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.

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

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International Standard Serial Number (ISSN)

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

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

Lag time

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

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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 Methods, **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.

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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 Edito-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.

Pertanika Journal of

SOCIAL SCIENCES & HUMANITIES

Community, Youth, Entrepreneurship
& Human Resource Development

Guest Editors
**Siti Zobidah Omar, Asnarulkhadi Abu Samah
& Aminah Ahmad**

Preface

There has never been a time when individuals and communities have been impacted by change as intensely as now. Many countries, including Malaysia, are undergoing necessary transformative development as a response to multifaceted economic and environmental changes. Understanding the impact of such development on livelihood and lifestyles, Malaysia has emphasised inclusive policies to better help vulnerable groups to cope with the resulting challenges. Therefore, social science researchers continue to pursue notable studies on rural communities, the degree of local agency of youths, people with disabilities and inclusive organisations. This special issue aims to showcase diverse research findings to contribute to national human capital and community development policies and strategies.

The carefully selected articles in this special issue provide insights into community development, youth development, entrepreneurship development, climate and environmental change management and human resource and organisational development. Several articles report on factors impinging on the Human Development Index of river communities, empowerment and sustainability of self-help groups through participation in development and improvement of community lifestyle through rural libraries. Other articles focusing on youth development address rural youth sustainable livelihood, youth-adult partnership for enhancing youth participation in community development, youth participation in volunteering activities, youth's sense of togetherness through social media usage and factors affecting youth's entrepreneurial intention. With respect to entrepreneurship development, several articles present the demographic factors that influence the success of small ruminant farming and the role of social networks in entrepreneurship development.

As Malaysia's human capital continues to respond to external pressures, this special issue includes topics on climate and environmental change management. Several articles present findings on fishing communities' awareness and views on causes and impact of environment change and their adaptation to climate change. Also, recognising the importance of inclusion and resilience of human capital, this issue includes an article on virtual training for people with disabilities for knowledge enhancement and skill development and two articles that provide the spiritual insights of individuals in work organisations that could help improve organisational performance.

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

The publication of these papers would not have been possible without the support of the Institute for Social Science Studies (IPSAS) and the team of reviewers who carried out the review despite their tight schedule. Without their commitment and endurance, this edition would not have been a reality and we wish to express our sincere gratitude and hearfelt appreciation for them.

Finally, this issue is the result of the collective work of many individuals. We would also like to thank Dr. Nayan Kanwal, the Chief Executive Editor and his journal division team at UPM Press for their steadfast technical support and advice.

Guest Editors:
Siti Zobidah Omar *(Assoc. Prof. Dr.)*
Asnarulkhadi Abu Samah *(Assoc. Prof. Dr.)*
Aminah Ahmad *(Prof. Dr.)*
Dahlia Zawawi *(Dr.)*
Steven Eric Krauss *(Assoc. Prof. Dr.)*
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SOCIAL SCIENCES & HUMANITIES

Assessing Rural Youth Sustainable Livelihood in Malaysia

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ABSTRACT

The study aims to assess rural youth sustainable livelihood in Malaysia. This is a quantitative study in which a total of 240 rural youths from four districts in Peninsular Malaysia were selected as respondents. Assessment of their sustainable livelihood was based on six capitals namely, human capital, social capital, natural capital, physical capital, financial capital and cultural capital. Analysis performed confirmed that human capital was the best capital possessed by the respondents, while cultural capital was the weakest. Further analysis confirmed that the factors of gender, educational achievement and occupation had significant relationships with the types of capital studied, while the factors of age, income and period of staying in the village recorded a significant relationship with the capitals studied. The discussion highlights the important findings of this study and it is hoped that they can assist concerned parties in constructing the best strategies to further improve rural youth sustainable livelihood.

Keywords: Rural development, rural youth, sustainable livelihood, youth development

INTRODUCTION

Sustainable livelihood is an increasingly popular concept in the development debate. Sustainable livelihood can be defined in so many ways that an uneasy compromise arises between the different objectives included in the same definition. Although this obstacle of inconsistent, unclear and narrow definitions of sustainable livelihood

persists, Chambers and Conway (1992) have managed to come up with a definition that seems suitable for the present time, as given below:

> A livelihood comprises of the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.

Sustainable livelihood is an important issue nowadays and has attracted the interest of scholars across the globe. The concept of sustainable livelihood has become an important issue within the context of rural development, poverty eradication and environmental management. Albeit efforts by the government have been consistent, nevertheless, efforts by the community themselves are also needed to ensure that sustainable rural livelihood is achieved. One of the important community groups that can assist in achieving this is the youth. Studies by Prado, Seixas and Berkes (2015), Ramchandani and Karmarkar (2014), and Maconachie (2014), for example, looked into the challenges faced by youth in achieving sustainable livelihood, while studies done by Dufur, Parcel and Troutman (2013), Martin, McNally and Kay (2013), Weaver and Habibov (2012), Markway (2013), Misfud (2012), Wray-Lake, Flanagan and Osgood (2010), Morse,

McNamara and Acholo (2009), Jaeger and Holm (2007), Crocker (2006), Norris and Inglehart (2003), and Sullivan (2001) confirmed demographic background influence on sustainable livelihood among youth. Although this issue has become an important research focus at the international level, nevertheless, albeit much emphasis placed by the government, more works need to be done at the local level as the number of related studies is still scarce. Such a scenario has signalled the need for more studies to be conducted to understand sustainable livelihood among youth in Malaysia. In response to this issue, the current study aimed to examine Malaysian rural youth sustainable livelihood from two main perspectives; the aims of this study, were, therefore: (1) to examine Malaysian youth's level of sustainable livelihood; and 2) to determine the factors that predict Malaysian rural youth sustainable livelihood.

Youth in Malaysia and Sustainable Livelihood

Youth in any country represent the future of that country. They play a vital role in developing the country; indeed, it is a duty they must perform. In Malaysia, based on the definition set by the Ministry of Youth and Sport, youth are defined as those between 15 and 40 years of age. Such an age range is vast, and includes those who are quite 'old', compared with the age range for 'youth' set by the United Nations i.e. 15-24 years old and several other countries such as Singapore (15-29 years old), China (15-28

years old), Australia (15-25 years old) and India (15-35 years old). Youth in Malaysia comprise 12.5 million individuals, which is 42% of the total population

Sustainable livelihood is an important element for youth to be aware of as a valuable asset for their future. Certainly, youth with enhanced skills and knowledge, more financial resources and better social relationships and who are surrounded by greater physical facilities and natural resources are expected to lead successful future lives. A sustainable livelihood can be constructed from many aspects; however, within the context of this study, we shall discuss youth livelihood based on the concept of the Pentagon Model. The Pentagon Model, developed by the Department for International Development (DFID) (2000), consists of five capitals namely, human capital, social capital, natural capital, physical capital and financial capital. In addition to these five capitals, one additional capital, cultural capital, has been included in this study.

Human Capital

The first capital included in the Pentagon Model is human capital. Human capital is the skills, knowledge, ability for labour, and health level that allow workers to fulfil their livelihood objectives. Human capital at the household level represents the amount and quality of labour available. This capital varies as it is bound by household size, skill level, leadership potential and health status. In general, youth in Malaysia are expected to have better human capital.

Within the Malaysia context, there are vast opportunities for youth to pursue education at the highest level to ensure possession of specialised knowledge and skills. Currently, Malaysia has 21 public universities, 27 polytechnic colleges, 10 matriculation colleges, 38 community colleges, 21 private universities, 38 college universities and 324 private colleges. Up to May 2014, the unemployment rate was 2.9% (Department of Statistics Malaysia, 2014), and this indicates that a majority of youth in Malaysia possess the human capital needed by Malaysia's various sectors and industries. In addition to this, the government has also initiated industrial learning centres, the Skills Development Fund Cooperation and National Youth Skill Institute, in their effort to add more options for youth.

Social Capital

Social capital can be understood as the social resources upon which people rely to pursue their livelihood objectives. Social capital can be achieved via networks and connectedness. This network and connectedness can be developed either vertically (patron/client) or horizontally (between individuals with shared interests) and eventually can enhance people's trust and ability to cooperate and expand their access to wider institutions, such as political or civic bodies. Furthermore, social capital can be constructed based on the membership of more formalised groups; this often entails adherence to mutually-agreed or commonly accepted rules, norms and sanctions. In addition to this, it also represents trust,

reciprocity and exchanges that enable cooperation, lessening transaction costs and possibly offering the basis for informal safety nets among the poor.

In general, social capital among youth in Malaysia can be discerned from the big number of registered youth associations in Malaysia. Currently, drawing on the statistics provided by the Institute for Youth Research (IYRES) (2014), there are 7,052 registered youth associations in Malaysia. However, though it has a big number of youth associations, the involvement of youth in these associations is quite low as only 11.8% of youth aged 15-25 years old and 10.6% of youth aged 26-40 years old are directly involved.

Regarding social activities, Shaffril, Abu Samah, D'Silva and Yassin (2013), and Yassin (2013) illustrated the positive social conditions in rural communities in Malaysia where activities such as '*gotong-royong*' and '*merewang*' are able to strengthen social relationships among youth and between them and the community. Abu Samah, Shaffril, D'Silva and Uli (2011) supported the findings of Shaffril et al. (2013) that rural communities have better social activities within the family, especially with regard to recreational activities such as fishing, which is done in natural surroundings that are healthy and tranquil. Salomon (2012) concluded that the involvement of society and social relations within rural communities are high with regard to social and family activities, socialising with neighbours and leisure, recreation and entertainment.

Natural Capital

Natural capital can be understood as the natural resource and related services such as nutrient cycling and erosion protection that are useful for generating livelihood. Resources that construct natural capital are varied. They can be intangible public goods such as the atmosphere and biodiversity to divisible assets used directly for production, for instance, trees and land. In general, rural communities profit from better natural capitals derived from a less polluted environment compared with communities in urban areas. According to Yassin et al. (2014), the rural folk surveyed agreed that they were surrounded by an abundance of terrestrial and marine natural resources. However, it should be noted that the phenomenon of climate change is a threat to countries across the globe including Malaysia; thus, initiatives to preserve the environment are directly related to the future of the youth, who will inherit the impact of changing climate. Realizing this, in order to ensure a sustainable environment for the future generation, the government has developed a number of related initiatives such as the National Climate Change Policy, the National Environment Policy and the National Policy on Biological Diversity.

Physical Capital

Physical capital refers to the basic infrastructure and production of goods needed to support livelihood. It can be infrastructure consisting of changes to the physical environment that assist the

community to fulfil their basic needs and to be more productive. In addition to this, physical capital also includes the tools and equipment that people use to function more productively. According to the Department for International Development (DFID) (2000), items such as affordable transport, secure shelter and buildings, adequate water supply and sanitation and clean, affordable energy and access to information (communication technology) are vital for constructing better physical capital for the community.

Malaysians nowadays enjoy better access to physical capital resources. This can be proven based on numerous statistics. The Department of Statistics Malaysia (2012), for example, showed that a total of 77.6% of Malaysians live a distance of less than five miles from the nearest public health centre, while a total of 77.9% of Malaysians live a distance of less than five miles from the nearest private health centre. The same study also indicated that a total of 95.4% of the Malaysian population lives a distance of less than five miles from the nearest primary school, while another 84.0% were found to live a distance of less than five miles from the nearest school. Salomon et al. (2012) in their study found that in general, the societies surveyed were satisfied with the level of generality, convenience and amenities around their homes. Salomon (2012) also added that Malaysians surveyed had a moderate level of satisfaction for infrastructure such as public transportation, places of worship, recreational facilities, public toilet facilities, post offices, banks,

police stations and fire-fighting stations available to them. In a local study done by Yassin et al. (2011), the rural community surveyed was satisfied with the physical facilities provided for them, but stressed that there was room for improvement to further enhance the sustainable livelihood of rural people.

