their sentences is “type a” which is Modal + bare infinitive. Only in the case of *should*, two instances were found in which EFL learners have used “type d” which is Modal + perfect infinitive. These two sentences are presented here:

(10) so I should have tried a lot.

(11) but I should have left my family and go to USA.

### SUMMARY AND DISCUSSION

The first item that looked at in analyzing modal auxiliary verbs was the distribution of nine modal auxiliary verbs in the advanced EFL corpus. This section summarizes the findings for this research question and discusses the results.

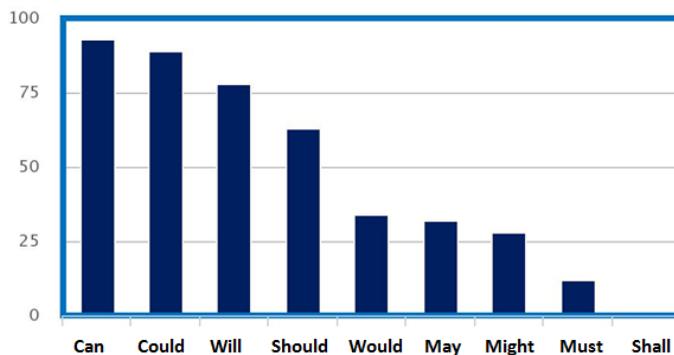


Figure 4. The frequency of modal auxiliaries

Figure 4 shows that, at the advanced level, EFL students are capable of using various modal forms (except *shall*) in their narrative compositions. There were altogether 429 instances of nine modals in this learner corpus. Of all, the modals *can*, *could*, *will* and *should* were the leading modals altogether used 323 times in advanced EFL learner's compositions, accounting for 75% of all modal tokens in this corpus. *Would*, *may* and *might* with 34, 32 and 28 hits were almost one-third of all modal tokens, accounting for 21%. *Must* (had 12 hits) and *shall* was not been even used once in this learner corpus. Considering the pairs of modal auxiliary verbs, the past tense was less frequent than their partners in all cases except for *shall/should*.

Although care should be taken when making comparisons between large corpora of native speakers and a small corpus, our findings are not consistent with the distribution usage of modals used by native speakers in the most famous reference corpora available. That is, British National Corpus (BNC), the corpus of Survey of English Usage (SEU), the Lancaster-Oslo/Bergen Corpus (LOB), and the Longman Grammar of Spoken and Written English corpus (LGSWE). However, it is worth mentioning that since the researchers did not have any access to these corpora, all the data available in the literature review regarding modal auxiliaries were used for the purpose of analysis. In the study conducted by Kennedy (2002) on modal auxiliaries in BNC, the four most used modals by native speakers were *will*, *would*, *can* and *could* in

narrative writing. Likewise, Coates (1983) reported that *would*, *will*, *can* and *could* accounted for 71.4% of all modals. Hence, the modal *would*, which is supposed to be one of the most frequent modals in written English, stands in the 5<sup>th</sup> place, with only 34 stances. In contrast, we see that *could* has been overused by advanced EFL learners because its usage should come only after *will*, *would* and *can*. The distribution of other modals were compared with Quirk Greenbaum, Leech, and Svartvik (1985, p. 136) and Coates (1983) and is presented here in descending order: *will*, *would*, *can*, *could*, *should*, *must*, *may*, *might* and *shall*. In which case, the modal *should* has also been overused by our EFL learners, when it should have been underused as done by native speakers. The discrepancy between the ways in which advanced level learners in Iran have used modals is consistent with the results of Khojasteh and Reinders (2013) regarding Malaysian advanced level learners.

The data also showed that EFL advanced learners preferred to use present tense modals than the past form. This finding is supported by Biber et al. (2002), who report that present tense modals are more frequent than their counterparts except in the case of *should*. Mindt (1995) claimed that *should*, the past tense of *shall*, is used more in writing. Taking the modals' semantic functions into account, however, the degree of "probability" in the case of modal *could* is more prevalent than *can*. In the two sentences, "She *can* go" and "She *could* go (if she wants to)", the degree

of “probability” of *could* is greater than *can*. This pragmatic function should have been acquired by the time English learners reached advanced levels (Vethamani, Manaf & Akbari, 2008). However, since the difference in the use of *can* and *could* was found to be negligible in this study, we can perhaps assume that advanced students are not far behind in using the modal *could* compared to *can*.

Studying the type of errors advanced EFL students made in their compositions with regard to modal auxiliaries showed that at the syntactic level, students did not have major problems producing modals. This result is supported by Mukundan, Saadullah, Ismail, and Zasenawi (2013), who found that Malaysian Master’s students did not have much difficulty in producing grammatically correct modals. In another study, by Vethamani et al. (2008), the same conclusion was reached, indicating that students at higher levels were able to use various modals in their narrative compositions. However, what emerged from this finding is that except for two instances (*should*), all other modals were used in “type a” (Modal + bare infinitive). Thus suggesting that the absence of too many errors by advanced EFL students should not be considered as a promising result because an avoidance strategy may have accounted for low frequency of errors. Wong (1983) refers to this as a simplification technique by which ESL learners use alternatives to overcome their inadequacy in L2 in relation to the use of modals. Oxford (1990) supports this view, indicating

that L2 learners adopt certain strategies to overcome their limitations in learning a second language. The adoption of strategies is due to the students’ motivation to learn a second language and find alternatives faced with obstacles in their learning process. Moreover, the use of strategies indicates conscious learning and students’ awareness of the learning process (Kafipour et al., 2010, 2011). This phenomenon accelerates learning as supported by a study conducted by Manaf (2007) on Malaysian students.

## CONCLUSION

This study had two objectives: to determine the distribution pattern of modals, and examine whether participants used the modals accurately in their compositions. The researchers aimed to study the difficulties that advanced EFL learners could encounter while using modal auxiliaries. The results for the first objective showed that there were some discrepancies in the frequency of modals used by native speakers and the ones used by advanced EFL students. For example, *would*, which is one of the most frequently used modals by native speakers, was not used frequently by our learners. Accordingly, we can say that the use of modal auxiliary verbs in our learners’ compositions do not really represent their use in natural English. To see the type of errors students made in their composition regarding modal auxiliaries, the researchers found that students were rather competent in producing modals syntactically although simplification features were also detected in these learners’ compositions.

## IMPLICATION OF THE STUDY

With regard to modal auxiliaries, the results of this learner corpus study revealed how advanced EFL students used modal auxiliaries in their narrative compositions. The process would ultimately help teachers to make the best use of a textbook's strong points and recognize the shortcomings of certain exercises, tasks, and entire texts. Furthermore, when one modal auxiliary is introduced to students, teachers should make sure that the modal is featured repetitively in order to enhance the students' understanding before it fades away from their memories. The results of this study can help EFL teachers make sure their advanced students, who represent proficient English learners, are competent enough to write English fluently, especially in academic settings. Textbook writers, too can benefit from the results of this study when designing and planning their lessons for EFL learners.

## SUGGESTIONS FOR FURTHER STUDIES

The following recommendations are proposed. It is recommended that a larger corpus should be made from all the learners from various proficiency levels. In view of the fact that constructing a corpus is a very tedious and difficult task, it is suggested to strengthen teamwork. In addition it is suggested students' voices be tape-recorded in English language classes to prepare a spoken corpus as well. In this way, many comparative analyses can be made regarding any grammatical feature used in spoken and written English.

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## **The Role of *Secure Base* and *Safe Haven*: A Means of Re-constructing the Broken-Self in Yvonne Vera's *Under the Tongue***

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### **ABSTRACT**

Yvonne Vera is certainly the most successful and imaginative female novelist to emerge from Zimbabwe and conceivably one of the most significant writers of Africa. Her prose is valued for its characteristic lyricism and its lightness of touch which paradoxically highlight silenced and weighty realities of life. Being a Zimbabwean, she has directly experienced generational trauma of colonial oppression, horrors of guerrilla war and brutal killings of civilians in post-independence era. In 1990s, researchers have worked on trauma studies focusing on the sufferings of Whites like in the Holocaust and war veterans of Vietnam but less attention has been paid to the sufferings of black women. This study endeavours to locate Vera's texts within the theoretical debates of trauma studies. I intend to focus on Yvonne Vera's *Under the Tongue* (1996) which is about a sexual assault of a pre-adolescent girl by her own father, written against the backdrop of severe guerrilla warfare against colonialism. It aims to analyse the recovery of the protagonist in light of John Bowlby's Attachment Theory. This research will strive to study the role of *secure base* and *safe haven* which function as a mean of re-constructing the broken-self of the protagonist. In certain cases, nature or religion helps the healing process of the individual but the paper will

establish how affectionate attachment figures have comforting, healing and therapeutic effects on the suffering individual. This will in turn help to reconstruct the broken-self and enable the survivor to face the society with confidence.

*Keywords:* Secure base, safe haven, trauma, attachment, pain, women, words

### **ARTICLE INFO**

#### *Article history:*

Received: 29 September 2016

Accepted: 27 April 2017

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## INTRODUCTION TO ATTACHMENT THEORY

Attachment is a profound and enduring emotional bond that connects one person to another regardless of time and space. It is characterised by a particular behaviour in children who search for an attachment figure when troubled or endangered. John Bowlby analysed the effects of hospitalisation on children orphaned during World War II. He concluded that an early disruption in the mother-child dyad is a significant contributor to subsequent psychical disorders in these adults. A child is able to cope with the outside world when he knows that he has a protective and nurturing parent or caregiver. Without an attachment figure, he suffers serious psychological and social impairment. To recognise the importance of intimacy, Bowlby wrote, "Attachment theory regards the propensity to make intimate emotional bonds to particular individuals as a basic component of human nature, already present in germinal form in the neonate and continuing through adult life into old age" (1988, *A Secure Base*, 120–121). He contradicted behavioural theory which suggests that attachment is simply a learned behaviour. This theory proposed that attachment is the result of feeding relationship between child and caregiver. A caregiver feeds a child and provides nourishment, which is why the child becomes attached to her. On the contrary, Bowlby observed that food does not diminish distress and anxiety experienced by children when they are separated from their primary caregivers. Instead, he found

that it is love, care and attention which a child needs. In later life, as an adult, it helps him to make socio-emotional adjustments and build psychological resilience in the face of impersonal and interpersonal trauma.

Bowlby believed that attachment which begins at infancy continues throughout life. An infant first establishes a strong attachment with its primary caregiver which then becomes a *secure base* and *safe haven* for him to explore. Exploration is essential to development for it promotes learning about the environment and the social world. Yet, the world can be both fascinating and alarming. Secure ones are confident in their ability to explore because their experience suggests that in case of danger a sensitive and responsive caregiver will be there to comfort them. So, he walks around with confidence. He enjoys being independent, but when independency becomes too overwhelming he returns to secure base and safe haven. Providing a safe haven includes being available to the victim, giving space and time for open communication, showing interest in the problems, worries, anxieties of the other. Moreover, in giving reassurance and moral support, making him feel worthy and sustaining physical closeness besides warmth in times of need. Bowlby claimed that human beings are born with an innate psychobiological system which motivates them to seek closeness to attachment figures. Interactions with attachment figures that are sensitive and responsive to their calls for help promote a stable sense of attachment security and build positive mental representations of self and others.

But if the attachment figure is not reliable and/or supportive, proximity seeking fails to relieve distress. Attachment security is undermined, thus leading to negative models of self and others. Then there are chances of other emotional problems which may hinder the acquisition of skills. In *Maternal Care and Mental Health* Bowlby asserted that, “essential for mental health is that the infant and young child should experience a warm, intimate, and continuous relationship with his mother (or mother-substitute), in which both find satisfaction and enjoyment” (1951, 67).

## BACKGROUND

Yvonne Vera (1964-2005), the author of five novels and a collection of short stories, was a popular speaker at many European conferences and recipient of several awards. She was born and raised by educated parents against the backdrop of uncertain colonialism and vicious guerrilla warfare in 1970's Rhodesia. She saw men go off to war never to return while women struggle to survive in a society where being a woman is a challenge in itself; for it is a society where she is frequently ignored and mistreated at worst. Vera was only fifteen when the guerrilla armies overthrew the colonizers and Zimbabwe was born. Unlike her predecessors, her focus shifted from grand narratives of national history and heroic struggle of men to private experiences of women. Her third novel, *Under the Tongue* (1996), deals with pain of three generations of women who are betrayed neither by enemy nor by unknown

men but by the men of the house. *Under the Tongue* won first prize in the Zimbabwe Publishers' Literary Awards, was awarded the 1997 Commonwealth Writers' Prize (Africa region), and two years later won the prestigious Swedish literary award “The Voice of Africa”.

Vera's fiction has no narrative movement, no plot development, and no character portrayal in the conventional sense; social and political upheavals are highlighted which form the context of her fiction. There is endless repetition of words, short sentences and consistent imagery but framed from varied angles. Singular images are built up into extended metaphors. She deliberately resists clear-cut meaning as she has the courage to tackle taboo subjects of “violence, rape, incest, and suicide, and the collective terror of racism, tribalism, and war, all wicked invasions of the land and women's bodies, dismemberment of memory, and betrayal of the future” (Zezeza, 2007, 14).