Financial Capital

Financial capital refers to the financial resources people rely on to fulfil their livelihood objectives. There are two types of financial capital. First, financial capital can be in the form of available stocks. Saving can be included under this type of financial capital. It is the preferred type of financial capital as it has no liabilities attached and commonly does not entail reliance on others. This can be held in several forms: cash, bank deposits or liquid assets such as livestock and jewellery. The second type of financial capital is regular inflow of money. Excluding earned income, the most common types of inflow are pensions or other transfers from the state and remittances. According to Yassin et al. (2011) and Abu Samah et al. (2011) most of the rural youth surveyed expressed their inability to amass enough savings and were not interested in making investments as they had other priorities to consider. Yassin et al. (2011), Shaffril et al. (2013) and Abu Samah et al. (2011) added that the monthly earnings of most of the rural community surveyed were "just enough" for their needs, and this obstructed or minimised their ability to save money or make investments.

Cultural Capital (Additional Capital)

Bynner (2007) confirmed the importance of cultural capital for constructing sustainable livelihood for the community. Bynner found that cultural capital, which is a subset of social capital highlighting certain behavioural dispositions such as motivation to learn, aspiration and attitude towards education and adaptability to change, could play a significant part in creating sustainable livelihood for the community. Increasingly, it is being suggested that these less tangible forms of capital should be a key focus of social involvement strategies for youth (Esping-Anderson, 2007).

Generally, cultural capital is found to be higher among rural communities. This is based on the findings of Salomon et al. (2012), Shaffril et al. (2013) and Abu Samah et al. (2011). Initial findings by Salomon et al. (2012) concluded that society, especially in rural areas, have had good access to subjective well-being because of the availability of cultural activities such as the production of traditional food, traditional games and traditional art. Shaffril et al. (2013) found that the rural community, particularly those who had settled in coastal areas, were still practising local cultural gatherings at '*wakaf*' gatherings every evening, playing draughts, repairing nets and engaging in face-to-face chatting. Abu Samah et al. (2011) in his study revealed that the rural community surveyed, particularly the river community, were still practising traditional cultural activities such as catching river lobsters. These activities, according to Abu Samah et al. (2011), were passed down from generation to generation.

Factors Affecting Sustainable Livelihood

Certainly, there is an abundance of factors that can be associated with these six capitals; among the prominent ones are demographic factors. Factors such as gender, age, educational achievement, number of household members and occupation have been said to impinge on the sustainable livelihood of the community.

Gender is one of the common factors associated with sustainable livelihood. Gender analysis recognises that the realities of women and men's lives are different. The current existing literature has proven this. Studies such as by Norris and Inglehart (2003), Food and Agriculture Organisation (2014), and Masika and Joekes (1996) proved that men enjoyed better sustainable livelihood particularly in terms of social capital, financial capital and physical capital; however, a study done by Westermann, Ashby and Pretty (2005) proved the opposite, finding that females had better sustainable livelihood, particularly in terms of natural and physical capital. In addition to gender, age is another prominent factor that can impinge on sustainable livelihood. Based on the existing literature, it can be concluded that due to their vast working experience, older people enjoy better livelihood aspects such as human capital and financial capital, and according to Wray-Lake et al. (2010) and Misfud (2012), younger people do not

enjoy better natural capital and cultural capital, but they do enjoy better social capital compared with older people.

Income is another factor that can significantly influence sustainable livelihood. Having more income denotes the possibility of having more and better capitals. Martin et al. (2013), and Weaver and Habibov (2012) confirmed that people with better financial ability had better possession of financial capital, human capital and physical capital. Having better education was found to be one of the keys for having better sustainable livelihood. Crocker (2006), Dufur et al. (2013), Jaeger and Holm (2007), and Sullivan (2001) confirmed in their studies that educated people had a better chance of possessing better human, social, physical, cultural and financial capitals, but were also proven not to have better natural capital. This was also confirmed by Markway (2013). Occupation is another factor that can influence sustainable livelihood. Working in the government and private sectors enables better human capital and financial capital, whereas self-employment allows for better social capital, cultural capital and natural capital (Morse et al., 2009; Shaffril et al., 2013). Education is another factor that impinges on sustainable livelihood. People with higher education are said to have better sustainable livelihood, particularly through having better human and financial capitals (Crocker, 2006; Dufur et al., 2013; Jaeger & Holm, 2007; Sullivan, 2001).

METHODS

This study is quantitative in nature and used a developed questionnaire to collect the data. The questionnaire was constructed based on the Pentagon Model constructs, review of literature and questions raised in past studies. After a series of instrument development workshops, the final version of the questionnaire was generated consisting of a total of 56 questions (see Table 1).

Table 1
Number of questions in each sections of the questionnaire developed for this study

Section	Number of Questions
Demographic	6
Human capital	7
Social capital	7
Natural capital	6
Physical capital	6
Financial capital	8
Cultural capital	12
Total	52

To determine a suitable size of sample, this study relied on G-Power analysis, which uses a software that determines the suitable size of sample based on the needed analyses. Power refers to a situation where the test can detect a statistically significant difference or relationship when such a difference or relationship exists. It is generally accepted that power should be 0.8 or greater, that is, an 80% or bigger opportunity of finding a statistically significant difference or relationship where one exists. This study intends to run inferential analyses such as

ANOVA, the independent t-test and the Pearson product moment correlation. Based on the G-power analysis, the size of sample to run an independent t-test is 176, to run ANOVA is 232 and to run the Pearson product moment correlation is 191. This study had a bigger sample size; this posed no problem as Mohammad Najib (1999) has confirmed that a bigger sample size will strengthen the reliability and validity of the instruments.

The study applied multi-stage cluster sampling, where at the first stage of sampling, four out of the five regions in Malaysia, were randomly selected. They were the southern region, central region, east coast region and northern region. At the second stage of sampling, one state was randomly selected to represent the region; the selected states were Kedah (representing the northern region), Negeri Sembilan (southern), Selangor (central region) and Terengganu (east coast region). At the third stage of sampling, one district was randomly selected to represent each state; the selected districts were Gurun (Kedah), Kuala Selangor (Selangor), Jelebu (Negeri Sembilan) and Kemaman (Terengganu). At the final stage of sampling, a total of 60 youths aged between 15 and 40 years old were randomly selected to represent each district, bringing the total number of respondents to 240 (60 respondents × 4 districts).

The final version of the questionnaire was later pre-tested among 30 youths at the district of Kuala Besut in the east coast region. The resulting Cronbach's alpha value of 0.840 exceeded the recommended value of 0.70 suggested by Nunnally (1978), indicating that the questionnaire was reliable. The actual data collection took four months to complete, from November 2013 to February 2014. The actual data collection was assisted by a number of trained and experienced enumerators and monitored by the research team members. The survey was the main data collection technique used to obtain the data and on average, the enumerators took between 25 and 35 min to complete the survey. The respondents were given an option of five options as in a Likert scale from which to pick an answer. The scale ranged from 1 ('Strongly disagree') to 5 ('Strongly agree'). Data obtained were processed and analysed using both descriptive and inferential analyses.

RESULTS AND DISCUSSION

Table 2 displays the demographic data of the respondents. It can be seen that more than a three quarters of the respondents (81.3%) were male, while the average mean score recorded was 22.9. The majority of the respondents (37.9%) were in the group age of 17-20 years old. Understandably, not too many of the respondents possessed higher education; only 18.3% possessed tertiary education. In terms of job security, the data raised some concerns as only a small number of the respondents (24.2%) were employed on permanent basis while a total of 21.7% were unemployed. With regard to income, it was something of a positive

indicator that the mean score recorded was RM1167.55 (roughly equal to USD380), far exceeding the poverty level set by the Economic Planning Unit, which is RM720 (roughly equal to USD240).

Table 2
Demographic data of the respondents

Factors	Frequency	Percentage (%)	Mean
Gender			
Male	195	81.3	
Female	45	18.7	
Age (Years Old)			22.9
15-20	91	37.9	
21-25	79	32.9	
>26	70	29.2	
Education Achievement			
Never been to school	1	0.4	
Primary school	6	2.5	
Secondary school (lower)	20	8.3	
Secondary school (upper)	169	70.4	
Tertiary	44	18.3	
Occupation			
Permanent	58	24.2	
Contract-based	71	29.6	
Self-employed	59	24.6	
Unemployed	52	21.7	
Income (n=188) (RM)			1167.55
<750	43	17.9	
751-RM1000	77	32.1	
1001-1500	40	16.7	
>1501	28	11.7	

Rural Youth Sustainable Livelihood

One of the study's targets was to examine the level of rural youth sustainable livelihood. A total of six capitals were analysed and two namely, human capital and social capital, recorded high mean scores, while the remaining four, natural capital, physical capital, financial capital and cultural capital, recorded moderate mean scores (Table 3). It can be seen that human capital emerged the best capital possessed by rural youth. Such a scenario is not surprising as it is a reflection of the government's success in providing and widening rural youth access to education and skills learning. The government has never stopped offering opportunities to further enhance youth human capital. Several programmes have been established

within the rural context by concerned parties to further improve the human capital of rural youth. Among the programmes are, as stated earlier, the establishment of a number of public universities, polytechnic colleges, matriculation colleges, community colleges, private universities, college universities and private colleges, industrial learning centres, a Skills Development Fund Cooperation and the introduction of automotive, marine maintenance, welding and wiring skill learning at national youth skill institutes. Indeed, in the 2014 national budget, the government had allocated RM54.6 billion (roughly equal to USD18 billion) to further improve education and community skills, particularly of the youth.

Social capital was another capital that recorded a high mean score. This might have been due to several reasons. First, previous studies have proven that rural communities enjoyed strong relationships within the family and among colleagues and the surrounding community in general (Shaffril et al., 2013; Yassin et al., 2011). Second, social activities that strengthen social relationships within the community such as '*gotong-royong*' and evening social gatherings at places of interest such as '*wakaf*' and coffee stalls are actively practised in rural communities (Shaffril et al., 2013). Third, it is well known that involvement in social activities is important for youth as they are at the stage of development where they want to be accepted by everyone in the community. At the same time, such activities offer them the opportunity to practise and learn

important leadership and participatory skills (Jennings, Parra-Medina, Hilfinger-Messias, & McLoughlin, 2006).

The next discussion will focus on the four capitals that recorded moderate mean scores and the probable causes for this. First, with regard to natural capital, it is understood that the natural elements surrounding rural communities nowadays are deteriorating, contributed in part by changes in the climate and the human behaviour and activities such as open burning and pollution (Kwan, Tangang, & Juneng, 2011; Tangang, 2007). The moderate mean score achieved by the factor of physical capital was expected as a number of local studies such as by Yassin et al. (2011) and Idris et al. (2014) have less satisfaction of the rural community towards their physical environment. Yassin et al. (2011) further elaborated that infrastructure facilities were available in rural areas but their number was inadequate. Financial capital also recorded a moderate mean score. Though income of rural communities has far exceeded the poverty level, yet, most rural youth surveyed in studies reported not having enough savings and were not interested in making investments as their income was needed for more immediate priorities. Yassin et al. (2011), Shaffril et al. (2013) and Abu Samah et al. (2011) demonstrated that the monthly earnings of most of the rural community folk surveyed were "just enough" to procure basic needs, and this prevented them from or minimised their chances of having bank savings or making investments. The cultural capital recorded the lowest mean score among the

six capitals. Such a finding is not surprising as the studies done by Fasick (1984) have confirmed that there is a deteriorating trend among traditional cultural elements practised by rural communities, particularly the youth and this could result from the phenomenon of youth culture, which consists of beliefs, behaviours, styles and interests. The way youth choose their clothes, popular music, sports, vocabulary and dating set them apart from other age groups, providing them what many believe is a distinct culture of their own (Fasick, 1984).

Table 3
Mean score of the six capitals studied

Capital	Mean Score
Human capital	3.97
Social capital	3.86
Natural capital	3.23
Physical capital	3.53
Financial capital	3.11
Cultural capital	3.05
Cultural capital	12
Total	52

Factors Affecting Rural Youth Sustainable Livelihood

Another attempt of this study was to determine potential predictors for rural youth sustainable livelihood. Analysis confirmed that males had better social capital than females, as was also the case for physical capital. However, this contradicted with the findings of Salomon (2012). Several previous studies offer an explanation for this contradiction. Norris and Inglehart (2003) for example, explained that possession of

more time and interest motivated males to become involved in social capital compared with females. Norris and Inglehart (2003) further elaborated that another considerable reason for the high strong social capital among males is the informal mobilising mechanisms generated by family, friends and colleagues. Masika and Joekes (1996) noted that although females, especially those married, had a great relationship with their family, nevertheless, family commitment reduced their opportunity to actively socialise with their colleagues and the community surrounding them. Regarding the factor of physical capital, the findings of the study were in line with those of Perks (2012), who concluded that gender was one of the impinging factors. Table 4 shows the comparison between capitals and gender.

Table 4
Comparisons between the capitals and gender

Capitals	t	p
Human capital	0.024	0.981
Social capital	2.882	0.004*
Natural capital	0.971	0.333
Physical capital	1.973	0.050*
Financial capital	0.603	0.547
Cultural capital	1.022	0.308

* Significant

With regard to human capital, the analysis confirmed a significant difference between those who had permanent jobs, those who worked on contract basis and those who were self-employed with those who were unemployed. This was expected. In addition,

those who were self-employed recorded the highest mean score, while further analysis confirmed that there was a significant difference between the self-employed and those who worked on permanent basis (Table 5).

This can be explained by the nature of the respondents' jobs. Self-employed respondents had greater flexibility compared with those who worked on permanent basis and those who worked on contract basis as the latter were tied to the work schedules, rules and regulations determined by their employers. Having more flexibility offered more time to the self-employed group to engage in more meaningful relationships with their family, colleagues and community (Shaffril et al., 2013). The highest mean score for natural capital was recorded by the unemployed among the respondents and further analysis confirmed that there was a significant difference between the unemployed and those who work on permanent basis and those who worked on contract basis. In terms of financial capital, those who worked on permanent basis recorded the highest mean score and there was a significant difference between those who worked on permanent basis and those who worked on contract basis and the unemployed. Such a significant difference was expected as the monthly earnings of the employed group offered them greater financial power to set aside money for savings or investments compared with the unemployed.

Table 5
Comparisons between the capitals and occupation

Capitals	f	p
Human capital	21.809	0.0001*
Social capital	4.194	0.002*
Natural capital	3.668	0.013*
Physical capital	0.400	0.753
Financial capital	6.722	0.0001*
Cultural capital	0.421	0.738

* Significant

In terms of comparisons between the capitals and educational achievement, it can be seen from the table that educational achievement did not have an influence on five capitals (Table 6). Surprisingly, the findings of the study contradicted with those of Crocker (2006), Dufur et al. (2013), Jaeger and Holm (2007), and Sullivan (2001), who confirmed that higher education assisted people in having better human, social, physical, cultural and financial capitals. Furthermore, the comparison analysis confirmed that those who had at least a lower secondary school certificate scored the highest mean score for natural capital and there was a significant difference recorded between those with at least a lower secondary school certificate and upper secondary school certificate and those who had a tertiary education. Markway (2013) elaborated on the causes for this as including having too much to worry about, being focussed on immediate problems, being disconnected from the environment and having a knowledge deficit resulted in many educated people not having the inclination to appreciate nature.

Table 6
Comparison between the capitals and educational achievement

Capitals	f	p
Human capital	1.058	0.349
Social capital	2.731	0.067
Natural capital	4.294	0.015*
Physical capital	1.836	0.162
Financial capital	0.938	0.393
Cultural capital	1.152	0.318

* Significant

Table 7
Relationship between the capitals and age

Capitals	r	p
Human capital	0.323	0.0001*
Social capital	0.078	0.230
Natural capital	-0.162	0.012*
Physical capital	-0.097	0.135
Financial capital	0.309	0.0001*
Cultural capital	-0.071	0.240

* Significant

In terms of the respondents' age, three capitals namely, human capital, natural capital and financial capital recorded a significant relationship with age (Table 7). Analysis confirmed that the older the respondents were, the greater the human capital they possessed. Older people are always believed to possess greater skills and wider experience, both of which further enhance their human capital as these factors qualify them for better salaries, resulting in greater ability to make savings and investments. Natural capital recorded a negative and significant relationship with age, denoting that the younger the respondents were, the less the natural capital they possessed. Wray-Lake et al. (2010) and Misfud (2012) explained this as being due to the fact that youth are less appreciative of the natural environment and cultural activities.

The relationship between the capitals and income was also examined (Table 8). Human capital was found to have a significant relationship with income; this was not surprising as it was in line with studies done by Martin et al. (2013), and Weaver and Habibov (2012). Indeed, such a situation was expected, as having better skills, expertise and knowledge of certain jobs would definitely create more opportunities for generating more money. Natural capital and cultural capital recorded a negative and significant relationship with income, meaning that the higher the income, the lower the natural and cultural capitals possessed by the respondents. Income was also seen to influence the financial capital of the respondents. Having more money provided the respondents with the opportunity to create their own savings or investments (Martin et al., 2013; Weaver & Habibov, 2012).

Table 8
Relationship between the capitals and income

Capitals	r	p
Human capital	0.153	0.036*
Social capital	-0.062	0.395
Natural capital	-0.253	0.0001*
Physical capital	-0.110	0.134
Financial capital	0.215	0.003*
Cultural capital	-0.167	0.022*

* Significant

CONCLUSION

As found by several others, this study found that sustainable livelihood is a complex phenomenon reflecting the conditions and capability for youth to establish the means to live in an ever changing environment. Youth are also an increasingly important population group to study as they are valuable assets of the present and the future. This study found that despite the national employment statistics, only about 24% of the rural youth surveyed had permanent jobs as most were temporarily employed. They had mid-level education and were considered young and yet to establish their careers.

The factor of human capital scored highly, mainly due to the good spread of educational facilities and infrastructure. Social capital did well too as the youth lived in closed communities. On the other hand, natural, physical and financial capitals had moderate scores, in this order, mostly due to the degradation of the environment, the scarcity of facilities and the respondents' low capacity to save money. At the same time, cultural capital among them was fast deteriorating mainly due to the onslaught of materialism, the popularity of hip-hop culture and the attraction of contemporary lifestyle.

Males tended to have a higher social capital score. Human capital was associated with job permanency while financial capital was linked with job stability and the power to save money. Educational achievement did not influence most of the capitals and inversely affected natural capital. However, age did influence human and financial capitals and like educational achievement, did affect natural capital in a negative way. Income did positively affect the human and financial capital scores while it negatively affected the natural and cultural capital scores.

This study recorded several important conclusions. Firstly, among the youth, human, financial and social capitals featured as the strongest pillars for constructing sustainable livelihood. Secondly, natural, physical and cultural capitals had been given little attention and they remain as the additional capitals to be exploited. Thirdly, being male and having higher income as well as increasing age and job permanency greatly influenced the most important tangible capitals. Fourthly, educational attainment had no influence on the capitals and in fact, negatively affected natural capital. Fifthly, income did negatively influence the natural and cultural scores. Sixthly, from this study it can be discerned that cultural capital was the most important

capital that needs to be studied in addition to the five other capitals listed in the Pentagon Model.

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SOCIAL SCIENCES & HUMANITIES

Predictors of Entrepreneurial Intention among Youths in Malaysia

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ABSTRACT

This study aims to examine the factors affecting entrepreneurial intention among youths in Malaysia. This study is quantitative in nature, and made use of a questionnaire as the main data-collection tool. Via multi-stage cluster sampling, a total of 400 youths from four districts in Peninsular Malaysia were selected as respondents. The analysis confirmed that all of the factors studied were found to have positive and significant relationship with entrepreneurial intention. Further analysis concluded three factors, namely attitude towards entrepreneurship, entrepreneurship knowledge and perceived feasibility, are the most significant factors contributing towards entrepreneurial intention among youth. These three factors (attitude towards entrepreneurship, entrepreneurship knowledge and perceived feasibility) need to be given particular emphasis in order to promote entrepreneurship intention among the target group. In other words, if these three factors among the target group were to be strengthened, there would be a greater likelihood that the group's entrepreneurship intention would be increased.

Keywords: Education hub, internationalization of higher education, international student satisfaction

INTRODUCTION

The Malaysian government aims to prepare adequate human resources, especially among the young population. In order to achieve this, a number of initiatives have been introduced, one being the establishment of several learning and

skills centres. Currently in Malaysia there are 21 public universities, 27 polytechnic colleges, 10 matriculation colleges, 38 community colleges, 21 private universities, 38 college universities and 324 private colleges. Furthermore, the establishment of the National Youth Skill Institute provides a great form of alternative education for young people. One of the main skills taught at these learning and skills centres is entrepreneurship. Entrepreneurship offers a viable, rewarding and sustainable career option (Ambad & Damit, 2016). Despite the benefits offered, the involvement of Malaysian youth in entrepreneurship is still discouraging (Ahmad Faiz, Idris, Uli, Shaffril, & D'Silva, 2010; Yusof, Jamaludin, & Mat Lazim, 2013). This can be related to negative attitudes, weak social support, unavailability of mentors and expert support and a lack of entrepreneurship skills and knowledge (Ahmad Faiz et al., 2010; Ambad & Damit, 2016; Mat, Maat, & Mohd., 2015; Koe, Sa'ari, Majid, & Ismail, 2012; Linan, 2004; Roxas, Lindsay, Ashill, & Victoria, 2007; Shiro, 2010; Yildirim, Cakir, & Askun, 2016).

The study was mainly conducted due to lack of theoretical perspective on the influence of behavioral factors on entrepreneurial intention among Malaysian youth. Understanding of the fundamental theory on entrepreneurial intention is vital for better understanding and wider perspectives on the issues. Realising this, the current study attempted to respond by examining the factors affecting entrepreneurial intention among youth in Malaysia from the perspective of the Entrepreneurial Intention Model (EIM).

Youth and Entrepreneurship in Malaysia

Throughout the world, the youth is an important group. In Malaysia, youth constitutes more than 40% of the total population, with the current number of young people in Malaysia at 13.375 million (Institute for Youth Research Malaysia [IYRES], 2014). According to IYRES (2010), youths are defined as those whose ages range from 15 to 40 years. Compared with neighboring countries, such as Singapore (15 to 29 years), Thailand (15 to 24 years), Vietnam (15 to 35 years), Brunei (15 to 25 years) and Philippines (15 to 30 years), the age for youth in Malaysia is relatively old.