## METHODOLOGY

The study will depend on the method of using the conceptual framework of safe haven and secure base selected from Attachment Trauma Theory to focus on analysing some intrinsic aspects of psychological trauma alongside to reveal how the character struggles to come out of trauma with the help of safe haven and secure base. References from critical articles will be made to elucidate how affectionate attachment figures help the distressed protagonist in the process of recovery.

## DISCUSSION

*Under the Tongue* (1996) is a novel of trauma. It opens with an image of a *tongue* which is not associated with speech but with life and tears. The tongue is dead and dry, buried deep under rock. The softness of the tongue is contrasted with the heaviness of the rock. The stone is not above the tongue but “buried in [her] mouth, carried under [her] tongue” (121). The protagonist painfully continues, “My voice has forgotten me” (121) and “the fact that Zhizha has no voice is a textual paradox since the narrative comes directly from her and is her narrative discourse, though a silent one. At times, her discourse seems to be an interior monologue, displaying many oral traits such as repetition and piling” (Ortega-Guzmán, 2007, 106). Not only her mother but her grandmother also provides her a secure base and becomes a safe haven as she consoles her in every possible way; the grandmother says that a person has many tongues, which lie inside one’s mouth. If one tongue has stopped responding then another can be used. She tries to absorb all the fears of the grandchild within herself. The grandmother, being an attachment figure who has an enduring emotional bond with the granddaughter, motivates the child to touch the sky, to achieve the impossible and hopes that their “voices reach the sky with their crying; rain will fall and cover the earth” (122). She is certain that nature will respond to their cries and will purify the child with rain water. She pushes her to “touch the sky even if it is so far way. We cannot fear our silence, our desire, our release” (122). Like a

true healer she carries “all [Zhizha’s] sorrow of yesterday” (122) and motivates her to “choose words” to bury the grief (131).

She consoles Zhizha and tells her that pain is common to all women. It is a universal dilemma for it is in their fate to withstand “the many wounds women endure” (122). Grandmother encourages Zhizha to speak because she believes that words help “to bury our grief” (131) but unfortunately “her characters often lack the means to articulate their desires” (Brendt, 2009, 129). Zhizha must confide her sorrows for only by doing so, she will find release. Words borne of sorrows are “the wisdom of her heart” (133). Only in this way she can celebrate “the moment of birth” (131) and “defeat death and silence” (131). The living room is empty, the only thing that is there in the room is the *basket* which has no egg in it but has “words [to] be shelled and tossed” (137). The grandmother is trying to make her realize that “the best words are those that are shared and embraced, those that give birth to other words” (137).

Grandmother cites female gender as an example and says that a woman cannot pinpoint the source of pain because it is here and there. A “woman finds her sorrow in her dream and everywhere” (162). Vera’s compelling narrative portrays the acute pain that pervades women’s daily existence. It extends from the workings of the imagination to the daily process of living (Norridge, 2012, 26). The old woman is no more than a shadow but still Zhizha finds her very supportive as she feels that she is “lifting [her] from the ground, raising [her]

high” (162). She is spending her days and nights with Zhizha to soothe her broken psyche. She sings songs to Zhizha, but tears start dropping from her eyes. Her songs are born in old places where now no organic life exists. These are originated in ancient lands “where the sun no longer rises or sets” (162). She tells her grandchild that sorrows of women are ageless and timeless; sorrows are so obvious that a woman does not need to speak of them because a “woman’s cry is naked like birth; there is nothing to hide it” (162). She says that rivers of tears flow where women gather, but she ends on a hopeful note “that morning will arrive even in such a place” (163). Nature is kind to all. Like night is regularly replaced by morning with fresh hope and optimism; similarly sorrows also stay for a certain period of time. While talking about the limitations of women-folk she says, “We have no mouth” (163). They dare not air their grievances which might help them to survive. They have to cover thorny passages and step onto hostile ground in order to survive. She compares living with dead, saying that those who have left this world are better off, for the sorrows of life cannot touch them. The grandmother wants Zhizha to understand that she is young, and has much life ahead of her; so “[g]randmother’s narratives are not just placebos for the suffering girl childhood, but a transmission of positively utopian possibilities that transcend the ennui and enervation induced by an implacable oppression” (Muponde, 2007, 39). She shares her life experiences with Zhizha in order to reassure her that she does not

suffer alone; there are others too who have been abused and violated. In this novel, women of three generations suffer so much mental anguish that they “have become strangers to sleep and [their] day[s] ha[ve] no beginning or end” (153). She adds that just as smoke makes everything hazy and unclear, similarly sorrow also blinds vision. Sorrow becomes so overwhelming that it comes in between everything they see and everything they do. These sorrows are like cries moving not in linear direction but they move in circles. Accepting all these facts, the grandmother soothes herself and reassures the two suffering females by saying, “these are the things for forgetting not remembering” (154). Despite life’s hardships, one has to move on. She reiterates that sorrows cannot be hidden. They are so visible and obvious hence they have to be buried beneath the earth like the dead otherwise they will putrefy. She has gone through much pain but the sorrows of her daughter and granddaughter aggravate her agony.

Her grandmother’s wise counsel and loving embrace make Zhizha feel safe and loved. On finding her disintegrated, she folds arms around her to embrace all her sorrows. The grandmother weeps for Zhizha and her own painful past. She tries to wash away Zhizha’s pain with her tears, which come straight from heart through her eyes. She tells her that a woman loses her identity as soon as she is born into this world and becomes as insignificant as a branch of a tree or a grain of sand. Grains of sand are innumerable, they do not have

any importance if taken individually, and branches of tree bear the heat of the sun but provide shade to others. Through these two metaphors, the grandmother suggests that women as individuals hold no importance in patriarchal society so they have to raise their voice collectively in order to be heard; and it is also within their nature to withstand heat themselves and provide cool shade to others. Visual symbols entwine with the structure of the text. Discussing the aesthetics of Vera's novels Norridge (2013) writes, "This quest for meaning, the search for narrative thread in the face of free-floating words and images, inconsistencies and gaps in chronology, reflects the real person in pain's quest to make sense of their own story's confusions" (2013, 33).

Pain is one of the most complex realities of life. It is deep rooted but invisible. It has no substantial existence but at the same time it is as big as a tree which grows in a mouth. It is watered by tears of humanity but is as dark and unsubstantial as a shadow is. Grandmother feels that the present pain and loss, when her daughter is arrested and taken away by the police, is greater than all the previous pains she has borne in the past. She does not know when her daughter will be released or reunited with her. This breaks her; she has become tired of this worldly life for "she finds her present sorrow large and waiting" (164). Grandmother represents the archetype of woman whose sorrows are as old as hills, rivers and rocks. This pain of losing her daughter uproots and devastates her. She feels as if she has fallen down with a crash. Her hair has grown white not

because of her age but because of the salt of her tears. The grandmother, though old and mature, searches for her secure base and safe haven. She remembers her family and cries for help, "where is my clan and my people?" (165). Nature too seems to respond to her painful state of mind as it starts raining. The raindrops soothe and comfort her. They have liberating and life-giving energy in them. Though she is going through such a painful state of mind which renders her voiceless, and made her as dead and lifeless as a stone is, yet her "eyes are bright with longing" (165). This longing signifies hope for a better tomorrow which will end their vicious cycle of pain and liberate them. Grandmother is appealing to the Higher Reality with "hands cupped, arms raised, head bowed and eyes closed" (165). Raindrops soothe grandmother's pain which she silently bears hidden under the tongue.

Later it is seen that a transformation in grandmother's thought takes place. Earlier she has been comparing woman to a branch of a tree for it bears heat and provides shade to others but later on she says that "women are children" (173) because they are as innocent and vulnerable as children are. She realizes that women cannot be compared to trees because trees have many branches but women are born with limitations. Another difference between trees and women is that trees are firmly rooted to the ground while women have no firm basis. They can be uprooted by people around them, but the advantage which a woman enjoys over a tree is that she has a tongue with which she can relate her dreams of future and memories of

the past. Another difference between a tree and a woman is that a tree is watered while a woman's tears are an outlet to express her various emotions. No matter what the circumstances are, a woman is born with an indomitable will to move on. Though the "path has many thorns ... this path is narrow ..." (173) but she has to carry on. Circumstances and seasons may change, but women have to endure many difficulties in the journey of life. The grandmother questions the silence of women. She says women who are blessed with tongues should use them to fight for their rights. A woman is not a tree whose fruit falls on the ground and rots. A woman can go to the extent of killing her husband if he has victimized her child. She imparts these words of wisdom to the younger generation. She declares "a woman must not swallow her tears. A woman is not a tree" (175). Vera feels that these words could only be conveyed and understood by the silently suffering female gender. Women sometimes try to bury their sorrows in far off places which they promise never to visit but when a fresh sorrow comes into their lives then "a woman will return to a place she thought had become a memory" (175). Words have the propensity to convey pain but if a woman does not speak of her pain, and then it will become as big as a tree, with its roots reaching the depths of soul.

Zhizha senses her grandmother's grief. She finds her broken and shattered so wants to comfort her. When she finds that the shadow of sorrow has swallowed grandmother then she takes a decision: "I do not cry" (181). She tries to withhold

the hidden word within her mouth. She wishes to pick up a "ray of light and spread it across her forehead" (181) but is unable to do so. She is too young, hence has no idea how to do it but her decision to not cry is a positive one as it will help her to heal, and also facilitate the healing of her mother and grandmother. She takes this positive decision because she has been brought up by a mother who has provided her with a *secure attachment* which is why she is trying to regain her lost confidence; though the situation is too overwhelming to accept.

Gunner and Kortenaar opine that, "For Vera protagonists, there are no havens where one does not have to think and feel. There is no escape from the body in pain" (2007, 4), but I strongly refute this idea. Zhizha recovers because of her closeness to her grandmother who is her secure base and safe haven, the one who listens to her "silence and her dreams" (182). Grandmother recounts Zhizha's birth and recalls how she has buried her incapacitated son, a memory of which is an extremely painful and unforgettable reality of her life. She had frantically prayed for the healthy life of son but was devastated when he died and she had to bury the child with her own hands. Her bereavement led to attachment trauma that further intensified when her husband spurned and humiliated her for giving birth to a sick son. Grandmother has not forgotten her son and still feels his presence around her. This painful episode revealed the true face of her husband who taunted and insulted her instead of supporting her. Zhizha listens as grandmother recounts

her painful past and comes to realize how grandmother, who is broken from inside, still lends her emotional and physical support when she “sleeps beside” her (193). She expresses her extreme love for her and professes that Zhizha is closer to her than her own daughter. She then sings a beautiful and touching lullaby for Zhizha and offers her shoulder to rest her head on it. Though Zhizha’s face is wet with tears, but the grandmother ignores her tears and says that her face is bright and beautiful.

Grandmother not only consoles the granddaughter but her daughter too, who seeks support from her secure base and safe haven after murdering her husband. She consoles her daughter through tender facial expressions “saying many unspoken things which the mouth cannot carry” (151). Their closeness to each other negates the need for language for she does not need the support of language to give expression to her feelings. Her silence details her husband’s murder. There is dead silence in the room yet “they speak and speak” (151). The grandmother knows that after going through such a horrific incident, her daughter must be feeling very thirsty, so she gives her some water to drink. Her daughter is trembling due to extreme shock so she drinks water as if she has been thirsty for years. She “speaks and speaks” (151), in language of silence, which grandmother listens with full empathy. The Grandmother wants the daughter to know that she will always be there as her secure base and safe haven, “to hear the unspoken things of her mouth” (151). She feels her daughter’s

trauma. It appears as if the mother of Zhizha has brought eternal and untold sorrow upon the whole family. This crisis only serves to deepen all the sorrows of the past and reopen old wounds which they have tried so hard to forget. The mother of Zhizha regrets her action but later justifies her guilt by saying, “I am silent. Just silence to speak of my silence against the husband who is not a man but a lizard with a rotting stomach” (152).

Generational trauma borne by the female gender is explicitly described by the grandmother in these words “of the many places, the many sorrows, the many wounds women endure” (122-123) and, “our tears are as old as the daughters and mothers and grandmothers of our ancient earth...” (132). Her expressions are like a soothing balm on the wounds of all women irrespective of race or age. Vera has “steadfastly endeavoured to imagine the emotional and psychological lives of Zimbabwean women and to disclose the histories of violation and brutality responsible for their silences” (Kostelac, 2010, 76). I assert that the lap of grandmother has become a secure base and safe haven — an essential requirement for the re-construction of the broken-self of the traumatized person.

Zhizha, in her extreme pain, searches for her *mother*, but cannot find her. Though she is being fully taken care of by the grandmother, she still remembers and misses her mother whom she regards as her moon. Bowlby also thinks that mother-child dyad is significant in reducing the emotional turmoil of the suffering child. Grandmother consoles her by saying that her mother is around so

she need not be afraid of anything. Zhizha's mother supports the daughter by killing the husband who had sexually violated their daughter, the memory of which "bursts from the sky, explodes in sharp piercing rays, burning, like flame" (142). The wise counsel of her safe haven will help Zhizha to heal her psychic and physical wounds. Zhizha is also mired in the memory of her violation as she ceaselessly remembers the darkness of the night, the sharpness of the knife and the harshness of the rock. Driver says, "Vera's language not only transforms the dead past into a living past but also allows the past to call insistently to the present for the continual reinterpretation of both" (2007, 116). The mother of Zhizha does not feel triumphant after killing her husband; on the contrary, nothing made sense to her numbed mind. Zhizha is haunted by the sight of her grief-stricken mother, whose "voice [is] shattered, hidden, swallowed by the ground" (150). Zhizha wants to show her wounds to her mother but the mother discourages the child from doing so because she feels that Zhizha is too young to understand the implications of her abduction. Words alone cannot explain Zhizha's scars and wounds. All she can do is "only sorrow and forgetting" (180). Vera's characters "inhabit a liminal, interstitial space, caught at various points between life and death, speech and silence, identity and its negation" (Kostelac, 2007, 124). Both mother and daughter are connected through the loss of voice after the most shocking incidents of their lives. Mother's *silence* and *shattered* state are testimony to her pain. Murray (2010)

identifies that Vera's continuous return to bodies as the loci of both psychic and physical pain constitutes part of her attempt to overcome the difficulties of writing about pain, trauma and violence. The mother compares the dead man to a lizard with a rotting stomach and to a hen which chases its own shadow mindlessly. He has stolen the cool light of the moon. He has deceived his family like a traitor who throws a handful of dust onto his own clan. He has brought shame to the whole family—the forefathers as well as the future generations.

Zhizha's disturbed mental state causes her to hear her mother's calling even in her sleep. She cries for her secure base and safe haven for she knows that only these two mother figures can restore her psychic balance. She says, "I cry to my mother frantically, saying, I remember my forgotten world. I remember the pain in my growing. I remember my stolen dawn. I cried in the voice of my mother and my grandmother. I remember my hidden world..." (200). Kopf says, "Zhizha's 'I' moves to and fro in endless shiftings and displacements, the boundaries of her 'self' are indistinct and permeable" (2005, 248). Zhizha remembers her mother teaching English vowels in front of a mirror. Zhizha feels blessed with a new life when her mother returns from the prison. She feels rejuvenated by her "endless warmth" "brilliant growing love" "radiance of her eyes" (202). On her return, the mother tells her daughter that she also used to see her in her dreams. They laugh heartily and rejoice in their closeness. The mother again teaches Zhizha to phonate

English vowels for she strongly believes “[we] live with words” (203). The mother, in this novel, plays a dual role. She has come in search of her secure base and safe haven; she also becomes a secure base and safe haven for her daughter. The writer stresses the importance of secure base and safe haven in a mother-child relationship, “We grow together even when we are apart. We belong together” (208). Distance cannot affect the relationship of a mother and a child because their relationship starts before the birth of a child and it grows with time. Zhizha feels guilty for the pain she has caused to her mother, yet she also knows that she cannot survive without her mother when she says, “I long for her never to depart” (218).

The mother becomes her secure base and safe haven as she comforts and consoles the broken Zhizha. She sings a lullaby to soothe Zhizha’s restless soul. She calls her *light* to restore her self-esteem and to bring her back to normal life. The novel begins with the following lines: “A tongue which no longer lives, no longer weeps. It is buried beneath rock. My tongue is a river. I touch my tongue in search of places of my growing” (121). These lines speak of silence which has engulfed Zhizha, but with consolation, love and care from the two attachment figures, a transformation takes place within her as she says, “Under the tongue are hidden voices. Under the tongue is a healing silence” (163). She then tries to train herself to remain silent, a silence which is different from the former one. Earlier, she has lost her voice after the traumatic experience but now she wears this silence as

a sign of maturity which is passed onto her by the experienced members of the family. She wants to stay in this period of silence to experience the “joy” of “forgetfulness” (182). This will make her strong to face the people of the community with confidence.

The mother consoles the injured child by reminding her of their strong bond which precedes her relationship with the rest of the world. The event of her birth is related to her in detail. To emphasize the strength of their bond, the mother says that they both cry in similar manner. Zhizha hears her mother very lovingly saying, “I have seen you, my daughter, I will always be near” (200). Thus, she re-assures her availability and reiterates that she will always stand beside her. The concept of secure base and safe haven comes in as Zhizha says “lapping gently. My mother” (201). The secure base and safe haven in Bowlby’s Attachment Theory signify the lap of a mother or care-giver and here Zhizha uses the word *lapping* to emphasize the warmth and security which she feels on the return of her mother. She not only feels elated but calm too. The mother plays the role of a psychotherapist as she constantly assures and reassures her daughter of her love and support in order to make her feel important and confident. She reassures her that she is not alone and should not feel alienated. She calls her the beauty of the earth. The mother claims to know the secrets of her sleep; she has intensely enjoyed her innocent laughter. She reassures her that she has full life ahead; she has many bright dawns waiting for her, all carrying messages

of hope. But hope is still accompanied by a restlessness which mother, by her therapeutic treatment, will ease away. She reminisces about Zhizha's birth, how she cried for the first time and how both mother and grandmother were there to take care of her. They held her close to give her a sense of belonging. She continues her consolation by saying "You are strong, Zhizha, you are my daughter so strong" (208). These words are spoken by the mother to strengthen the broken child who has been weakened by a physical assault of that very person who was expected to protect her. Zhizha wishes for the presence of the attachment figure to be permanently with her as she "desires no portions and fragments of her living" (218) because she believes that only her consistent presence can protect her against social alienation and loneliness.

The mother's love for her daughter imbues confidence within the silent child, so she resolutely takes a decision to remain firm and bear the sorrow, as she says, "I do not cry" (181). The child's self-affirmation will support her to discover her lost integrity. Eventually, with the help of safe haven and secure base, she comes out of trauma—a state which had rendered her sleepless and voiceless.

## CONCLUSION

*Under the Tongue* is a novel of trauma that embraces three generations of women: the affected child, the severely shocked mother and the consoling grandmother. The

writer's narrative aims to portray how "the two women join forces in the protagonist's rebirth" (Jean-Charles, 2014, 46). Both the mother and the grandmother soothe, console and comfort Zhizha by reassuring her that just as they have been doing so, they will continue to be her secure base and safe haven. Their laps have become secure bases and safe havens, an essential condition for healing Zhizha's trauma and reconstructing her broken-self. The warm and comforting laps of mother and grandmother offer great fortitude to the fragmented soul.

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## **Exploring Factors for Pedestrian Fatalities at Junctions in Malaysia**

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### **ABSTRACT**

Over the years, pedestrians are seen as one of the most susceptible road user groups in Malaysia, although their involvement in road accidents has decreased. Using the national accident data from 2009 to 2013, this study applies logistic regression model to explore the factors associated with pedestrian fatalities at road junctions. Among the four factors identified to be behind pedestrian deaths include age, injuries sustained to their head or neck, involvement of heavy vehicles, and location of accidents. Results of this study show that the likelihood of a pedestrian being killed in an accident may increase by 5.6 times when struck by a heavy vehicle. In addition, the probability of death increases to 8.7 times in the event a pedestrian sustains injuries to the head or neck following an accident.

*Keywords:* Pedestrian, accidents, logistic model, Malaysia

### **INTRODUCTION**

Road accidents is a major public health concern in Malaysia where there had been a total of 66,296 fatalities from 2005 to 2014 (PDRM, 2014). Although various road users (car drivers, motorcyclists,

pillion passengers, etc.) are involved in road accidents, pedestrians or people going on foot have been identified as the most vulnerable group of road users in the country. Travelling sans the protection of vehicle body or safety helmet can result in death or severe injury.

The severity of the injury sustained by a pedestrian depends on type of vehicle, impact speed, the size of vehicle, age of the pedestrian, as well as his/her height (World Health Organization, 2013). According to Rosén and Sander (2009), the risk of pedestrian death in an accident correlates

#### **ARTICLE INFO**

*Article history:*

Received: 29 September 2016

Accepted: 05 April 2017

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with the vehicle impact speed. The probability of road fatality will also increase when a pedestrian is struck by a heavy vehicle (Aziz et al., 2013). But at the same time, even collision with small vehicles such as motorcycle may likely result in death to a pedestrian (de Vasconcellos, 2013).

Investigating the factors that lead to road fatalities remains a matter of national importance in Malaysia where the mortality

rate of pedestrians is the third highest after motorcyclists and car drivers (PDRM, 2014). Existing accident record shows a decreasing trend from 2004 until 2014 (see Figure 1). As seen in the figure, the total number of pedestrian injuries in 2004 was 3980 to decline by 66% (1356) in 2014. Nevertheless, the number of pedestrian fatalities has shown little signs of improvement.

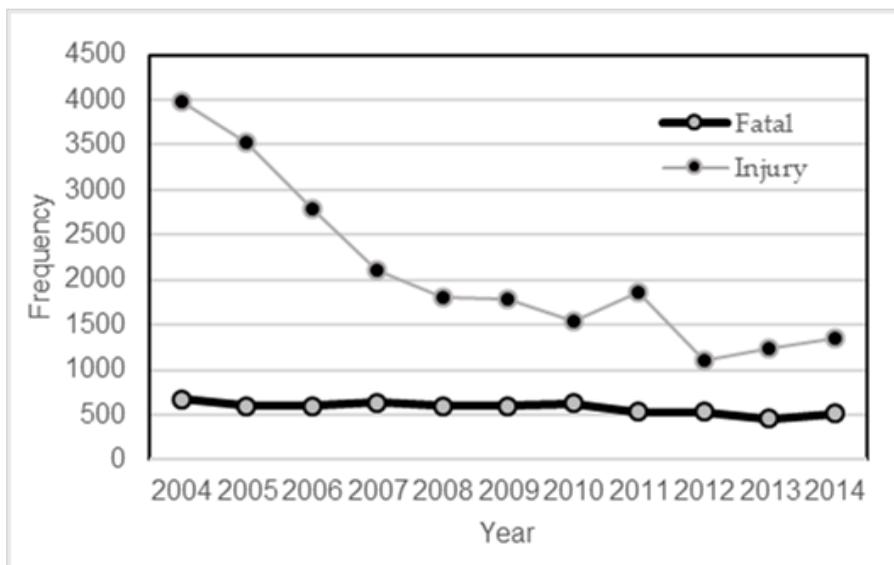


Figure 1. Pedestrian accidents in Malaysia  
Source. PDRM (2014)

Analysing existing accident data using statistical method has been used by previous researchers to investigate the relationship between injury severity and its contributing factors. Kong and Yang (2010), and Sze and Wong (2007) have successfully applied the logistic model to analyse pedestrian injury severity in China, Hong Kong, and Washington. A study using the logistic model

was done to analyse the effect of factors associated with risk among pedestrians (Olszewski et al., 2015; Rosén & Sander, 2009). This study aims to investigate the relationship between pedestrian fatalities in Malaysia and its influencing factors using accident data. The focus is on pedestrian accidents occurring at cross junction or T/Y junction types.

## METHODS

### Data

Data from 2009-2013 obtained from the MIROS Road Accident Database and Analysis System (MROADS) was used. The data consists of accident case, vehicle information, and pedestrian injury profile. The accident case data provided information on accident location, date, time, traffic system (one way or two ways), road type, control type, type of location (urban or rural) etc. Data on vehicle information provided information on the type of vehicles, model, ownership, manufactured year, driver information, license status and much more. While the injury profiles of pedestrian victims provided insights on demography, age, gender, part of body injured and severity.

The initial data was filtered to only include pedestrian accidents that occurred either at 3 or 4 legs junction. The 4 legs junction is referred as the cross junction, while the 3 legs junction is referred as T/Y junction. Data were excluded if the observed data was coded as 'damage only' case since pedestrian was not injured though was involved in the accident. Observations with inadequate variables used for the model and redundant coding were also excluded. This results in 325 observations of pedestrian accidents selected for the final dataset.

### Statistical Model

Logistic regression was applied in this study to examine the relationship between pedestrian fatality and its associated factors.

The method of maximum likelihood is used to estimate the parameters of the logistic regression (Kutner et al., 2005). This method was found to suit the data well, since the outcome of inspection will always be categorical, either pass or fail. In this content, the pedestrian fatality as the categorical dependent variable is measured on a dichotomous scale either 0 or 1, which indicate fatal or non-fatal.

When  $Y_i$  is binary, with probabilities of success,  $\pi$  and probability of failure is  $1-\pi$ , then  $Y_i$  is a Bernoulli random variable with  $E(Y_i) = \pi$ . Since the distribution of the error term  $\varepsilon_i$  depends on Bernoulli distribution of the response  $Y_i$ , then the simple logistic regression takes the following form:

$$E(Y_i) = \pi_i = \frac{\exp(X'_i\beta)}{1 + \exp(X'_i\beta)} \quad (1)$$

The relationship between pedestrian fatality as the dependent variable and its contributing factors as independent variables is estimated using logistic regression. Logistic regression models are a powerful, flexible tool to examine the range of different effects and conditions related to safety. The effect of each independent variable on the dependent variable is expressed as an odds ratio in logistic regression, analysed using IBM SPSS Statistics. The odds ratio is equal to the  $\text{Exp}(\beta_i)$ .

## RESULTS AND DISCUSSION

### Pedestrian Accidents at Junctions

Within a five-year period, a total of 325 pedestrian accidents at either cross of T/Y junctions were recorded. Table 1 provides

the summary of pedestrian accidents at junctions in Malaysia with respect to the final dataset used in the model. About 25% of pedestrian accidents occurring at junctions were fatal. The incidence of pedestrian accidents at junctions was higher in the south and in Sabah/Sarawak/Labuan compared to other parts of the country. The proportion was higher during the day compared to night time with or without light and dry road conditions. Most of the pedestrian accidents at junctions are not hit and run cases, and the involvement of heavy vehicles is also low (10.8%). The occurrence of pedestrian accidents was higher at T/Y type junction, with the two-way flow, where the junction is signalised, and located in the rural area. A lower proportion of pedestrian accidents at junctions was observed among

female pedestrians, and where a high percentage took place among pedestrians aged between 6 to 15 years.