The majority of the employed in Malaysia fall into the category of youth; in fact, a total of 62%, or roughly 7.2 million people working in Malaysia are youths (Department of Statistics Malaysia, 2014). However, despite this high number, youth involvement in one of the most important sectors, entrepreneurship, is not as high as one would expect. Shaffril, Hassan and Abu Samah (2009) for example, posited that only 29.8% of youths were involved in agro-entrepreneurship. Ahmad Faiz et al. (2010) stated that the total population of youth entrepreneurs was only 10% and this can be associated with their reluctance to deal with the high risk attached to engaging in entrepreneurship activities.

According to a study conducted by Graduate Barometer (2013), entrepreneurship is not one of the main career choices of young people. The majority favour working in the public or the private sector. Another study by the Department of Statistics Malaysia (2014) confirmed that young Malaysians favoured working in services, marketing and technical and professional fields.

Entrepreneurial Intention Model

Although several theories have attempted to provide a comprehensive understanding of entrepreneurial intention, this study attempts to understand it from the specific perspective of the Entrepreneurial Intention Model (EIM), developed by Linan (2004). A number of studies have examined intention as the prime predictor of starting a new business venture (Ambad & Damit, 2016; Koe et al., 2012; Mat et al., 2015; Yildirim et al., 2016). According to Yildirim et al. (2016), understanding entrepreneurial behaviour can be achieved more successfully from entrepreneurial intention perspectives rather than from personality traits or demographic factors. Entrepreneurial intention refers to the commitment placed on the performance of the entrepreneurial effort of setting up a business for self-employment (Linan, 2004). Entrepreneurial intention guides the entrepreneur on what to do and what not to do, as this is vital for establishing, developing and implementing a successful business concept (Mat et al., 2015). Therefore, in understanding the

pursuit of business ownership, it is vital to view the nature and precursors of the intention of engaging in entrepreneurship activities (Yildirim et al., 2016).

Numerous theories have attempted to connect several factors to entrepreneurial intention. Dahalan, Jaafar and Mohd Rosdi (2013), and Stamboulis and Barlas (2014), for example, confirmed the influence of demographic factors such as age, gender, geographic areas, education achievement and labour experience on entrepreneurial intention. Other scholars across the globe such as Olugbola (2017), Yildirim et al. (2016), Jebarajakirthy and Lobo (2014), and Serra, Kuscu and Doganay (2014) focused on the influence of certain behavioural factors on entrepreneurial intention. However, despite the emergence of these factors, Reynolds (1997) claimed that predictive capacity was still limited, and earlier findings have been criticised for their methodological and conceptual limitations as well as for their weak explanatory power (Veciana, Aponte, & Urbano, 2005).

In response to this gap, Linan (2004) suggested some alternative factors that might affect entrepreneurial intention and introduced the Entrepreneurial Intention Model (EIM). The model was tested among 533 university students in Spain and Taiwan. The model consists of four behavioural factors namely, attitude towards entrepreneurship, perceived social norms, perceived feasibility and entrepreneurial knowledge.

Attitude towards entrepreneurship can be understood as the level of individual

personal valuation, either positive or negative, about being an entrepreneur. It is suggested by a number of studies that attitude can be a significant factor towards behaviour (Ambad & Damit, 2016; Koe et al., 2012; Mat et al., 2015; Shiro, 2010; Yildirim et al., 2016). According to Linan (2004), a favourable attitude towards entrepreneurship is expected to increase the individual's intention to become involved in entrepreneurial activities. Perceived feasibility can be considered to be the extent to which people perceive themselves to have the capacity to display certain behaviours. It attempts to study people's confidence in their ability to join and run any entrepreneurship activities (Linan, 2004). Perceived social norm refers to the perceived social pressure on their decision to display certain behaviours. People's decisions can be hugely influenced by those around them (Ambad & Damit, 2016; Mat et al., 2015). The emphasis on 'collective action' taken by the community must be supported by the majority; therefore, for entrepreneurship involvement to become truly useful to an individual, it must come with majority support (Ambad & Damit, 2016; Koe et al., 2012). Entrepreneurship knowledge refers to the concepts, skills and mentality that entrepreneurs use or should use as knowledge plays a major part in ensuring entrepreneurship success and sustainability (Koe et al., 2012; Yildirim et al., 2016).

METHODS

This study was quantitative in nature. The questionnaire was used and was developed based on document analysis and a series of instrument-development workshops. For a review of the document analysis process, a number of related articles were identified from several journal databases such as Science Direct, Taylor & Francis, Sage Publications and Emerald Publishing. This was required to find suitable questions from previous studies for inclusion in the questionnaire.

A literature review and document analysis led to the production of a draft questionnaire that comprised three parts. The first part related to demographic background. The second part related to entrepreneurial intention and examples of items such as "I'm thinking seriously of being an entrepreneur." The third part consisted of four sub-sections; the first sub-section was attitude, with items such as "being an entrepreneur offers me more advantages than disadvantages." The second sub-section was perceived social norms and an example of the items was "Entrepreneurship is a culture in my community." The third sub-section was perceived feasibility and an example of item was. "I know how to develop entrepreneurship projects." The fourth sub-section was entrepreneurial knowledge, with items such as "I have entrepreneurship skills" (see Table 1). For each question, except for those related to

demographics, the respondents had to pick a number based on a 5-point Likert ranging from 1 (Strongly disagree) to 5 (Strongly agree). The questionnaire was then pre-tested among 30 youths in Sepang, Selangor. The resulting Cronbach's alpha values were: attitude towards entrepreneurship (0.924); perceived social norms (0.864); perceived feasibility (0.888); and entrepreneurial knowledge (0.903). These values exceeded the recommended alpha value of 0.700 suggested by Nunnally (1978) as indicating the reliability of the questions.

Table 1
The questionnaire

Part	Number of questions	Type of answer
Demographics	6	Open-ended, closed ended
Entrepreneurial intention	7	with Likert scale response options
Behavioural factors		
Attitude towards entrepreneurship	8	With Likert scale response options
Perceived social norms	11	
Perceived feasibility	11	
Entrepreneurial knowledge	8	

The number of samples was 400, determined by G-Power software. Via G-Power, the number of samples was determined based on the required analysis. To fulfil the objectives determined, this study ran inferential analyses such as Pearson correlation and multiple linear regression tests. Based on the moderate effect size, the alpha value =0.005 and the magnitude of power was between 0.90 and 0.95. The appropriate number of samples needed to run the Pearson product moment correlation test is 191 and the appropriate number to run a multiple linear regression test is 119. Bigger sample sizes are not a problem as they strengthen the instrument's reliability (Mohammad Najib, 1999). The respondents were selected based on multi-stage cluster sampling. In the first stage, all the states in Peninsular Malaysia were grouped based on their respective zones. Then, in the second stage, one state was selected to represent its zone, which resulted in Perlis being chosen to represent the northern zone, Terengganu, the east-coast zone, Selangor, the central zone and Negeri Sembilan, the southern zone. In the third stage, the districts of each selected state were listed, and a district was then randomly selected to represent its respective state. The districts selected were Arau (Perlis), Marang (Terengganu), Kuala Selangor (Selangor) and Jelebu (Negeri Sembilan). In the final

stage of sampling, a total of 100 youths aged between 15 and 40 years old were selected from each district to ensure that each district was represented by an equal number of youths (100 × 4 districts = 400 youths).

Data collection was conducted over five months from January 2014 to May 2014. Prior to data collection, permission from the local authorities (e.g. village leaders, youth leaders) was requested. Experienced and trained enumerators were hired to assist with data collection with monitoring by the researchers. The main data-collection technique used was the survey, and for each respondent, the enumerators took between 20 and 25 min to complete the questionnaire. The performed test of normality resulted in a skewness value and kurtosis value that passed the minimum requirement for the data to be accepted as normal. The skewness value was within +/-2.0, while the minimum requirement for kurtosis was within the range of +/-3.0 (Tabachnick & Fidell, 2007). Therefore, based on the value obtained in the normality test, it could be assumed that the data for this study were normally distributed. Descriptive analysis of traits such as frequency, percentage, mean score and standard deviation was performed to describe the descriptive data,

while inferential analyses and Pearson product moment correlation were performed to examine the relationship between the factors. Multiple linear regressions were performed to determine the factor that contributed most towards entrepreneurial intention among youths.

RESULTS

Table 2 below shows the socio-demographic data of the respondents. Nearly two thirds (64.0%) of the respondents were male and the remaining third (36.0%) were female. The mean score for respondents' age was 26.2 years old, with the majority belonging to the age group, 20-30 years old. The mean income was RM1355 per month (roughly USD451.6). This result was encouraging, as the figure exceeds the poverty level set by the Economic Planning Unit of Malaysia (RM720 per month, approximately equal to USD240). In terms of education level, the majority had obtained secondary-level education. One third of the respondents (33.1%) were self-employed, while nearly a quarter (23.5%) worked in the private sector. Additionally, most of the respondents had a household size of between four and five family members.

Table 2
Socio-demographic data

Factor	Frequency	Percentage	Mean
Gender			
Male	256	64.0	
Female	144	36.0	
Age			26.2
17-19	111	27.8	
20-30	162	40.5	
31-40	127	31.7	
Income per month (n=251)			1,355.42
<RM750	54	21.5	
RM751-RM1,500	144	57.4	
>RM1,500	53	21.1	
Education achievement			
Never been to school/Primary school	13	3.3	
Secondary school	254	63.5	
Skill certificate	29	7.3	
Tertiary	104	26.0	
Profession			
Government sector	46	11.5	
Private sector	94	23.5	
Self-employed	132	33.1	
Retiree/housewife	18	4.5	
Unemployed	19	4.8	
Student	91	22.8	
Number of household members			
1-3	68	17.0	
4-5	143	35.8	
6-7	107	26.8	
>8	82	20.5	

Table 3 shows the overall mean score of entrepreneurial intention. A total of seven statements were used to measure overall entrepreneurial intention. The summated mean score of these statements was calculated and then grouped into three categories. Categorisation, as mentioned above, was based on the range of score calculation. The mean score of 3.69 reflects a high level of behavioral intention among the respondents studied.

Table 3
Overall entrepreneurial intention

Factor	Frequency	Percentage	Mean	S.D.
Level			3.69	0.985
Low (1.00-2.33)	43	10.8		
Moderate (2.34-3.67)	135	33.7		
High (3.68-5.00)	222	55.5		

Table 4 shows the factors studied, namely attitude towards entrepreneurship, perceived social norms, perceived feasibility and entrepreneurial knowledge. The summated mean score was used to study the overall mean score for each factor. The results showed that attitude towards entrepreneurship had recorded the highest mean score (M=3.76), while entrepreneurial knowledge had recorded the lowest mean score (M=3.22).

Table 4
Factors studied

Factor	Mean	S.D.
Attitude towards entrepreneurship	3.76	0.883
Perceived social norms	3.71	0.656
Perceived feasibility	3.51	0.758
Entrepreneurial knowledge	3.22	0.914

Further analysis using the Pearson product moment correlation was performed in order to investigate any possible relationship that might exist between entrepreneurial intention and the four factors studied. Table 5 shows that three factors, namely attitude towards entrepreneurship (r=0.656), perceived feasibility (r=0.660) and entrepreneurial knowledge recorded a strong and positive relationship, with entrepreneurial intention, and perceived social norms had a moderate and positive relationship (r=0.483).