### Model Results

To examine the relationship between pedestrian fatalities and contributing factors, the logistic model was fitted to the final dataset. The Hosmer-Lemeshow goodness of fit test indicates the model is satisfactory fit the observed data. A non-significant value of Hosmer-Lemeshow (in this study,  $p = 0.193$ , with degrees of freedom,  $d.f = 8$ ), showed the model fits the data well. Another measurement, higher value of Nagelkerke R squared also indicates that model fits the observed data better, in this study the value is 0.423.

Table 1  
*Characteristic of pedestrian accidents at junctions (2009-2013)*

Variables	Attributes	N	Percentage (%)
Injury	Fatal	84	25.8
	Non-fatal (serious and light injury)	241	74.2
Region	South	77	23.7
	North	60	18.5
	East	54	16.6
	Central	59	18.2
	Sabah/Sarawak/Labuan	75	23.1
Light condition	Day	237	72.9
	Night with light	67	20.6
	Night without light	21	6.5
Road surface condition	Dry	306	94.2
	Wet	19	5.8
Hit and run case	Yes	14	4.3
	No	311	95.7
Vehicle type	Heavy vehicles (bus and lorry)	35	10.8
	Others	290	89.2

Table 1 (continue)

Junction Type	Cross junction	105	32.3
	T/Y junction	220	67.7
Traffic flow	One way	55	16.9
	Two way	270	83.1
Junction Control type	Signalised	32	9.8
	Without signal	293	90.2
Junction Location	City/urban	94	28.9
	Built up area	75	23.1
	Rural	156	48.0
Gender	Male	211	64.9
	Female	114	35.1
Part of body injured	Head/neck	97	29.8
	Others	228	70.2
	0-5	21	6.5
	6-10	50	15.4
	11-15	30	9.2
	16-20	22	6.8
	21-25	19	5.8
	26-30	21	6.5
	31-35	15	4.6
	36-40	8	2.5
	41-45	17	5.2
	46-50	12	3.7
	51-55	17	5.2
	56-60	17	5.2
	61-65	15	4.6
	66-70	20	6.2
71-75	14	4.3	
76-80	9	2.8	
81-85	12	3.7	
86-91	6	1.8	

The effect of factors contributing to pedestrian fatality is measured by the odds ratio, where a value greater than 1 indicates that the concerned factor leads to higher risk of fatality. The fatality odds ratios calculated using a logistic model for each independent

variable is listed in Table 2. Results indicated that 4 factors were statistically significant: pedestrian age, head and neck injury, and heavy vehicles at the  $p < 0.05$  and type of junction at the  $p < 0.1$ .

Table 2  
Odds ratio

Attributes	Reference category	Odds ratio (95% CI)
Night with light	Day	1.468 (0.449-4.803)
Night without light	Dry	2.152 (0.573-8.090)
	Wet	0.769 (0.210-2.811)
Hit and run case	Not hit & run	1.126 (0.224-5.663)
Heavy vehicle (bus and lorry)	Other vehicles	5.653 (2.198-14.541)**
Cross junction	T/Y junction	0.497 (0.243-1.014)*
One way	Two way	0.514 (0.206-1.278)
With Signal	No signal	0.911 (0.282-2.940)
City/urban	Rural	1.047 (0.482-2.277)
Built up area		0.472 (0.189-1.176)
Male	Female	1.643 (0.825-3.274)
Head/neck injury	Other body parts	8.697 (4.543-16.650)**
Age	-	1.033 (1.020-1.047)**

\*\*Statically significant at 5% level

\*Statically significant at 10% level

The odds of a fatal pedestrian accident occurring at night with or without light are higher than for the day (OR= 1.468, 2.152). Hit and run case also have higher odds (OR=1.126), and lower odds for dry road surface (OR= 0.769). All these variables were found to be statistically insignificant factors. The likelihood of fatality in an accident is significantly higher when a pedestrian is struck by a heavy vehicle (OR= 5.653). An accident that occurred at the cross junction, however, had lower odds (OR=0.497), compared to T/Y junction with regards to fatality.

Road characteristics had an insignificant effect on lower odds were the accident that took place in one-way traffic system (OR= 0.514), at the signalised junction (OR=0.

911), at built up area (OR=0. 472), but higher odds for an accident occurred in a city or urban area (OR=1.047).

With respect to pedestrian characteristics, male males were found to have higher odds of being involved in a fatal accident than female pedestrians (OR=1.643). Odds of fatality among pedestrians who experienced either head or neck injury compared with other parts of the body was great (OR=8.697). In addition, pedestrians' age also affects the likelihood of fatal injury (OR=1.033).

## DISCUSSION AND CONCLUSION

Analysis of existing data on accidents using a logistic model is one way to examine the effects of factors that contribute to serious accidents. In this study, the model shows

four significant factors behind pedestrian fatalities at road junctions.

Age of pedestrians is identified as an individual factor for their fatality. Older pedestrians seem to be more vulnerable as their physical strength and ability deteriorates. Another significant factor leading to fatality is pedestrians who suffered head or neck injury, where may increase 8.7 times. A similar trend was found by Wong et al. (2007) where the pedestrian accidents with head injury are more likely to die by 3.82 times.

The likelihood of pedestrian fatality would increase by 5.6 times when he/she is hit by a heavy vehicle, compared to other types of vehicles. The deadly effect of heavy vehicles such as buses and trucks is consistent with findings of previous research (Lefler & Gabler, 2004), even to other road users such as bicyclist (Moore et al. 2011). The likelihood of fatal pedestrian accidents is lower at a cross junction compared to T/Y junction, probably due to the effect of signalization at cross junctions. An accident at T/Y junction may also be more severe to the drivers, compared with other types of junctions (Huang et al., 2008).

Exploration of pedestrian fatalities at junctions using a logistic model based on accident data from the year 2009 to 2013 highlighted four significant factors that can lead to fatalities among pedestrians at the  $p < 0.1$  are: the age of pedestrian, nature of injury, type of vehicle involved, and the type of junction. The outcomes of this study suggest that the heavy vehicles traffic flow

entering an area with the higher volume of pedestrians should be controlled and reduced.

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## **The Influence of Product Quality and Service Quality on House Buyer's Satisfaction in Prima Home**

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### **ABSTRACT**

Owning a home is the dream of many Malaysians. The establishment of Perbadanan PR1MA Malaysia which is dedicated to designing and building affordable quality homes is aimed at making this dream come true. This study seeks to examine the relationship between product and service quality among house buyers' for PR1MA Home. A survey was conducted among private developers in residential areas implementing PR1MA Home concept and results showed that service quality has a major influence on house buyer's satisfaction.

*Keywords:* PR1MA home, product quality, service quality, satisfaction, structural equation modelling

### **INTRODUCTION**

Housing is one of the biggest sectors that contribute to the nation's economy. Fundamentally, a house is a shelter which bestows the various attributes encompassing safety, love, peace and freedom (Marcussen,

1990). Its existence is supported by some basic peripherals which include service and infrastructure or facilities (Johal, 1997; Kemeny, 1992). Moreover, housing development has been cited as an impetus that improves the quality of life. Thus, the Housing and Local Government Ministry of Malaysia (MHLG, 2008) reiterated the importance of providing safety, security, comfort, health, privacy and other related services to buyers. The *Perumahan Rakyat 1Malaysia* (PR1MA) was launched in 2011 to provide affordable homes for middle-income households in urban areas, i.e. those with monthly income

#### **ARTICLE INFO**

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Received: 29 September 2016

Accepted: 05 April 2017

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RM2,500 to RM4,000 and houses priced at the RM100,000 to RM400,000 range in key urban areas. The PR1MA Home goes beyond brick and mortar. They are not just serving the national agenda of building affordable quality homes for middle income Malaysians, but they are also serious in promoting greater home ownership amongst those who are facing challenges in buying a property.

## LITERATURE REVIEW

This section provides a synthesis and analysis of previous published research related to the main theoretical concepts of this study such as satisfaction, product quality and service quality.

### Customer Satisfaction

Customer satisfaction can promote a business, hence fulfilling customers' wants and needs should be a company's main orientation. Customer satisfaction has become an important indicator for the service and housing industry and is a key element in modern marketing thought and practice. Essentially, customer satisfaction is used as a means to enhance performance in the housing industry where competitive advantage is vital.

In evaluating satisfaction in the housing industry, two approaches are suggested for measuring buyers' satisfaction (Adriaanse, 2007; Amerigo & Aragonés, 1997). The first approach predicts the buyers' behaviour when moving into or making renovations to the present house (Mohit, et al., 2010; Adriaanse, 2007) and the second is valued by

house quality factors that affect satisfaction levels (Adriaanse, 2007). Besides the choice of moving to another house or doing renovation, satisfaction can be assessed by conceptualization (Hallowell, 1996; Paris & Kangari, 2005), and displaying loyalty behaviour. According to Torbica (2001), customer satisfaction is seen as an important factor in the continuing growth and economic success of the housing industry. Thus, developers need to periodically measure the level of satisfaction among its customers (Torbica & Stroh, 2000).

### Product Quality

Product quality is one of the most important constructs in marketing. The term "quality" has no global definition. The American Society for Quality Control defines quality as the totality of features and characteristics of a product that bear on its ability to satisfy stated or implied needs (Miller, 1993). Product quality is viewed as significant for customers. Therefore, firms should be concerned about their own perception or customers' perception of a products' quality (Watson, 1998). Similarly, Fornell et al. (1996) claimed that customer satisfaction is more quality driven than value or price. Product quality is also found to be one of the antecedents to customer satisfaction (example, Anderson & Sullivan, 1993; Churchill & Suprenant, 1982; Cronin & Taylor, 1992; Fornell, 1992). On the other hand, Bearden and Teel (1983) found that perceptions of product quality are considered as determinants of attitudes towards purchase and use. This study focuses

on buyers who perceive their houses as a physical product which is well designed according to the details and specifications supplied by the developer. Buyers receive what is in the project location after all the work has been completed.

### **Product Quality and Satisfaction**

Generally, almost all research on service marketing emphasise the construct and dimension of service quality in relation to consumer satisfaction and loyalty. Shostack's (1977) study classified salt and soft drinks as tangible products, while consulting companies and teaching institutions as intangible services. The tangible quality of service products should be part of the satisfaction model which is identified as an important factor for consumer decision making relating to product quality (Cronin, Brady, & Hult, 2000). As a result of these ongoing studies, the perceived quality construct of consumers' durable goods and perceived product quality had a major effect on purchasing choices (Brucks, Zeithaml, & Naylor's, 2000). This statement suggests product quality has as much an effect on consumer satisfaction as service quality (Parasuraman, Zeithaml & Berry, 1994). Such discussions show that product quality is found to be an independent factor and therefore, this study aims to investigate its influence on consumer satisfaction. To conclude, while product quality and service quality are the main factors that contribute to customer satisfaction in the housing market, issues such as residential environments and neighbourhoods can also contribute

to customer dissatisfaction. As such, it is extremely difficult to predict customer satisfaction as product and service quality in themselves may be insufficient criteria.

### **Service Quality**

Service quality is a primary concern for most Malaysian companies today. In order to gain competitive advantage, companies need to gather information on market demands and process the details of customer satisfaction. In the last few decades that service quality has turned out to be the most important area of focus among practitioners, managers and researchers owing to its strong impact on business performance, lower costs, customer satisfaction, customer loyalty, and profitability (Leonard & Sasser, 1982; Cronin & Taylor, 1992; Gammie, 1992; Hallowell, 1996; Chang & Chen, 1998; Gummesson, 1998; Lasser et al., 2000; Silvestro & Cross, 2000; Newman, 2001; Sureshchander et al., 2002; Guru, 2003).

### **Service Quality and Customer Satisfaction**

It is apparent and fairly well established that customer satisfaction and service quality are closely related but conceptually different. This argument has been signified by Shemwell et al. (1998) where they ponder that service quality is a cognitive, left-brained, evaluative and objective concept whereas satisfaction is a mixture of an effective, right-brained, feeling based, and subjective component. The link between the two though has been well recognized

and empirically evidenced (Jones & Sasser, 1995; Oh & Park, 1997; Sasser et al., 1978; Zeithaml et al., 1993). Empirical studies conducted by several researchers have provided proof that perceived service quality in fact leads to customer satisfaction (Cronin & Taylor, 1992; Parasuraman et al., 1985, 1988). The success of the housing development project relies heavily on the quality of the house and quality of services. As highlighted their study by Parasuraman, Zeithaml and Berry (1985), marketers must concern themselves with the quality of their goods and services to remain technologically competitive in the eyes of customers. The issue of dissatisfaction among the home buyers is commonly resulted from housing abandonment,

product quality and service quality (Aziam & Maznah, 2012). The measurement of buyer satisfaction is the main interest of this paper. It covers determinants in relation to buyer's satisfaction on product quality and service quality, building safety and developer responsibilities. The function of service quality has been acknowledged as being a vital determinant for the success of service providers in today's competitive housing industry. Based on the literature review, the hypothesis and measurement model is formulated for the exogenous variable and the endogenous variables to explain the relationships among product quality, service quality and satisfaction in Figure 1.