Table 5
Relationship between factors studied and entrepreneurial intention

Factor	r	p
Attitude towards entrepreneurship	0.656	0.0001
Perceived social norms	0.483	0.0001
Perceived feasibility	0.660	0.0001
Entrepreneurial knowledge	0.657	0.0001

Multiple linear regression using the enter method was employed to test the contribution of the four independent variables (factors) on entrepreneurship intention. The results of the analysis showed that the overall regression model met the model fit (F [4,395]=145.173, p=0.000). Based on the value of the coefficient (R^2=0.595), the four independent variables explained 59.5% variance in entrepreneurship intention. The relationship between the four factors and entrepreneurship intention was considered high (R=0.771).

A detailed examination of the individual factors revealed that only one factor (perceived social norm) did not contribute

significantly towards entrepreneurship intention (t=-0.003, p=0.997), while the other three factors contributed significantly towards explaining the dependent variable. The most significant factor that contributed towards entrepreneurship intention was attitude (Beta=0.355), followed by entrepreneurship knowledge (Beta=0.338) and perceived feasibility (Beta=0.212).

These three factors contributed positively towards entrepreneurship intention, as seen from the positive Beta values (Table 6). The findings were in line with the previous studies of Linan (2004), Shiro (2010), Ahmad Faiz et al. (2010), Ambad and Damit (2016), Yildirim et al. (2016), Mat et al. (2015), and Koe et al. (2012).

Table 6
Results of multiple regression (enter method)

Variables	b	SE	Beta	t	p
Constant	0.060				
Attitude	0.396	0.050	0.355	7.994	0.000
Perceived social norm	0.000	0.063	0.000	-0.003	0.997
Perceived feasibility	0.276	0.064	0.212	4.280	0.000
Entrepreneurship knowledge	0.365	0.047	0.338	7.731	0.000

F=145.173 R=0.771
Sig-F=0.000 R^2=0.595

DISCUSSION

The major contribution of the present study was the extending of the generalisability of the EIM from university students in Europe and South Asia to a new specific context, Malaysian youth. As discovered in this study, three factors from the original factors discussed in the EIM, namely attitude towards entrepreneurship, entrepreneurship knowledge and perceived feasibility, significantly contributed towards entrepreneurial intention among the Malaysian youths studied here.

In line with studies conducted by Ambad and Damit (2016), Yildirim et al., (2016), Mat et al. (2015), and Koe et al. (2012), this study concluded that attitude

was one of the major contributors towards entrepreneurship intention. Several causes can be attributed to this findings First, within the scope of the EIM, as suggested by Linan (2004), a favourable attitude is expected to increase an individual's intention to display a certain behaviour; hence, a positive attitude is expected to drive positive personal evaluation of entrepreneurship intention. Shiro (2010) on the other hand, suggested the simple explanation that a positive attitude will lead to success in any activity in which the majority of a community are involved in, and vice versa.

In line with the EIM, perceived feasibility was found to be a significant contributor. Within the scope of this factor,

the influence of role models, mentors or partners is vital; this notion is supported not only by the results of this present study, but by other researchers such as Ahmad Faiz et al. (2010). Ahmad Faiz et al. explained the significant influence of partners on youths' decision and in most cases, more so than that of parents and the surrounding community. Ahmad Faiz et al. further clarified that experience and expertise of role models and mentors attract youth attention and intention to be involved in entrepreneurship. Furthermore, Ahmad Faiz et al. confirmed that experience and expertise possessed by these people made entrepreneurship look easy, thus motivating and encouraging young people to get involved in entrepreneurship activities.

Knowledge is another contributor towards entrepreneurial intention. Having knowledge can further help young people to distinguish or generate opportunities and take action aimed at realising an innovative knowledge practice or product. The findings of this study are in line with studies conducted by Yildirim et al. (2016) and Koe et al. (2012), who found that the possession of adequate knowledge of entrepreneurship creates interest among young people, which then nurtures intention to participate in entrepreneurship.

This study concluded that perceived social norms are not considered a major contributor towards entrepreneurial intention and this contradicts the findings of Roxas (2007). Nevertheless, this contradiction might be explained by Miranda, Chammoro-Mera and Rubio (2017), who stressed lack of entrepreneurial culture in the local context as a possible reason, as the community might not be characterised as being greatly drawn to entrepreneurial activity.

Limitations of the Study

The study has several limitations. First, the sample size included only 400 respondents from among the large population of Malaysian youths; different findings are expected if a bigger sample size and various age groups had been included. Second, the study was conducted in four districts in Peninsular Malaysia; hence, the results may not be generalised to the total population of youths in Malaysia. Third, although there are many behavioural factors studied by scholars across the globe, the present study focused only on four behavioural factors, namely attitude, perceived social norms, perceived feasibility and entrepreneurship knowledge.

CONCLUSION

From this study, three variables emerged as significant contributing factors towards entrepreneurship intention. These three factors, attitude towards entrepreneurship, entrepreneurship knowledge and perceived feasibility, need to be given particular emphasis in order to promote entrepreneurship intention among the target group. In other words, if these three factors among the target group were to be strengthened, there would be a greater likelihood that the group's entrepreneurship intention would be increased.

Recommendations

A number of recommendations are highlighted here. First, in order to enhance entrepreneurship knowledge among young people, intervention by the parties concerned is necessary. Courses and seminars, for example, can be conducted at schools and universities. Online courses and seminars are also an effective and highly engaging means of spreading information. The same strategy also can be used to create a positive attitude towards entrepreneurship among young people.

A mentor-mentee programme could also be created, where mentors would help their young mentees set career goals and take the necessary steps to realise those goals, while at the same time capitalising on their own personal contacts to get involved in helping their mentees locate entrepreneurship possibilities. Through a programme like this, potential youth entrepreneurs could be identified and nurtured.

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SOCIAL SCIENCES & HUMANITIES

Enhancing the Sense of Togetherness among Youth via Facebook: A Case Study on 1Malaysia Wireless Village Project

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ABSTRACT

This paper explores some topics related to enhancing the sense of togetherness among youth within a virtual community. With the wider use of the Internet among the rural youth in Malaysia, rural communities are more exposed to global connection. The 1Malaysia Wireless Village Project has taken this many steps forward. The Internet has occupied social media of all kinds, and social media are widely accessed among rural youths. Rural youths occupy themselves within the social space of Facebook in a way that suggests that they find its functions useful for staying connected with friends near and far. Primary analysis has found that use of Facebook functions creates not only a social bond and support but also builds a social channel for obtaining and sharing current issues among virtual group members. The frequent use of its specific functions such as conversation, sharing, identity, reputation and group were found to have significant correlation with users' sense of togetherness. However, it was identified that the frequent use of the group function contributed the most to enhancing the perceived sense of togetherness among the virtual community members.

Keywords: Facebook function usage, group, rural youth, sense of togetherness, social connectedness, virtual community

INTRODUCTION

After winning independence in 1957, Malaysia, a multi-racial country with diverse ethnic groups, religions and cultures, has been trying to disseminate ethnic tolerance among its population to overcome

the race barrier. Malaysians have embraced the existence of diversity, but the integrity of the population is fundamental for social harmony without assimilating altruism. As stated by the fourth prime minister in his legacy to the nation, "The Way Forward: Vision 2020" (Mohamad, 1991), Malaysians will be able to overcome a race-based mindset and become a united nation if only a sense of togetherness exists within the society and all the ethnic communities accept one another's differences (Moody & White, 2003). Social integrity is a complicated goal for Malaysia to achieve, unless there is an acknowledged social connectedness among the people within a strong sense of togetherness. It is believed that Information and Communications Technology (ICT) can contribute to achieving this goal.

Information and Communications Technology (ICT) is one of the core components of the Tenth Malaysia Plan, the blueprint for turning Malaysia into a developed country by the year 2020 (Economic Planning Unit, 2010). Ever since the Internet was introduced in 1995, the Malaysian government has planted various initiatives related to information technology infrastructure to promote ICT use among the people. The Internet penetration gap between urban and the rural areas reported in the Malaysian Communications and Multimedia Commission's (MCMC) Pocket Book of Statistics Q1 (2014) recorded internet access and use by urban households as being 75.8% compared with rural households, which, sadly, were far behind, recording only 24.2% of Internet access. In order to close

this gap, the MCMC established numerous telecentres and distributed 1Malaysia Netbooks to underserved families in March 2010. In 2011, the organisation endeavoured to expose the netbook recipients to Internet access through the 1Malaysia Wireless Village Project with support from Universal Service Provision (USP).

Previous studies on the use of the Internet have mostly been conducted among urban communities (Marzbali, Abdullah, Razak, & Tilaki, 2014; Wickrama & Bryant, 2003), with very few focussing on rural communities (Ibrahim & Ainin, 2009). Ibrahim and Ainin (2009) found that the rural communities lacked awareness and participation in ICT as they lacked social capital. Since the 1Malaysia Wireless Village has a lot to offer in the context of social interaction (Sahharon, Omar, Bolong, Shaffril, & D'Silva, 2014), it is imperative to accumulate meaningful evidence that social media usage can foster social cohesiveness. This study aims to be a future reference for social media practices for communication. Other than face-to-face communication, computer-mediated communication can also foster a sense of emotional support and social interaction in a virtual community (Bolong, 2011). Bruhn (2009) stated that a feeling of togetherness refers to the forces that connect the parts of a group and resist any disruptive influences. This concept is the basic element for understanding group life as it conveys the members' readiness to accept the actions of others for intended actions of their own and their readiness to be influenced by other group members.

Therefore, results from this study could help improve the understanding of social media usage among rural youth and be a positive reference for its best use.

While some studies have indicated that online interaction could lead to psychological disruption such as dysfunctional behaviour, feeling a lack of community life and social isolation (Putnam, 2000), a recent study by Grieve et al. (2013), however, provided insight into social motivation through Facebook usage. Facebook usage is able to help simulate emotional indications of feeling connected; thus, Facebook can improve their cognitive and interpersonal interaction. Hence, in this study, we focussed on one of the important dimensions of social cohesion i.e. to determine the perceived sense of togetherness among virtual community members. Therefore, the first objective of this study was to explore the motivations of the youths of 1Malaysia Wireless Villages in using Facebook, while the second was to determine their level of sense of togetherness. The third was to determine whether Facebook functions can foster a sense of togetherness and lastly, the fourth was to determine which Facebook function most contributed to a sense of togetherness.

1Malaysia Wireless Village Project

By the end of the year 2014, there were a total of 5802 1Malaysia Wireless Village Projects planted across the Malaysian peninsular and Borneo (Malaysian Communications and Multimedia Commission, 2015). This provision offers a wide spread of wireless technology for Internet connection also known as Wi-Fi. Service networks such as Telekom Malaysia (TM), Celcom, Maxis, Digi, Redtone and Packet 1 provide wireless coverage for underserved areas by planting Advanced Access Points (AAPs) around nearby villages through an existing hub in telecentres. Sahharon et al. (2014) construed the potential benefits of 1Malaysia Wireless Village Projects among the rural community and found that the Project could benefit the rural communities in terms of creating connections, gaining information and creating opportunities for effective communication. The role of free Internet service also helps the rural communities to connect and fundamentally communicate with people beyond their comfort zone; moreover, they can also gain access to information easily through sharing of information among virtual community members (Samah, Badsar, Hassan, Osman, & Shaffril, 2013). Social media, especially, have become the favourite media of communication among youth communities everywhere around the world.