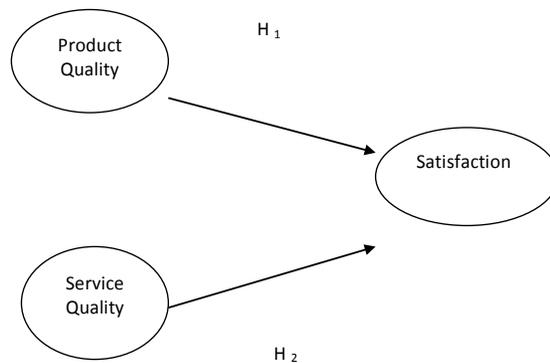


Figure 1. Theoretical Model for the influence of product quality and service quality on buyer's satisfaction in PR1MA Home

**RESEARCH METHOD**

This study employed the survey research method. The quantitative data collection technique that consists of closed ended questions was used to gather data on satisfaction. The constructed affordable

housing projects in Malaysia were determined by referring to PR1MA. In order to measure the effect of product quality and service quality on buyer's satisfaction in PR1MA Home, two criteria were observed: (1) the residential areas are built according

to PR1MA Home; (2) PR1MA Home for the residential areas have been occupied within two years. Since PR1MA Home is still new, most of the projects are still in the planning and construction phase. Only one PR1MA Home project was completed, that is in Putrajaya consisting of 560 housing units.

### **Questionnaire Design**

A structured questionnaire was used to collect data. Based on the extensive research done by Parasuraman, the five dimensions of SERVQUAL demonstrated reliability coefficients ranging from 0.53 to 0.93 (Parasuraman et al., 1991). Customer satisfaction was measured using 3 items adopted from Cronin, Brady and Hult (2000) and Wang et al. (2004), and the reported reliability of this scale is above .886. To measure product quality five item scale developed by Torbica and Stroh (2001) was used, and the reported reliability of this scale is .824. The survey sought to determine the direct effect of product quality and service quality on satisfaction for PR1MA Home. House buyers were asked to indicate their perceptions on product quality, service quality. A seven-point Likert-type response scale, which ranged from 1-strongly disagree to 7-strongly agree, was used due to its appropriateness for evaluating product quality and service quality and its effectiveness in measuring respondents' satisfaction (Torbica & Stroh, 2001). The selected measures were also chosen for their high reliability and validity (Parasuraman et al., 1985).

### **Data Collection Procedures**

The questionnaires were used to gain information on the extent of dissatisfaction with PR1MA Home. 250 questionnaires were administered directly to the occupants during door-to-door visits and requiring their immediate completion (Newman, 2000). Hence, after the respondents had completed the questionnaires, taking advantage from the face-to-face survey where the researcher has asked an open-ended question to the respondents. It was done as an expansion to the questionnaire.

### **Data Analysis Procedures**

To assess direct and indirect (mediated) relationships among the studied variables, the researchers performed confirmatory factor analysis and structural equation modelling (Anderson & Gerbing, 1988). SPSS and AMOS had been used to perform these analyses. These analyses should help us to understand which model fits the data best while presenting a credible assessment on the relationship between product quality, service quality and customer satisfaction.

## **RESULTS AND DISCUSSION**

Confirmatory factor analysis (CFA) was performed using AMOS to measure the unidimensionality, convergent and discriminant validity. Table 1 show the summary result from CFA for product quality, service quality and satisfaction models.

Table 1  
*Summary from confirmatory factor analysis*

Model	Dimensions	No. of Items	CR (>0.7)	AVE (>0.5)	Reliability Cronbach Alpha (>0.7)
Product Quality	Design	3	0.854	0.662	0.851
	Material	4	0.790	0.488	0.806
	Tangible	3	0.776	0.536	0.778
	Reliability	4	0.877	0.641	0.879
Service Quality Satisfaction	Responsiveness	3	0.837	0.633	0.831
	Empathy	3	0.861	0.675	0.856
	Assurance	2	0.711	0.509	0.705
		3	0.925	0.806	0.778

The impact of product quality and service quality on house buyer's satisfaction were investigated using structural equation modelling (SEM). A structural model can be viewed simultaneous linkages that allow a researcher to determine the relative strength of relationship between variables. The relationship between product and service quality and house buyer's satisfaction were displayed in Figure 1. The overall fit of the model can be assessed using a number of fit indices. The indices used include chi-square, Goodness of Fit (GFI), Non-Normed Fit Index (NNFI), Comparative Fit Index (CFI), Root Mean Squared Residual (RMSR) and Root Mean Square Error of Approximation (RMSEA). Exhibit shows

major fit measures and guidelines for their acceptable values. The goodness of fit indices for the final structural model, as shown in the bottom part of Figure 2 suggest a good fit to the data: small ratio of chi-square to degree of freedom ( $< 2$ ), great values of GFI, AGFI, CFI, NFI ( $> 0.9$ ) and RMSEA values ( $< 0.05$ ). A structural model is fit to the product quality, service quality and customer data according to the model structure given in Figure 2. Two paths (product quality to satisfaction and service quality to satisfaction) are found to have significant positive standardized path coefficients and not dropped sequentially based on Wald tests.

The Influence of Product Quality and Service Quality

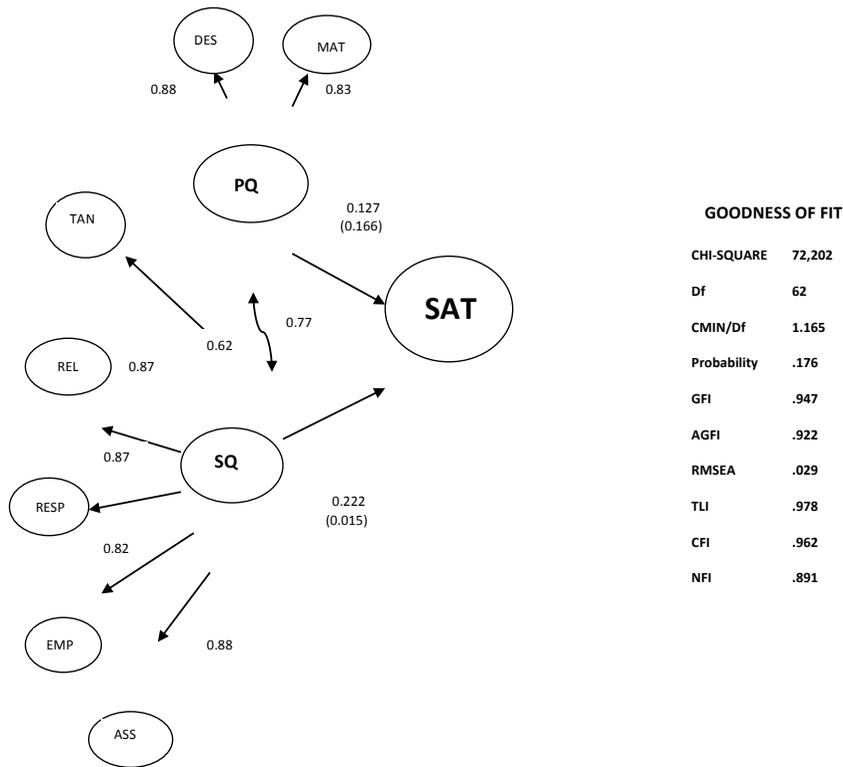


Figure 2. Results of Structural Model – Path Analysis

In accordance with the parameter estimates shown in Figure 2, service quality yield positively and significantly related to satisfaction (coefficient=0.222  $p(=0.015)<0.10$ ), this finding as proposed in  $H_1$ . In the same way, as proposed

in  $H_2$ , product quality has not positive and significantly effect on satisfaction (coefficient=0.127,  $p(=0.166)>0.10$ ). Table 2 shows the regression weight of product quality and service quality to satisfaction.

Table 2  
Summary of hypotheses testing results

Path	Estimate( $\beta$ )	S. E	C.R.	P	Result
Product Quality → SAT	0.127	0.087	1.379	0.166	Unsupported
Service quality → SAT	0.222	0.153	2.402	0.015	Supported

Standardised beta coefficients; S.E. = standard error; C.R. = critical ratio; \* $p<0.10$

The research question of this study is related to the effect of product and service quality on buyers' satisfaction. At the 10% level of significance, the relationship between product quality ( $\beta$ : 0.127) with satisfaction were not significant, and thus,  $H_1$  was not supported. On the other hand, there were positive relationship between service quality ( $\beta$ : 0.222) and satisfaction, thus  $H_2$  were supported.

## DISCUSSION

$H_1$  states that there is a significant effect of buyers' perceived product quality (PQ) on their satisfaction (SAT).  $H_1$  was rejected. The findings reveal that there was no significant effect of product quality on satisfaction and failed to support such a relationship. It is further evidence that results from empirical testing on the perceived product quality show that there was no impact on the level of satisfaction in PRIMA Home. Surprisingly, the results contradict with the hypothesized outcome and the findings from previous research such as Cronin et al. (2000) and Parasuraman et al. (1994). Even though the relationship between product quality and satisfaction was not significant, there is evidence that some association exists between product quality and service quality. This suggests that the higher the product quality, the higher the service quality, which leads to higher satisfaction. Therefore, product quality might have an indirect relationship with satisfaction through service quality (Refer Figure 2).

$H_2$  states that there is a significant effect of buyers' perceived service (SQ) on their satisfaction (SAT). The hypothesis was supported. Customer satisfaction and service quality are two important aspects that are closely related but conceptually different from each other (Jones & Sasser, 1995; Oh & Park, 1997; Zeithaml et al., 1993). Researchers of service quality suggest that high service quality results in high customer satisfaction (Parasuraman et al., 1985, 1988). Moreover, good service quality and perceived service lead to customer satisfaction which resulted in an increase in evaluation of service quality (Bitner, 1990). Similarly, perceived service quality is the accretion of consumer satisfaction (Teas, 1993). The findings of this study provide further support to the numerous arguments in the literature that service quality is a major factor for customer satisfaction.

## CONCLUSION

This study adds to the knowledge of existing buyers' satisfaction with PRIMA Home and shows the complex interactions between service quality and buyers' satisfaction. The findings hold strong implications for governing bodies, industry practitioners and funding agencies as they magnify the need for new and holistic strategies to address buyers' expectations and service providers' reluctance in developing innovative housing solutions.

PRIMA is a smart-partnership between the Government and the private sector

whereby the government provides the land and a reputable private sector developers construct affordable houses. Through PR1MA Home more Malaysians will be able to own a house and have a better future.

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*Short Communication*

**An Improved Risks and Benefits Assessment Tool for Institutional Review Boards**

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**ABSTRACT**

Ethical oversight is a critical requirement to conduct clinical research involving human participants and Institutional Review Board (IRB) and it is responsible to evaluate the ethical elements of a clinical research. However, there is no consensus on criteria for evaluating risks and benefits to human participants. Therefore, this article reviews the evaluation of risks and the potential benefits of a clinical trial using Multi-Attribute Utility Theory (MAUT) and suggests the incorporation of 5 levels of likelihood that risk event will occur for the standardisation of risk and benefit utility values.

*Keywords:* Risks and benefits assessment, bioethics

**INTRODUCTION**

Ethical oversight is a critical requirement in the conduct of clinical research involving human participants. Institutional Review Boards (IRBs) are responsible to evaluate the ethical elements of a clinical

research and their assessment usually follows ethical guidelines outlined by the World Medical Association (WMA), Council for International Organizations of Medical Sciences (CIOMS) and World Health Organisation (WHO). Additionally, IRBs are also required to ensure clinical research is designed in compliance with the International Conference of Harmonisation (ICH)-Guideline for Good Clinical Practice (GCP). ICH-GCP compliance provides public assurance that the rights, safety and well-being of trial subjects are protected and clinical trial data is credible.

**ARTICLE INFO**

*Article history:*

Received: 13 August 2016

Accepted: 04 July 2017

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Ethical and scientific reviews are firmly established in Malaysia. Thus far, 14 IRBs are listed in the National Medical Research Registry (NMRR) who are tasked with providing independent guidance, advice and decision on clinical research involving human subjects. IRBs in Malaysia follow international guidelines such as 'International Ethical Guidelines for Biomedical Research' (Vallotton, 2000), 'Operational Guidelines for Ethics Committees that Review Biomedical Research' (WHO, 2000) and 'Standards and Operational Guidance for Ethics Review of Health-Related Research with Human Participants' (WHO, 2011), independently or together with local guidelines on the conduct of ethical and scientific reviews.

The most important oversight that an IRB is responsible for is risk and benefit assessment. Currently, there is no consensus on the criteria for evaluating risks and benefits of human participants. IRBs' evaluation is usually based on clinical judgement which is unavoidably subjective and intuitive (Van Luijin et al., 2006). For example, guideline 8 on page 195 of 'Benefits and risks of studying participation in the International Ethical Guidelines for Biomedical Research' (Vallotton, 2010) states:

*'Interventions or procedures that hold out the prospect of direct diagnostic, therapeutic or preventive benefit for the individual subject must be justified by the expectation that they will be at least as advantageous to the*

*individual subject, in the light of foreseeable risks and benefits, as any available alternative. Risks of such 'beneficial' interventions or procedures must be justified in relation to expected benefits to the individual subject.'*

*'Risks of interventions that do not hold out the prospect of direct diagnostic, therapeutic or preventive benefit for the individual must be justified in relation to the expected benefits to society (generalizable knowledge). The risks presented by such interventions must be reasonable in relation to the importance of the knowledge to be gained.'*

Section 6.2.1.2 on page 10 of 'Scientific design and conduct of the study in Operational Guidelines for Ethics Committees that Review Biomedical Research' (WHO, 2000) describes that:

*'The justification of predictable risks and inconveniences weighed against the anticipated benefits for the research participants and the concerned communities.'*

Standard 7 on page 13 of 'Ethical basis for decision-making in research ethics committees in Standards and Operational Guidance for Ethics Review of Health-Related Research with Human Participants' (WHO, 2000) describes:

*'In ethically acceptable research, risks have been minimized (both by preventing potential harms and minimizing their negative impacts should they occur) and are reasonable in relation to the potential benefits of the study. The nature of the risks may differ according to the type of research to be conducted. Research Ethics Committee (REC) members should be aware that risks may occur in different dimensions (e.g., physical, social, financial, or psychological), all of which require serious consideration. Further, harm may occur either at an individual level or at the family or population level.'*

Such subjective statements are not very helpful when assessing risk-benefit because regulations and guidelines do not evidently describe “risks” and “benefits” nor do they define what determines risks acceptable (or reasonable or justified) in relation to expected benefits (Levine, 1988; Kimmelman, 2004; Rid et al., 2010; Rid & Wendler, 2011). Lack of regulations and guidelines in relation to risks and benefits may lead to inconsistent IRB decisions and a significant ethical and practical concern (Wendler et al. 2005; Rid et al. 2010; Rid & Wendler, 2012). The common concerns are: (i) some IRBs may provide inadequate protections for human subjects because they underrate risks, overemphasize expected benefits, or both; (ii) some IRBs may hinder valuable research because they overestimate

risks, underestimate expected benefits, or both; and (iii) if a study involves multiple study sites, inconsistent IRB risk/benefit decisions at different sites could delay final approval without reason and waste resources (Silberman & Kahn, 2011; Klitzman, 2015). Hence, there is a need for tools which are both systematic and of use in strengthen in risk-benefit assessment. It is the aim of this article to review a model and suggest how its applicability maybe improved.

Recently, Bernabe et al. (2012) described the evaluation of risks and potential benefits of a clinical trial using Multi-Attribute Utility Theory (MAUT). MAUT is a decision theory that is basically “concerned with making trade-offs among different goals” and this is achieved by assigning utility values and weights to attributes of a study. Weight is multiplied with utility value for each attribute; the product of all attributes are added together and that total value will provide a global picture or summary for risks and benefits for the trial (Baron, 2008). Utility value is generally defined as a numerical representation of human goals that have been determined by a decision maker while weight is usually the influence of each utility in a trial (Bernabe et al., 2012).

Each trial has a total weightage of 1 which is distributed among the risk attributes of the trial. Bernabe et al. (2012) assigned same weight of 0.5 to both individual experimental intervention risks and trial participation risks due to their comparable importance (Table 1). Experimental intervention risks usually refer to potential

harms caused by the investigational drugs or trial procedures whereby trial participation risks typically refer to potential discomforts or burdens encountered when participating in a trial. The authors further divided the weight for the experimental intervention risks equally between the comparator and trial drug arms, i.e., 0.25 each. Weight for the trial participation risk is similarly distributed

equally between certain harms and risks due to trial participation. Each sub-category in the experimental intervention risks and trial participation risks was assigned a negative utility value that is determined either by the IRBs, investigators or sponsors based upon their moral beliefs, intuitions, empirical data or experiences (Bernabe et al., 2012).

Table 1  
Multi-Attribute Utility Theory used to evaluate the risks of a clinical trial

Risks due to experimental intervention (side effects) (0.5*)		Risks due to trial participation (0.5*)	
Comparator arm (0.25*)	Trial drug arm (0.25*)	Certain harm due to trial participation (0.25*)	Risks due to trial participation (0.25*)
-3**	-4**	-4**	-3**

\*weight  
\*\*utility value

In Table 2, they assigned a weight of 0.5 each to two benefit attributes; benefits to participants and benefits to society, due to equal importance of these benefits. Benefits to participants were further categorised into direct benefits and inclusion benefits, and assigned weight of 0.4 and 0.1, respectively. Direct benefits are those that can be expected from the trial interventions. Inclusion benefits also known as collateral

or indirect benefits are benefits obtain in a trial regardless of whether the participant receives the experimental intervention or not. Additionally, each sub-category under direct benefits was assigned a weight of 0.2 each while another 2 sub-categories under inclusion benefits were assigned weight of 0.05 each. Utility values for benefits are assigned positive integers.

Table 2  
Multi-Attribute Utility Theory used to evaluate the benefits of a clinical trial

Benefits to participants (0.5*)				Benefits to society (0.5*)
Direct benefits (0.4*)		Inclusion benefits (0.1*)		
Comparator Arm (0.2*)	Trial Arm (0.2*)	Certain Inclusion benefit (0.05*)	Probable Inclusion benefit (0.05*)	
3**	3**	3**	3**	8**

\*weight

\*\*utility value

Risk-benefit index was then decided based on the sum of products of weight and utility value for each of the sub-categories for both risks and benefits as shown in Tables 1 and 2. Their calculation for the risk attribute was  $(0.25) \times (-3) + (0.25) \times (-4) + (0.25) \times (-4) + (0.25) \times (-3) = -3.5$ , whereas the benefit attribute was  $(0.2) \times (3) + (0.2) \times (3) + (0.05) \times (3) + (0.05) \times (3) + (0.5)(8) = 5.5$ . The addition of these two values yielded a positive index of 2  $[(-3.5) + (5.5)]$  indicating that the benefits outweigh risks. If the index had been a negative, it will mean that risks outweigh benefits.

## METHODOLOGY

### Standardisation of Risks and Benefits Utility Value

Bernabe et al. (2012) reported MAUT is an easy ethical assessment tool that could provide a more balanced and rationally defensible decision. The MAUT is a “summary measure of how consequences realise ultimate values or good” (Baron, 2008). However, there is still an element of

subjectivity in the determination of utility value of risks and benefits evaluation. Without some sort of standardisation, there may be much variation between determinations of each IRB resulting in different risk-benefit assessment for the same trial. We, thus, propose standard guide for determining utility value for risk based on a Risk Management Guide (US DoD, 2006) in Table 3. The risk utility value is based on 5 levels of likelihood that risk event will occur. Similarly, we developed a benefit utility value table based, too, on the likelihood of occurrence of the benefit (Table 4). We further re-categorised “risks due to trial participation” into “certain harm” and “collateral risk” as it is felt that the original sub-categories may be confusing. We define “certain harm” as harm from the study procedures, such as blood taking, biopsies, and other invasive procedures. “Collateral risk” is defined as mental, economic or social risk that may potentially be associated with trial participation, such as worries that one is on placebo and social stigma associated with the study disease.

Table 3  
*Utility value of likelihood risk event will happen*

Utility Function (u)	-1	-2	-3	-4	-5
Likelihood	Remote	Unlikely	Likely	High Likely	Near Certainty

Table 4  
*Utility value of likelihood benefit event will happen*

Utility Function (u)	1	2	3	4	5
Likelihood	Remote	Unlikely	Likely	High Likely	Near Certainty

The proposed utility value determinations are next utilised in risk-benefit assessment of a mock trial. The mock trial is to evaluate the effectiveness of a newly discovered beta-blocker drug to control hypertension. This new drug is believed to have similar pharmacodynamics with current top selling beta-blocker but potentially costs much less. Weights used by Bernabe et al. (2012) were retained for risk attributes (Table 5). Utility values for risks due to the experimental

intervention were assigned value of -3 as both comparator and trial arms have similar side effects and are likely to occur. Next, for risks due to trial participation, a utility value of -3 was assigned to certain harm as serious adverse events for all study procedures are unlikely to happen. A utility value of -1 was assigned to collateral risk as this type of risk is remote for the type of study investigational product and medical condition.

Table 5  
*Multi-Attribute Utility Theory to evaluate the risks of a mock trial*

Risks due to experimental intervention (0.5*)		Risks due to trial participation (0.5*)	
Comparator arm (0.25*)	Trial drug arm (0.25*)	Certain harm (0.25*)	Collateral risk (0.25*)
-3**	-3**	-3**	-1**
$(0.25x-3)+(0.25x-3)+(0.25x-2)+(0.25x-1) = -2.25$			

\*weight  
\*\*utility value

Consequently, benefit assessment was scored (Table 6). Similar to risk, weights for the benefit attributes used by Bernabe et al. (2012) were retained. Utility values for

direct benefits of comparator and trial arms were assigned with 5 to represent the near certainty that both drugs will lower the blood pressure of participant. Trial participants

were given free drugs and monitored closely, more than usual, by trial team and thus the sub-category ‘certain inclusion benefit’ was assigned a utility value of 5. However, the sub-category ‘probable inclusion benefit’ was only assigned a utility value of 1 because participants in both

intervention arms receive the same standard management, the only difference being the drug given. Additionally, category ‘benefits to society’ is assigned utility value of 3 as the experimental drug is likely to be a cheaper alternate to current anti-hypertensive drugs.

Table 6  
Multi-Attribute Utility Theory to evaluate the benefits of a mock trial

Benefits to participants (0.5*)				Benefits to society (0.5*)
Direct benefits (0.4*)		Inclusion benefits (0.1*)		
Comparator Arm (0.2*)	Trial Arm (0.2*)	Certain Inclusion benefit (0.05*)	Probable Inclusion benefit (0.05*)	
5**	5**	5**	1**	3**
(0.2x5)+(0.2x5)+(0.05x5)+(0.05x1)+(0.5x3) = 3.8				

\*weight

\*\*utility value

## RESULTS AND DISCUSSION

The sum of the product of weight and utility value for risk was -2.5 and for benefit was 3.8. Adding these 2 sums together gave a risk-benefit index of 1.3. Thus, the benefit of this trial outweighs its risk. By incorporating the 5 levels of likelihood with MAUT, we had successfully presented the standardisation for the utility value for risks and benefits that are systematic and can be utilised to strengthen risk-benefit assessment.

## CONCLUSION

With the addition of the guide for determination of utility values for risk and benefit, MAUT is an advantageous tool for risk-benefit assessment with the

standardisation of the parameters used for risk-benefit assessment because it is an easy ethical assessment tool that will provide a more balanced and rationally defensible decision making. Although, there are various quantitative risks and benefits methodologies as reported by International Society for Pharmacoeconomics and Outcomes Research (ISPOR) Risk-Benefit Management Working Group (Guo et al., 2010), we found that all these assessment tools are specific to assess drug safety and efficacy. Thus, MAUT could be the more suitable tool that can be adapted by IRB to assess the ratio between risks and benefits of various types of clinical research including drug trials, procedures, devices and observational studies.

## ACKNOWLEDGEMENT

We would like to thank the Director General of Health Malaysia for his permission to publish this article. We would also like to express gratitude to Saadiyah Mohd Salleh and Sangita Nair for contributing certain portions of this study.

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*Case Study*

**Language Choice of Malaysian Tamil Students in *Facebook*: A Case Study in a Malaysian University**

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**ABSTRACT**

Language is a powerful identity of an ethnic group. It is with difficulty that a minority group maintains its mother tongue in a multilingual society, particularly so when other languages such as Malay, English and Chinese have economic advantages over Tamil. Even though in Malaysia Tamil language is taught in primary schools for children aged 7 to 12 and in secondary schools for the students aged 13 to 18, only a few continue to study this language in their higher education. It is a challenge for the educators in higher education institutes to encourage and attract students to study Tamil and is equally challenging to encourage them to maintain Tamil language in their daily conversations. The main aim of this study is to identify the language used in *Facebook* communication among the

Malaysian Tamil students in the university. Reasons for their language choice and some strategies to maintain the usage of Tamil language in social networking platform are also discussed in this paper. Students aged 22 to 24 from a university in the central region of Peninsular Malaysia which offers Tamil studies, are chosen as the participants of this study. The participants were interviewed for their language choice. The finding shows that the participants

ARTICLE INFO

*Article history:*

Received: 29 August 2016

Accepted: 29 March 2017

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with excellent Tamil language competency, used code mixing, Romanised Tamil more than Tamil or Tamil script in *Facebook* communication. This study found a way to make the participants converse solely in Tamil. An altered language behaviour in cyberspace emerging out of unknown consideration, was thwarted and normal language use was restored.

*Keywords:* Facebook Communication, Language choice, Language maintenance, Malaysian Tamils, Tamil Language

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## INTRODUCTION

Malaysia is multilingual and multicultural. Most of the present Malaysian Tamil population had originally migrated from Tamil Nadu, India during the British colonial period, to work in rubber estates. Religion and Tamil education were the principle factors drawing them back to India. Therefore, the British colonial government offered the Tamils, education in their mother tongue in Malaysia in order to retain them in the immigrant land. The first formal Tamil education started in Penang Free School, Penang on 21.10.1816 (Paskaran, 2011). Since then, Tamil education in Malaysia has systematically developed at primary (for 7-12 year olds), secondary (for 13-18 year olds), tertiary (for 19-20 year olds) and university (above 20 year olds) levels. Currently, there are 523 government Tamil schools in Malaysia with more than 105 000 students and with more than 7,000 Tamil language teachers (Rajendran, 2011).