From 2014, social media platforms such as Facebook, Instagram and YouTube have become part and parcel of the daily life of virtual youth communities. In Malaysia, there were 17.5 million Internet users, of whom 87.9 % had access to Facebook. By July 2013, there were already 13.3 million Facebook subscribers aged between 13 and 34 years old, of whom the group aged 18 to 24 years old was statistically shown to be the highest age group among Facebook users (Hogan, 2012). With a mobile-phone

penetration of 143.4% per 100 inhabitants, it is easy for Malaysian youths to access Facebook through mobile apps (MCMC *Pocket Book of Statistics Q1*, 2014). These users mostly access the Internet from home, where they have their own Internet subscription or a mobile data plan. In 2014, there were 13 million active users accessing social media through their mobile devices, and Malaysians' mobile penetration for social media was 44% i.e. one third of the time spent online in Malaysia was on activities related to social media (Kemp, 2015). The use of social media among youths in Malaysia is often combined with interpersonal motives, including relationship maintenance, passing time, developing new relationships and pursuing companionship (Sheldon, Abad, & Hinch, 2011). Several scholars agree that social media not only compensate for social relationships, but also enhance the relationship among users who have already established interpersonal relationship.

Facebook Usage within Malaysia Context

Previous studies on Facebook have suggested that Facebook usage can provide an opportunity for developing and maintaining social connectedness among online friends (Grieve et al., 2013) and for gaining social recognition through self-presentation (Nadkarni & Hofmann, 2012) and self-disclosure (Park, Jin, & Annie Jin, 2011). Within the context of Malaysia, the adoption of Facebook among youths indicated that Facebook usage among

youths was influenced by peer pressure and the need to follow current trends, and for these reasons, it became a part of their daily routine (Mustaffa et al., 2011). Mustaffa et al. (2011) stated that 42% of Malaysian youths spent at least 1 to 3 hr per day on Facebook, of whom 67% intentionally used Facebook to communicate with friends, while 65.5% said they used Facebook to reconnect with old friends. Similarly, Kemp (2015) indicated that Facebook penetration in Malaysia by 2014 was 53% and the average time that social media users spent on social media each day was 3 hr 17 min. Facebook appeal among youths today is still eminent as it is a channel for keeping in touch with current or old friends and new acquaintances. Buechel and Berger (2012) argued that increased microblogging and emotional expression on online social networks is an indicator of emotional instability; however, they also concluded that online social networks might not be as negative to users' well-being as previously believed, which in turn could provide them with long-term social support and could foster intimacy.

Facebook Functions

The honeycomb framework by Kietzmann, Hermkens, McCarthy and Silvestre (2011) provides an insight into social media ecology. Specifically, social media ecology offers a pervasive communication strategy through seven main functions, which are presence, relationship, identity, sharing, conversation, reputation and group. The activities conducted by youths using social

media varies in terms of the seven building blocks as each function differently and delivers different impacts on its users (Kietzmann et al., 2011). The only social media platform that consists of all seven building blocks is Facebook; social media platforms such as Twitter focus on sharing of status, while Instagram focusses on sharing of special moments through pictures. The seven function blocks explained in Figure 1 indicate the different social media activities usually conducted by users. The blocks configured by Kietzmann et al. (2011) shows that frequent usage of the functions can lead to explicit social responses such as self-presentation, promotion and reputation through personal disclosure, conversation and sharing of information.
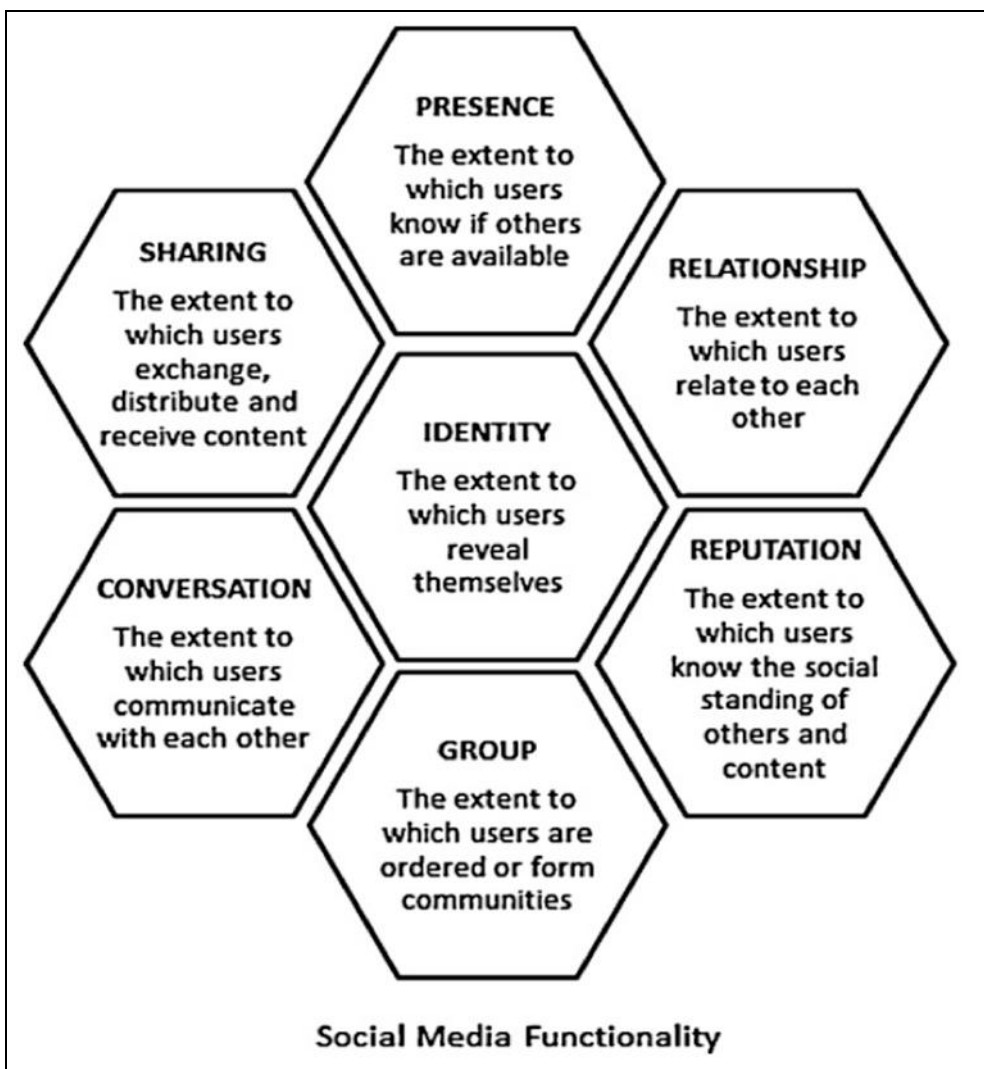
Figure 1. Honeycomb framework of Social Media building block functionalities (Kietzmann et al., 2011)

The conversation function, for instance, allows people to feel connected and the result of frequent postings allows a richer experience of social connectedness to the community as a whole. The group and sharing function blocks allow social media users to feel connected by a shared object and to form communities through online interaction that can strengthen interpersonal relationships. The relationship block forms relationships the user has with other users and shares their position within their network, leading them to make personal associations by sharing specific details with certain members, thus building a feeling of social cohesiveness. The presence block refers to the online presence of users, allowing users to know who is available at the time of use and the identity block allows users to find out more about other users by reading their self-disclosed profile. The reputation block provides information on the social standing of users and content by displaying the number of friends and followers of users.

Although several studies have shown that Facebook usage may provide the opportunity to develop and maintain social connectedness, social support, social ties and more (Gilbert & Karahalios, 2009; Grieve et al., 2013; Nadkarni & Hofmann, 2012) among online community members, it is unclear whether a sense of togetherness can be built from Facebook social interaction. Facebook has different functions (Kietzmann et al., 2011) that can enhance social cohesion among its users; therefore, this study focussed on which

Facebook function, if used frequently, could enhance the sense of togetherness among rural youth virtual communities.

Sense of Togetherness

The concept of sense of togetherness is different from sense of unity as in the former, members of the group may not share the same opinions, but do possess bonds that can link them to one another and to the group as a whole. Most Facebook studies tend to focus on social connectedness, which is the concept of how people come together and interact among their social circles or even communities (Sheldon et al., 2011). Sheldon et al. (2011) suggested that the frequency of Facebook use allows social connection and the positive use of Facebook is mediated by the tendency to have positive experiences within the virtual community context. The concept of sense of togetherness is derived as a dimension of social cohesiveness (Moody & White, 2003), in which the relationship and interaction between users were based on their physical intimacy or closeness and familiarity with other members of that community. A sense of togetherness is expressed through the property of relationships by which group members are linked through everyday forms of social interaction. In Maslow's Theory of Human Motivation (1943), belonging or a feeling of relatedness is the third most important human need after physiological and safety needs. Yusop et al. (2010) agreed with this after their study found that 90% of their respondents agreed that it was important to belong to a group or

an association due to their belief that they would benefit from being part of the group.

Grieve et al. found that Facebook was able to enhance social connectedness through the frequency of interaction with other virtual members and the level of self-disclosure (Grieve et al., 2013). However, Bonds-Raacke and Raacke (2010) implied that if the motivation for social media usage was solely information seeking, then social connectedness may not be experienced. A study by Cheung, Chiu and Lee (2011) on reasons for students' Facebook usage claimed that the presence of social identity can create a sense of belonging among users of an online social networking site, where users can relate to one another as members of the community. Their study showed that students utilised Facebook to fulfil their psychological state of wanting to belong and to be able to identify themselves as

being a part of something. Furthermore, the social connectedness through Facebook is influenced by individual differences in motivation for use. Before we go into details on the level of the sense of connectedness or belonging it is imperative to first determine the concept of sense of togetherness.

Sense of togetherness in this study refers to the level of agreement among 1Malaysia Wireless Village youth community members on perceiving that their Facebook profile is their own, whether they feel associated with their Facebook virtual community members, whether they try to achieve a common goal and understanding with other members and particularly, whether they have the intention to leave their Facebook virtual community due to lack of understanding among one another. The framework for this paper, based on a review of the literature, is presented below in Figure 2.
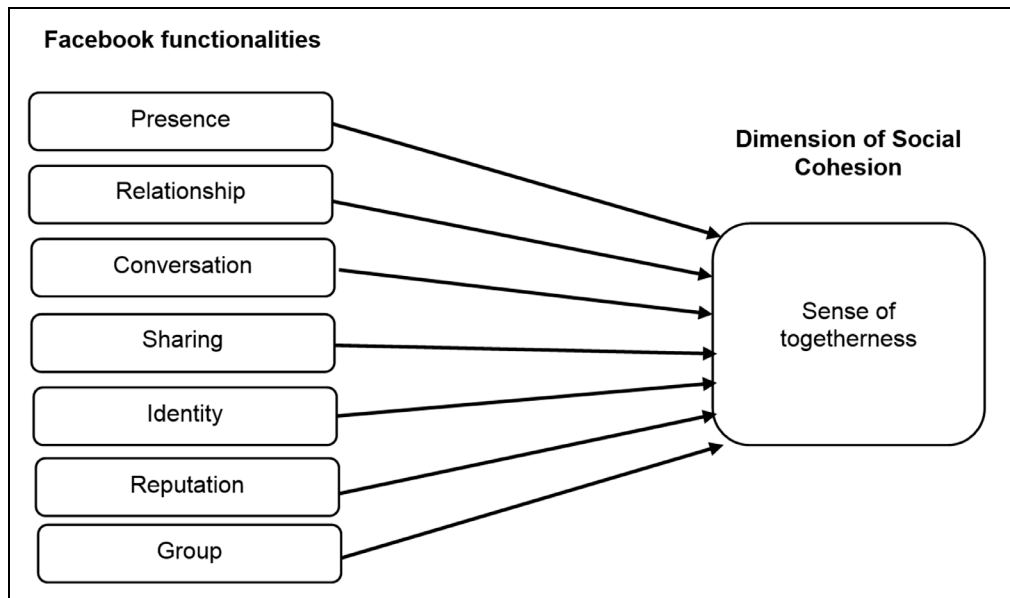
Figure 2. Framework for this paper

METHODS

This study was conducted using the quantitative method; the researcher employed the survey method and sampled the respondents through a multi-stage cluster sampling. A total of 25 respondents each were selected from four 1Malaysia Wireless Villages from four states i.e. Perlis, Negeri Sembilan, Seremban and Kuala Terengganu to represent the four zones in Peninsular Malaysia (25 rural youths x 4 1Malaysia Wireless Villages x 4 states = 400 respondents). A total of 400 1Malaysia Wireless Village rural youths aged between 15 and 40 years old were carefully chosen to represent each zone. The data collected were then analysed using the SPSS Statistics 22.