Malay is the national language of Malaysia and English exists as an important

international language. Therefore, it is compulsory for all Malaysians to learn these languages. As a result, most Malaysians, particularly the non-Malays are multilingual with competency in three or more languages. As a minority ethnic group, Malaysian Tamils realise that only their mother tongue will offer them an ethnic identity in a multilingual society. Yet, not all Malaysian Tamils agree with this idea. This is reflected in the fact that only about 52% of Malaysian Tamils send their children to Tamil schools for education (Rajendran, 2011). The number of students who enrol for standard one in Tamil schools range from 13,000 to 16,000 students per year. This number decreases in secondary schools, where only half of them sign up for Tamil language in Malaysian Certificate Examination (equal to GCE O level). Only about 2000 students continue their Tamil education to higher secondary level or pre-university level. Unfortunately, the Malaysian education allows only about 50 students to continue their studies in Tamil at tertiary level (Supramani, 2015).

There are only two universities namely University of Malaya (UM) and Sultan Ismail Education University (UPSI) that offer Tamil as a major in undergraduate. In UM, the Tamil language studies are offered in two different faculties. The department of Tamil Studies at the faculty of Arts and Social Science began in 1959 (Narayanasamy, 2011). The department of Malaysian Languages and Applied Linguistics at the faculty of Languages and Linguistics started in 1998 (Mannar Mannan, 2011). Starting from 2010 UPSI

is also offering a Bachelor Degree of Education (B.Ed.) majoring in Tamil. There are also several universities such as University Putra Malaysia (UPM), University Science Malaysia (USM), University Sabah Malaysia (UMS) and others that offer Tamil as a second language for non-native speakers (Supramani, 2015).

Tamil language has a diglossic nature. Diglossia is a sociolinguistic situation with two separate varieties of the same language. It is a linguistic phenomenon, where there is normal use of two varieties in different social situations (Al-Mahrooqi, Denman, & Sultana, 2016). Tamil is a diglossic language with separate varieties, in formal and informal social situation with spoken and written forms (Lal, 2011). The written form considered as standard Tamil is used in mass media and formal events, while the colloquial spoken form is used mainly in informal situations such as conversation among friends and family members.

In fact, there are lot of scope for Malaysian Tamils to use their mother tongue and communicate. There are several daily and weekly newspapers, fortnightly and monthly magazines published in Tamil. Additionally, there are 24-hour radio and television channels broad-casting in Tamil language. Yet, there seems to be a lag in Tamil language use among the younger generation. The younger generation tend to converse in Malay and English more than Tamil (Paramasivam & Farashaiyan, 2016).

There are a few studies conducted on minority language use in social media such as Low German (a regional language) in

Northern Germany (Reershemius, 2017), Irish in Northern Ireland (Lackaff & Moner, 2016), Yucatec Maya, an indigenous language of Mexico (Cru, 2015), and Greek in German city (Androutopoulos, 2015). Most of these studies focused on secondary, tertiary and university students and their language choice, as the current generation is engaged more with the social media. Tamils are also a minority group in Malaysia and so far, there are no studies found on their language choice in social media especially in *Facebook*. To fill this gap this study has investigated language usage by Malaysian University Tamil students in *Facebook* the new media.

#### AIM OF THE STUDY

The aims of the study are to:

- i) Identify the language choice among Malaysian Tamil students in *Facebook*, a social media.
- ii) Investigate the reasons for their language choice in *Facebook*.
- iii) Evaluate the use of Tamil in a specially created closed group called மொழியியல் மொட்டுகள் (*mozhiyiyal mottuhaL*) in *Facebook*, and test remedial measures if needed.

#### METHOD

This study was conducted using action research method. 16 students aged 22 to 24 from a university in the central region of Peninsular Malaysia which offers Tamil studies, were chosen as the participant of this study. These students were chosen as

participants to ensure that the respondents are fluent in written and spoken Tamil language. This is to eliminate the fact that lack of knowledge in Tamil language as a reason. Communication of these students in *Facebook* was observed for three months to identify their language choice. About 240 comments posted on 15 wall posts were analysed. All the 16 participants were grouped and interviewed for 20 – 30 minutes to gather information on the reasons for their language choice. After briefing about the intention of the study and the ways to use Tamil language in *Facebook*, these students were asked to participate in a specially created closed group named மொழியியல் மொட்டுகள் (*mozhiyiyal*

*mottuhaL*) literally meaning linguistics buds. Thus, 15 wall posts with 270 comments of this group were gathered for a period of three months and analysed.

## RESULTS AND DISCUSSION

From the first three months of observation, it was found that the participants were using Malay, English and Tamil language in their conversations among their varsity friends. Usage of Tamil language was mostly in Roman scripts. The frequency of the language choice among Malaysian Tamil students in the university while communicating on *Facebook* is given in Table 1.

Table 1  
Language choice of participants on Facebook

Language Text	Mix-Code			Tamil		English	Malay	Total
	Tamil	English	Malay	Roman Script	Tamil Script			
T1	5	2	1	8		3		19
T2	8	2	1	5	1			17
T3	1			6	1			8
T4	1			9				10
T5	6	2		4		1		13
T6	6	1		3				10
T7	9	2		10		1		22
T8	6	1		4		4		15
T9	5	1		3	1		1	11
T10	6	3		11		3		23
T11	13			8				21
T12	6			1		1		8
T13	10	5	1	10	1	3		30
T14	3		1	6	1	2	1	14
T15	9			8		2		19
Total	94	19	4	96	5	20	2	240

Table 1 shows that mix-code was the most frequent language choice of participants of this study. 117 out of 240 comments (48.75%) were made in mix code with Tamil as the dominant language. This was followed by 101 Tamil language comments (42.08%) but 96 out of it utilised Romanised Tamil script instead of the native script. Since all the participants were Tamil, they only used English in 20 comments and Malay in 2 comments in a whole. This

finding contradict the previous observation that the current Tamil generation use Malay and English more frequently than their mother tongue (Paramasivam & Farashaiyan, 2016). In fact, the participants choose a language in which they are fluent and most expressive.

Table 2 shows some of the comments posted by the Malaysian Tamil students in Facebook wall posts. Italic refers to Tamil words and Malay words are underlined.

Table 2  
Comments by participants on Facebook

No.	Comments posted in Facebook	Meaning / standard version
1	Wat 2 do dehy??? So cold n so sleepy... tatz y!!!	What to do? So cold and sleepy, that is why...
2	<i>elangovai pol kambanai pol neeyum pulaviyaage varuvaayaagee,...</i>	You will become a poet like <i>Elango</i> and <i>Kamban</i> .
3	யாருபெத்த புள்ளையோ நாம மனசுல நெனச்சத அப்படியே பேசுது ( <i>yaaru peththa piLLayoo naame manasule nenachchathe appadiyee peesuthu</i> )	I wonder who is that, who speaks my mind.
4	<u>SABAR-SABAR KITA BINCANG</u>	Be calm, we shall discuss it.
5	hehehehe.....make up <i>oda pesarangge...</i> <i>seyatha latihanuku</i> revision <i>vera</i> ....wat a comedy	She is teaching with full make-up. Revising an exercise which has never been done. What a comedy.

These examples show that participants in the study communicate in Facebook using Tamil (in Roman or Tamil scripts), English, and Malay or mixed of Tamil, English, and Malay languages. The first comment in Table 1 is written in English with some variations like nonstandard spelling (wat = what, tatz = that's) and using one letter representing a word (n=and, y=why). The second comment is in Romanised Tamil,

whereas the third comment is in Tamil with Tamil scripts.

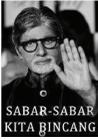
There were only two comments found to be in Malay language solely. The last comment is structured with a mix code of English, Tamil and Malay. The participants try to communicate in Facebook as in face to face communication. This can be seen in the third comment clearly. As Tamil is a diglossic language with spoken and written

variations (Lal, 2011), even though the comments are given in written form but they are in spoken variation. In the comments with mix code, Tamil is used as the dominant language. As in the last comment, English and Malay words are added with Tamil suffix (make-upode, latihanukku) and follow the Tamil sentence structure.

Malay is the national language and it is compulsory for all students to learn. Yet, this study shows that only two comments out of

240 comments were solely made in Malay language. Both these comments were in the format of *meme* as shown in Table 3. *Meme* is an image, piece of text, video, etcetera typically humorous in nature, which is copied and spread rapidly by internet users, often with slight variations. The term *meme*, derived from Richard Dawkins's biologist account of how genetic and non-genetic data spread, like viruses, through their corporeal transmitters (Sanchez, 2013).

Table 3  
Malay comments by participants on Facebook

No.	Comments posted in Facebook	Meaning/standard version
1		Be calm, we shall discuss it
2		Yeah, give an applause

The participants in the study use English language more than Malay language, with the frequency 20 out of 240 comments as a whole. The findings showed that these students use some variations in their English comments. Dawaghreh (2016) states that, *Facebook* language does not need to be learned, and any form of intended nonstandard spelling (abbreviated strangely) can be easily understood by the users (both recipient and sender). This statement matches the nonstandard spelling such as

wat = what, tatz = that's, Thx = thanks, tok = talk, and eu = you used intently by the students. Using one letter representing a word such as n = and, y = why, r = are and c = see are also common in their communication. Omission of vowel as in thnk = think, knw=know, and hw = how are also found in their posts. Moreover, most of their English comments have Tamil addressing words such as *dehy*, *dei*, and *da*. Few examples of English comments posted by Tamil students are given in Table 4.

Table 4  
English comments by participants on Facebook

No.	Comments posted in Facebook	Meaning/standard version
1	Wat 2 do <i>dehy</i> ??? So cold n so sleepy... tatz y!!!	What to do? So cold and sleepy, that is why
2	Thx a lot da...	Thanks a lot dear.
3	i thnk c tok British English!!!	I think she talks in British English
4	Hahahaxx...eu guyzz r damn funny <i>dei</i> ... dun knw hw to discribe...lol...:-) :-)	You guys are damn funny. Don't know how to describe.
5	nw itz my turn... c ur wall !!!	Now it's my turn. See your wall!
6		You funny kid. You tell funny joke.

Since all the students involved in this research had gone through Tamil primary education they have between good and excellent competency in Tamil. Tamil seems to be their first choice as in Facebook. These students had posted 101 comments in communicative language out of which 96 were made using Roman scripts as shown in

Table 4. These Tamil comments were posted as text and also *meme*. They tried to use Roman scripts to resemble Tamil phonetic. But there was no uniformity in their spelling.

Table 5 shows the Tamil comments with Roman scripts made by participants on Facebook.

Table 5  
Tamil comments with Roman scripts by participants on Facebook

No.	Comments posted in Facebook	Meaning/standard version
1	<i>Ipdi ellaam yosikka unakku solli kudukkirathu yaaru daa?</i>	Who taught you to think like this dear?
2	<i>Appadi ellam pesa kudathu! Rombe thappu.</i>	Shouldn't talk like that. It's very wrong.
3		Come on! Don't act too much. Even Sivaji, the super actor will feel shy.
4		Better get lost. If not, I will kill you.

*Ellaam* in the first comment is spelled as *ellam* in second comment and *YELLAM* in the third comment. These students do not differentiate the long vowel except the first comment where a double *a* resembling long vowel has been used. Unlike English or Malay language, Tamil has long and short

vowels which will change the meaning of a word.

Even though all the students are able to read and write in Tamil, only 5 comments were posted using Tamil scripts. Table 6 shows the Tamil comments found in this study. The fourth comment was used in two conversations.

Table 6  
*Tamil comments by participants on Facebook*

No.	Comments posted in Facebook	Meaning/standard version
1	எப்படி இப்படிலாம்.... ( <i>eppadi ippadiyellaam</i> )	How is these
2	தத்துவம் பாப்பா ☺ ( <i>thaththuvam paappaa</i> ) 	Philosophy! Girl! ☺
3	( <i>yaaru peththa piLLayoo naame manasale nenachchathe appadiyee peesuthu</i> )	I wonder who is that, who speaks my mind.
4	 ( <i>pudingga saar avanai pudichchu jeyille poodungga</i> )	Catch him and place him in jail, sir!

Mixed codes were used most frequently in their communication. 117 out of 240 comments which make up 49% of their total comments were in mixed mode of Tamil, English and Malay. Most of the mixed mode comments used Tamil and English as the dominant language. Only four comments were found to contain Malay words. The findings show that Tamil is the most used

communicative language among the Tamils in the university. Yet, these comments were not typed in Tamil but in Roman scripts.

The participants who posted the comments were interviewed to gather the reasons for their language choice. The five reasons given by the participants are listed in Table 7.

Table 7  
Reasons for the language choice of participants on Facebook

No.	Reasons	Frequency	%
1	Common known language	16	100
2	Worried that their friends will not be able to read	16	100
3	Do not know how to write Tamil in computer aided devices	6	37.5
4	No Tamil fonts in the device	5	31.25
5	Tamil encoding problem	5	31.25

As stated earlier Tamil language is the main communicative language of the participants of this study. They use Tamil among their friends because it is a commonly known language to them. According to the participants, it is easier and faster for them to express their ideas or thoughts in their mother tongue or first language compare to second or other languages.