Operationalisation of Research Variables

The first part of the questionnaire consisted primarily of demographic questions (age, gender, friends' background). The second part measured the frequent use of Facebook functions. All the items were measured on a 4-point Likert scale. The third part contained items on sense of togetherness in a virtual community and a 4-point scale was also used, with 4 indicating a high sense of togetherness and 1 indicating a low level of togetherness.

Initially there were four items to describe the usage of the presence function, with items referring to the frequency of knowing if other users were available. Two examples of the items were: "I check the 'available' status (round green button) on

the right side of [the] Facebook chat sidebar before contacting my friend" and "I share my status on Facebook with friends." The response option given was a 4-point Likert scale, with 1 indicating the user never used the Facebook function and 4 indicating frequent use of it.

Originally there were six items to describe the usage of the conversation function, and the items referred to the frequency of communicating with other users. Two examples of the items were: "I start a conversation with other users through sharing [status]" and "I converse with friends by expressing my opinions in [the] Facebook comment space." The response option given was a 4-point Likert scale, with 1 indicating the user never used the Facebook function and 4 indicating frequent use of it.

There were four items to describe the usage of the sharing function, wherein the items referred to the frequency with which users exchanged, distributed and received content. Two examples of the items were: "I like to share, distribute and receive information about current issues" and "I like to share information in groups or the groups I joined as a member because we have the same passion and direction." The response option given was a 4-point Likert scale, with 1 indicating the user never used the Facebook function and 4 indicating frequent use of it.

There were four items to describe the usage of the identity function, and the items referred to the frequency with which users revealed themselves. Two examples of the

items were: "I use the Facebook profile function to share information about myself" and "I intentionally reveal my identity through the function of 'Like' on Facebook." The response option given was a 4-point Likert scale, with 1 indicating the user never used the Facebook function and 4 indicating frequent use of it.

There were seven items to describe the usage of the reputation function, with the items referring to the agreement to reveal the social standing of others and content. Two examples of the items were: "My reputation can be measured through my list of friends (Friends button) on Facebook" and "Updating Facebook status determines my reputation." The response option given was a 4-point Likert scale, with 1 indicating strong disagreement and 4 indicating strong agreement.

There were three items to describe the usage of the group function, with the items referring to the agreement among users in forming communities. Two examples of the items were: "By participating in a Group means that I have the same interests with friends" and "The Group function in Facebook allows me to create and manage different types of [friend]." The response option given was a 4-point Likert scale, with 1 indicating strong disagreement and 4 indicating strong agreement.

There were four items to describe the usage of the relationship function, with the items referring to the frequency with which users related to each other. Two examples of the items were: "I build a group on Facebook

to build relationships with friends" and "I [confirm] the identity of a person on Facebook before I 'approve' them as [a] friend." The response option given was a 4-point Likert scale, with 1 indicating the user never used the Facebook function and 4 indicating frequent use of it.

There were eight items for sense of togetherness, with the items referring to the level of agreement from a Facebook virtual community member i.e. whether members perceived their Facebook profile as their own or not, and whether they saw themselves as part of the Facebook community. Two examples of the items were: "I feel like the virtual community is mine" and "I [regard] myself as part of this virtual community." The response option given was a 4-point scale; a high mean score (max=4) would show high perception of sense of togetherness, whereas a low mean score (min=1) would show a low sense of togetherness towards their Facebook virtual community.

Pilot Test

The pilot test of the study was conducted with 30 respondents in Kuala Perlis. A reliability analysis resulted in a Facebook-function construct with a Cronbach's alpha of 0.939 and a sense-of-togetherness construct with a Cronbach's alpha of 0.862. Both results confirmed that both of the constructs were reliable and valid as the values exceeded the recommended Cronbach's alpha value of 0.700 by Nunnally (1978). However, the presence and the relationship functions

were both deleted from the construct due to low construct reliability, low AVE level and failure to meet with the criteria of fit indices.

RESULTS AND DISCUSSION

Demography

The demographic characteristics of the respondents (Table 1) revealed that there were more male (58%) respondents than females (42%), of whom the majority were Malays (98.3%). This indicated that the villages included in the sample were homogenous in ethnic identity, and this explained why their Facebook friends were mostly Malays (98.8%). This study found that the highest users of Facebook among the respondents were youths aged between 15 and 20 years (76.8%), with

a mean of 19.15; this finding was similar to that of Hogan (2012), who found that users in the age group of 18 to 24 years old made up the highest number of Facebook users. The mean for age group conveyed that the majority of Facebook users within rural communities were among those who were no longer in school, had spare time in between their part-time jobs and could afford their own personal gadgets. Most of their Facebook friends consisted of close friends from school (95.5%) and the village (65.3), and more than half of them sought new friends (53.3%) online. This finding showed that the respondents were mainly using Facebook to maintain close relationships with established friends, but were also seeking new social networking outside their comfort zone of acquaintances.

Table 1
Frequency of distribution of the sampled population

Variables	Frequency	%	Mean
Gender			
Male	232	58.0	
Female	168	42.0	
Race			
Malay	393	98.3	
Chinese	4	1.0	
Indian	3	0.8	
Others			
Members' race			
Malay	395	98.8	
Chinese	54	13.5	
Indian	22	5.5	
Others			
Age (Years)			19.15
15-20	307	76.8	
21-30	72	18.0	
31-40	21	5.3	

Table 1 *(continue)*

Variables	Frequency	%	Mean
Type of friends			
School friends	382	95.5	
Village friends	261	65.3	
Family	238	59.5	
New friends	213	53.3	
Friends from neighbouring village	126	31.5	
Urban friends	125	31.3	
Colleagues	102	25.5	

Pattern of Facebook Usage

The location of Facebook usage was mainly the users' own home (87.5%) and within the radius of the 1Malaysia Wireless Village hotspot (35.5%), which was the second favourite place of users to be online. This data depicted that the free Wi-Fi provided by the Universal Service Provider (USP) with the collaboration of the Malaysian Communications and Multimedia Commission (MCMC) was convenient as there were several underserved families who could not afford personal Internet subscription. The gadgets used to access Facebook were primarily smart phones (90.5%) and computers (54%) provided at nearby telecentres. This finding was prominent since MCMC recorded about 143.4% of mobile-phone penetration per 100 inhabitants in Malaysia. The average hours of Facebook usage during school/work days were consistently between 1 and 3 hr (88%); this finding was in line with Mustaffa et al.'s adoption of Facebook and it was clear from the length of time spent online that some of the respondents were still in school or had other responsibilities to attend to on regular days (Mustaffa et al., 2011).

Table 2
Pattern of Facebook usage

Variables	Frequency	%
Facebook usage location		
Home	350	87.5
1Malaysia Wireless Village hotspot	142	35.5
Cyber café	136	34.0
Eatery	102	25.5
Study place	77	19.3
Work place	72	18.0
Gadgets used to access Facebook		
Smart phone	362	90.5
Computer (PC)	216	54.0
Personal laptop (netbook)	147	36.8
IPad/IPod	51	12.8
Average hours of Facebook usage during school days/work days		
1-3 hr	352	88.0
4-6 hr	30	7.5
>7 hr	18	4.5

Motivations for Facebook Usage

In answering the first objective, which explored the motivation for Facebook usage among 1Malaysia Wireless Village rural youth, it was discovered that, remarkably, their main motivation for using Facebook was to get current news about other members (91%). This was followed by the desire to chat with other members through Facebook messenger (86.3%) and to share the latest updates in their life (79.8%). This emphasised that the main usage of Facebook among the rural communities surveyed in this study revolved around information seeking, sharing and gathering within their virtual community activities. In contrast, Mustaffa et al.'s findings (2011) on the purpose of Facebook usage among youth in the Klang Valley revealed that they used Facebook mainly to communicate with friends (67%) and to reconnect with old friends (65.5%).

Table 3
The main objective in using Facebook

Variables	Frequency	%
To get the latest news	364	91.0
To chat	345	86.3
To share information	319	79.8
To be active in the groups joined	302	75.5
To check who is online	237	59.3
To maintain reputation/identity	220	55.0
To find new friends/networks	210	52.5
To watch videos	145	36.3

Sense of Togetherness in Virtual Community

The second objective was to determine the level of sense of togetherness among 1Malaysia Wireless Village rural youth virtual communities. The 1Malaysia Wireless Village rural youth were found to have a moderate sense of togetherness (M=2.89) with their Facebook communities (Table 4). This was somewhat affected by the fact that their Facebook usage was mainly for information seeking and sharing. Likewise, Bonds-Raacke and Raacke (2010) previously implied in their study that if the motivation for social media usage was solely information seeking, then social connectedness may not be experienced. The fourth most common activity was to remain active within the groups joined (75.5%). Since the respondents were aware of their reputation, they believed that it was imperative to maintain a good image within their social group; thus, the role of group functionality somewhat contributed to their sense of togetherness.

Table 4

Level of 1Malaysia wireless village rural youth sense of togetherness with their Facebook community (n=400)

Level	Frequency	%	Mean	SD
			2.895	0.581
Low (1-2.00)	52	13.0		
Moderate (2.01-3.00)	239	59.8		
High (3.01-4.00)	109	27.3		

The SEM results suggested that Facebook functions could enhance a sense of togetherness (Table 5). A simple linear regression analysis was used to determine which Facebook functions contributed the most to sense of togetherness. A significant regression equation was found (F [7, 392]=103.111, p<0.000), with an R2 of 0.648. There were items identified as affecting the factor loadings; therefore, a Confirmatory Factor Analysis (CFA) was done for each variable to test the relationships, and items that did not fit the construct for a model fit were deleted. Out of the seven functions on Facebook, only the frequency of group, conversation, reputation and identity usage was observed to contribute significantly towards the perceived sense of togetherness.