Yet, they use Roman scripts instead of Tamil script because Tamil scripts are not enabled in their devices. Since Tamil writing uses varied keyboards the participants have not mastered that art. Many of them use Roman scripts intently just to make sure all their contacts can read their comments. They are worried whether their friends' devices

are Tamil enabled. Technically Standard Tamil Keyboard layouts in unicode is still on its way in modern devices.

After discussing the reasons for their language choice, and technical competency in Tamil unicode was restored, the participants were requested to participate in a specially created closed group called *மொழியியல் மொட்டுகள் (mozhiyiyal mottuhaL)* for cyber communication. Their conversations were observed for three months and about 270 comments from 15 wall posts were gathered. The finding showed all the 270 comments were posted in Tamil language solely using Tamil scripts. Some of the examples are shown in Table 8.

Table 8

Comments in a closed group *மொழியியல் மொட்டுகள்* (*mozhiyiyal mottuhaL*)

No.	Comments posted in <i>மொழியியல் மொட்டுகள்</i> ( <i>mozhiyiyal mottuhaL</i> )	Meaning/standard version
1	பேராசையே ஒரு மனிதனை ஏழையாக்குகின்றது ( <i>peeraasaiyee oru manithanai eezhaiyaakkuhinRathu</i> )	Greed makes a person poor.
2	மனிதனுக்கு எதிரியே மனிதன் தான்.. ( <i>manithanukku ethiriye manithan thaan..</i> )	Man is enemy to himself.
3	வினை விதைத்தவன் வினை அறுப்பான்.. ( <i>vinai vithaiththavan vinai aRuppaan</i> )	One who seeds, reaps the harvest.
4	அப்போ, அந்த அதிக பிரசங்கி நீ தானே..... ( <i>appoo, antha athiha pirasanggi nii thaanee.....</i> )	So, you are the big mouth.
5	ஆஹா... என்ன அருமையான கண்டுபிடிப்பு. அருமை அருமை அருமை. ( <i>aaha... enna arumaiyaana kandupidippu. Arumai arumai arumai.</i> )	Wow... what a brilliant investigation. Superb / Bravo
6	உண்மைத்தான் அம்மா... நண்டு தன் பிள்ளைக்கு நடை கற்றுக் கொடுத்த கதையாயிற்று... ( <i>uNmaithaan ammaa... naNdu than piLLaikku nadai kaRRuk koduththa kathaiyaayiRRu...</i> )	That is right madam. As if the mother crab taught the juvenile how to walk straight.

The examples in Table 8 are comments posted in Tamil language with Tamil scripts. These posts indicate some language variations in them. Tamil is a diglossic language with distinguished oral and written forms. Though these comments are posted in the form of written text but they are variation of the spoken language. For example, in Table 8, it is proper to write the word அப்போ (*appoo*) as அப்போது (*appoothu*) or அப்பொழுது (*appozhuthu*) in proper written Tamil. However, the ability to communicate using Tamil script was restored.

Native speaker of language tends to use proverbs in their daily conversation to express something indirectly (Malarvizhi, Paramasivam, Kannan, & Normaliza, 2015). Usage of proverbs also shows higher level of competency in a language. Proverbs are used globally to express emotions, to praise, to warn or to indicate failure (Omoera, 2013). Lateh and Othman (2014) explains that, proverbs are phrases used to say things orderly, beautifully, and in a subtle way. Findings of this study also proved that the participants use at least one proverb in each conversation (e.g. third post in Table 8).

There were 18 proverbs found in the entire data collected from 15 wall posts observed in the closed group. Even a Malay proverb *seperti ketam mengajar anaknya berjalan betul* has been translated and used as a Tamil proverb by the participants (sixth statement in Table 8).

## CONCLUSION

Findings of this study show that the participants with excellent Tamil language competency, used code mixing (Tamil, English and Malay), Romanised Tamil more than Tamil or Tamil script in Facebook communications as their language choice. They also choose words from a language in which they are fluent and most expressive in. The participants revealed five reasons for their language choice in Facebook. Participants tend to use the language form (Tamil or Roman script) known by all their contacts or group members. They opt for Romanised script to ensure that all their Facebook contacts could read their comments. The accessibility of a particular language in the communicative media (device) also determines the language choice of the participants. Prior knowledge of using the language in new media also plays an important role in the language use of Tamil.

This study found a way to make the participants to converse solely in Tamil by creating a closed group. After briefing about the intention of the study and the ways to use Tamil language in Facebook, the participants post their comments in a more

natural way as in their face to face communication. Involvement of the participants in the specially created closed group increased the usage of Tamil to 100% (an improvement from the previous 42% usage). In the first observation only 101 out of 240 comments were in Tamil but in the second observation all the 270 comments were in Tamil. There were only 5 out of 240 comments in Tamil native scripts in the first observation but all the comments posted in மொழியியல் மொட்டுகள் (*mozhiyiyal mottuhaL*) were in Tamil scripts only.

Language teachers also should play a role in encouraging students to use their mother tongue in a new media. They also should teach or guide their students to use their mother tongue in social media. This study has proved that participants are willing and happy to use their mother tongue for communication on Facebook provided they are given the space and technical knowledge of using their mother tongue in the new media. This study has helped the participants who had altered language behaviour in cyberspace, to revert back to their normal language usage.

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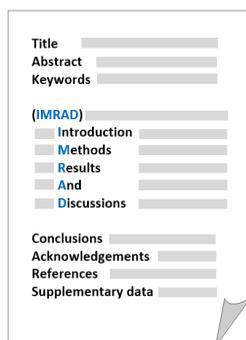
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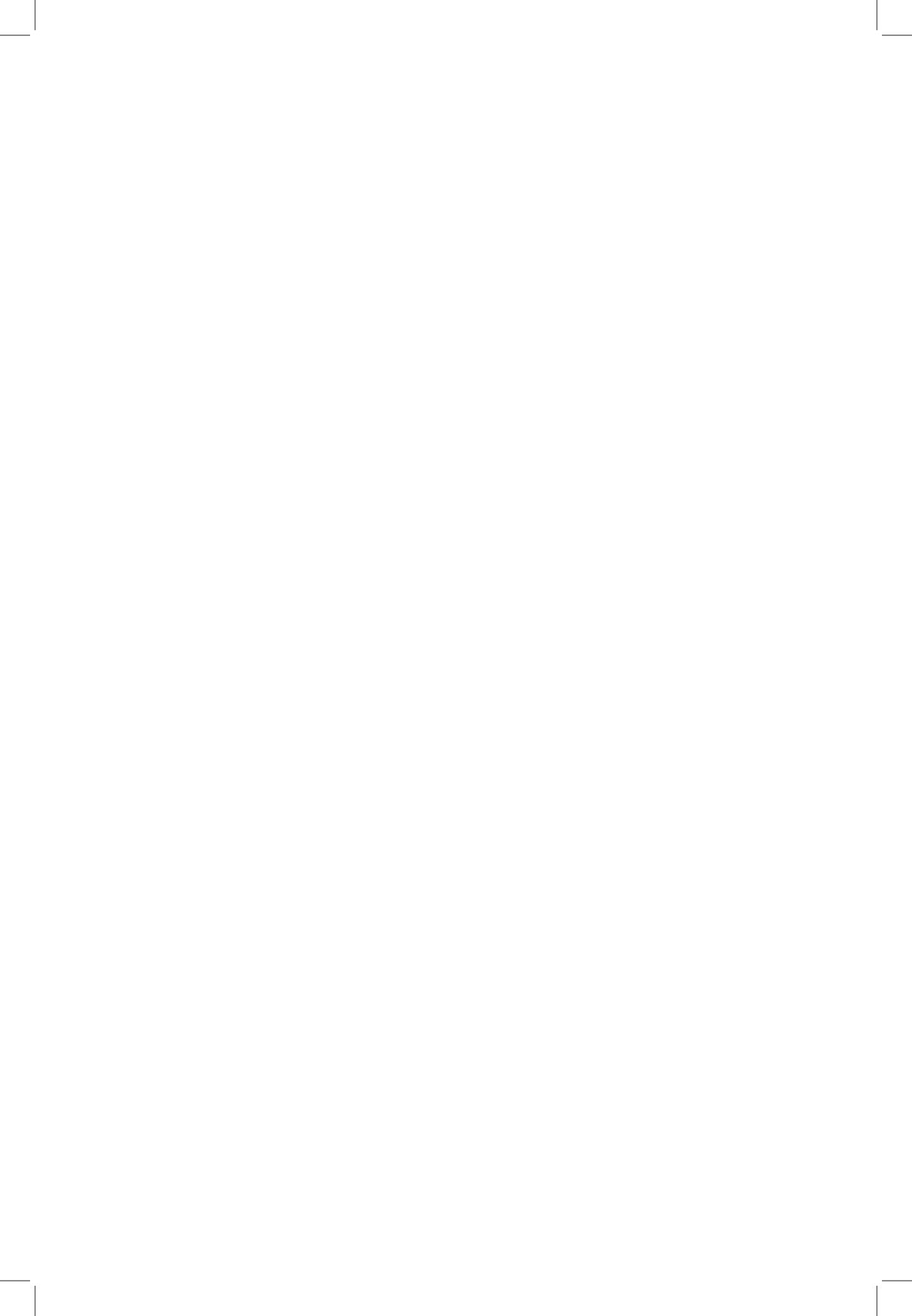
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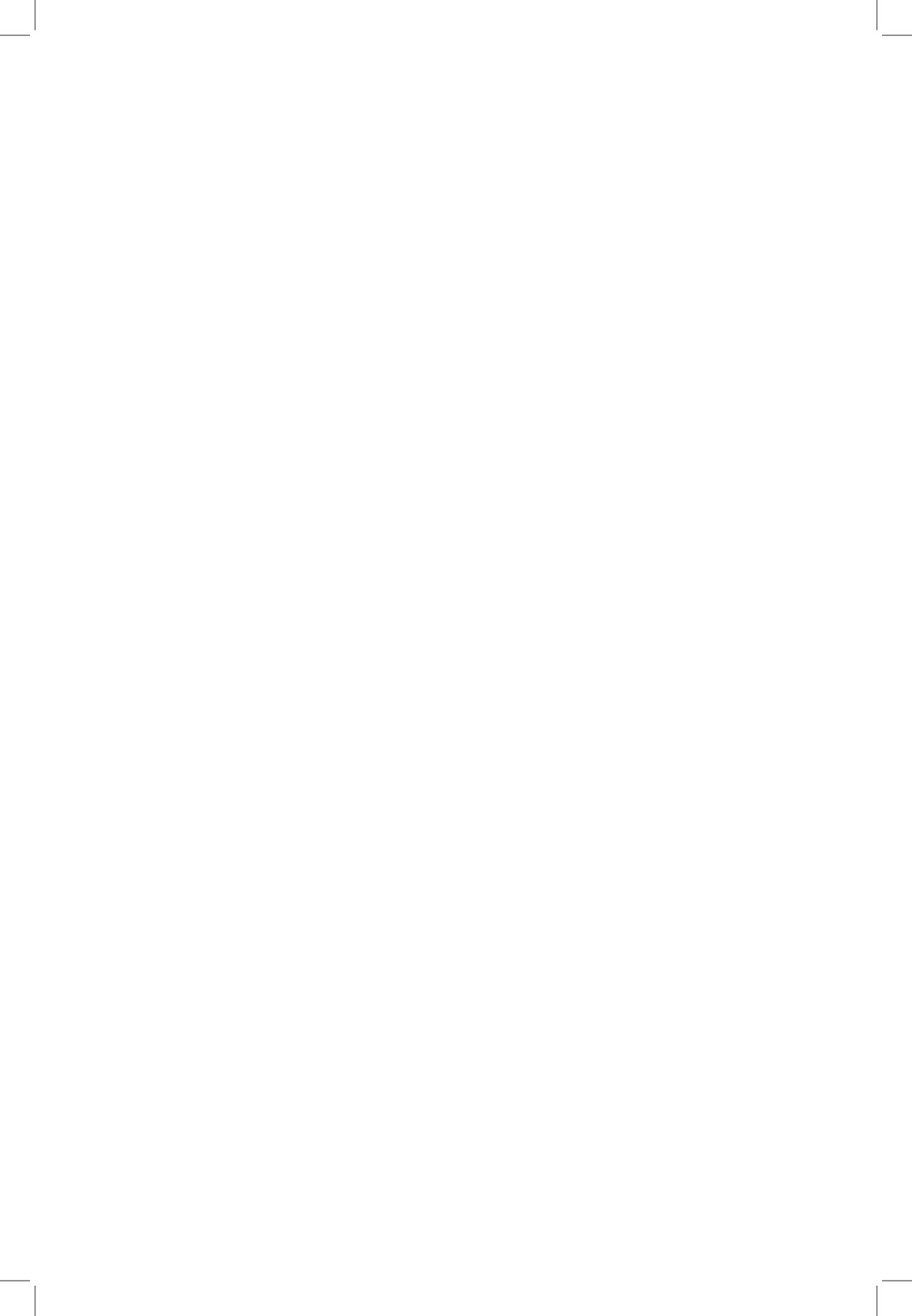
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