In answering the third objective, it was observed that the frequency of using the group function on Facebook (β=0.289) contributed the most towards the perceived sense of togetherness. This finding suggested that the majority of the respondents felt they belonged to the group and identified with their membership in the community. When the members of a virtual community are willing to share, work together, include each other and take pleasure in benefiting from community involvement, they feel a sense of togetherness (Bolong, 2011). Just as Moody and White (2003) indicated, a sense of togetherness develops from associations that are embedded in the social network. It makes the individual feel honoured and proud that members of the community are constantly striving to achieve mutual goals and common understanding. In line with Cheung, Chiu and Lee's study (2011) on reasons for students' Facebook usage, it was found that the psychological state of wanting to belong and to be able to identify as being part of a group was fulfilled by using Facebook. Similarly, Yusop et al. (2010) emphasised that belonging to a group brings benefits to the members and creates closeness as it is easier to organise group activities. They are willing to share responsibilities and commit to the group by maintaining a positive social relationship (Baumeister & Leary, 1995).

Table 5
Results of SEM on the effect of frequency of usage of Facebook functions on sense of togetherness

Construct	β	SE	Beta	CR	ρ
Group	0.289	0.041	0.309	7.077	0.000
Conversation	0.266	0.044	0.318	6.121	0.000
Reputation	0.173	0.036	0.197	4.772	0.000
Identity	0.097	0.027	0.154	3.582	0.000
Presence	0.008	0.036	0.036	0.224	0.823
Sharing	-0.005	0.027	-0.008	-0.198	0.843
Relationship	-0.018	0.037	-0.021	-0.472	0.638

R=0.805
R^2=0.648

Buechel and Berger (2012) concluded that online interaction through Facebook could provide long-term social support and foster intimacy between the users. Referring to the respondents' pattern of Facebook usage, Facebook was accessed for 1 to 3 hr daily to feel socially connected; therefore, social context cues such as mutual friends or shared interests could guide their conversations to socially relevant topics as they had found common ground.

Despite the fact that Facebook usage among youth was previously found to maintain existing relationships, this study found that usage of the relationship function was part of the motivation for enhancing sense of togetherness after the usage of the presence function and the sharing function. Kietzmann et al. (2011) implied that social media communities that do not value identity highly also do not value relationships highly. However, this paper found it to be otherwise; the rural youth did not associate the 'multiplexity' of relationships between the members as a form of attachment to feel a sense of togetherness although they did value the identity or the validation of authenticity of a user before adding the user as a friend. Perhaps the maintaining of relationships within Facebook is done by being active in groups, daily social interaction and ensuring a positive identity and reputation among other members on Facebook.

CONCLUSION

At the present time, youth communities have been applying social media as channels for social networking to gain more contacts and to develop interpersonal relationships with existing friends or new members from different villages. The 1Malaysia Wireless Village Project has the potential to create a community of shared values, shared challenges and equal opportunity among rural youth who use social media as channels for communication and social cohesion in the ongoing process of developing a rural community based on members' perceived sense of togetherness.

Spending time on Facebook appears to be part of the daily routine of most Malaysian youth (Mustaffa et al. 2011). The data from this study showed that the main usage of Facebook among the rural communities in this study was mainly for information seeking and sharing details of members' virtual community activities. Furthermore, it was found that the motivation of information seeking affected the perceived sense of togetherness, which was only moderate, among the 1Malaysia rural youth Facebook virtual community. The study also found that increases in the frequent usage of Facebook functions or Facebook usage purpose could increase users' perceived sense of togetherness as members of the virtual community.

In identifying which Facebook function contributed significantly towards the level of social cohesiveness, it was found that the frequency of usage of the group function on Facebook was the main motivation that influenced users' perceived sense of togetherness. As Kietzmann et al. (2011) explained, the implication of each block could assist in explaining how policy makers can develop a new project based on how online engagement takes place in social media. Through this project, the government can monitor the rural community's grouping activities and configure them to good use. A sharing network can help mediate users' shared interests, allowing them to value their national identity highly. Just as Kietzmann et al. (2011) highlighted, given the immense cyber traffic that social media

create daily, the existence of the group function is beneficial for filtering and only sharing specific details with some members and not others. This could come in handy for changing the future ecology of social media and assembling a strategy for more manageable human communication.

Due to the scarcity of interpersonal influences, different individuals tend to be in disagreement as everyone has a different attitude, beliefs and behaviour. Interpersonal interaction is needed for individuals to agree on anything and to coordinate behaviour (Friedkin, 2004). A homogenous community is not part of the national agenda, as current Prime Minister, Dato' Sri Najib Razak's vision is for a heterogeneous Malaysian society striving for the same goal (Suruhanjaya Komunikasi dan Multimedia Malaysia, 2011). Positive interpersonal attachments achieved through a dynamic of positive social interactions with like-minded people are what make a group attractive to the virtual youth members of 1Malaysia Wireless Villages. Positive consensus through social media creates rewarding interaction among members, and this in turn influences their attitudes and behaviour within the group as they become willing to contribute and commit to making the group a better place for all to feel a sense of togetherness.

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Profiling Youth Participation in Volunteer Activities in Malaysia: Understanding the Motivational Factors Influencing Participation in Volunteer Work among Malaysian Youth

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ABSTRACT

The involvement of youth in volunteer work is essential as it enables them to contribute to society (Checkoway, 2011). However, profile studies on Malaysian youth participation in volunteer activities are scarce and the subject warrants further research (Siti Raba'ah et al., 2011; Turiman et al., 2009). What is the level of participation of youth in volunteer activities? What hinders or motivates them to participate in volunteering work? This research profiles youth participation in volunteer activities in Malaysia. Specifically, it is aimed at profiling: 1) factors that motivate youth to participate in volunteer work; 2) the level of motivation towards participation in volunteer work among Malaysian youth; and 3) the most dominant motivation factor of youth participation in volunteer work. A total of 342 Malaysian youths participated in this nationwide study. A Youth Motivation on Participation in Volunteering Questionnaire was administered to Malaysian youth. Data were analysed and interpreted to provide the key findings on Malaysian youth engagement and participation in volunteer work. This study shows that the relationship between motivation and participation in volunteer work is positively significant. It shows that almost all the respondents in this study participating in voluntary activities were influenced by a number of motivating factors. The study ends with recommendations for policy makers and practitioners on how to attract youth to participate and to engage more effectively in volunteer work.

Keywords: Participation, volunteerism, youth

INTRODUCTION

Volunteerism and community services started in Malaysia in the years between the 1960s and the 1980s (Mohamed, 1986) to seek helps and supports from youth in many aspects ranging from politics to economic and social activities (Faizli, 2013). The youth were called on as they are always expected to define the national vision and elevate the status and image of the country to the higher level. However, it is important to understand the youth and Malaysian youth, especially, before delving into the role of youth and their participation in volunteer work in Malaysia. The definition of youth varies according to country and culture, especially in terms of the actual age range of youth. The United Nations Association (2012) outlines the ages of 15 to 24 years old as the age of the individual youth, while the Commonwealth Youth Programme Youth (CYP) in the Commonwealth Plan of Action for Youth Empowerment 2007-2015 defines youth as individuals ranging from 15 to 29 years old. According to Gale and Fahey (2005), each country has its own definition of youth; in Japan, Indonesia, Saudi Arabia and the United States, the range is 15 to 24 years old, while in Singapore and India it is 15 to 35 years old, in Bangladesh it is 18 to 35 years old, in European countries such as Spain, Italy, Greece and Denmark it is 16 to 29 years old and in China it is15 to 29 years old. Specifically in Malaysia, youth are defined as those within the age group of 15 to 40 years old (Dzulhailmi et al., 2012). Statistically, youth represents the largest portion of Malaysians population compared with other age groups such as children and adults. In 2012, youth numbered 46% of the population, which was equivalent to 13.3 million people out of the total Malaysian population at the time (Kasim, Zulkharnain, Hashim, Ibrahim, & Yusof, 2014).

According to Kim (2014), youth play an important part as they are seen to be a key element of future development for the country. They are the driving force of social transformation and can exert social pressure on demanding rights and priorities for the betterment of society as a whole (Secretary-General's Youth Employment Network, 2003). Research also stressed that "youth are not only the leaders of tomorrow, but the partners of today." Acknowledging the significance of youth contribution to society and nation building, the Malaysian government has clearly shown their concern and support for youth participation in volunteer activities by launching the 1 Malaysia for Youth (1M4U) with funds amounting to more than RM100 million (Carvalho & Ahmad, 2012). Besides, the Malaysian Youth Council (MBM) has underlined the role of youth organisations in many aspects such as cultivating a sense of responsibility, patriotism and volunteerism among youth, encouraging and inducing youth to play a positive and effective role in society and the nation, and working in close collaboration with the bodies responsible for youth affairs in the interest of the youth movement (Haslinda et al., 2012).

In the meantime, the awareness of the government and the community on the importance of volunteerism can also

be seen through the increasing in the establishment of voluntary organisations in Malaysia (Nawi & Asmuni, 2013) that actively seek the participation of youth such as Majlis Sukarelawan Universiti Malaysia (MASKUM), Yayasan Sukarelawan Siswa (YSS), Malaysian Association of Youth Clubs (MAYC), Federation of Peninsular Malay Students Association (GPMS) and Malaysian Islamic Youth Movement (ABIM). According to Azimi and Turiman (1996, 1997), youth organisations in Malaysia have not changed much since the 1970s. However, Azizan (2007) found that volunteerism practised in Malaysia nowadays is so much different from before. This is because various efforts have been made by various parties, including the government and non-governmental organisations, to inculcate the culture of volunteerism with high number of active participation from youth in volunteer activities in Malaysia. In addition, volunteerism has been given prominence as a basic element of higher education by being included in Malaysia's tertiary education system through co-curricular activities. Higher Learning Institutions (IPTs) in Malaysia also have been urged to give special credits for student involvement in voluntary activities (Mansor, 2010).

Nonetheless, a study involving 3,816 respondents found that the spirit of volunteerism among the students was only moderate (Julinawati et al., 2012). The involvement and the spirit of volunteerism should be increased as volunteerism gives added value to youth and it helps in

producing quality future leaders (Julinawati et al., 2012). Therefore, research into the involvement of youth in volunteer work through motivation is essential to help increase youth involvement in volunteer activities.

Past studies showed that volunteer participation was motivated by certain factors defined by the context of particular research studies (South, Purcell, Branney, Gamsu, & White, 2014; Von Bonsdorff & Rantanen, 2011). Other studies indicated that individuals participated in volunteer activities because they chose to do so on their own out of the spirit of altruism (Ali, Russ, Grarib, & Hadrami, 2014; Carpenter & Myers, 2010; Kahana, Bhatta, Lovegreen, Kahana, & Midlarsky, 2013; Wearing & McGehee, 2013). Research by Houle, Sagarin and Kaplan (2005) found that individuals' participation in volunteer work had different motivation and expectations; the factors varied depending on the context of the study, sample profile and socio-demography of the subjects (Grönlund et al., 2011; Hobbs & White, 2012; Hustinx et al., 2010).

Although research by Turiman et al. (2011) found that 74.6% of their total sample were involved in voluntary activities, other researchers did not find such a high number of volunteers among their respondents. Besides, Azizan (2011) has argued that volunteerism in Malaysia has yet to prove to be a basic and important aspect in the development of the country and this should be addressed systematically and consistently. Additionally, Siti Raba'ah

et al. (2011) and Turiman et al. (2009) stated that profile studies on Malaysian youth participation in volunteer activities are scarce and the subject warrants further research. Despite all the efforts carried out to cultivate a spirit of volunteerism in society, studies on youth motivation to participate in voluntary activities are less studied. Youth involvement in voluntary work is also seen to be inconsistent. The initiatives in place to attract young people to participate in volunteer work are sometimes seen as not appropriate in the context of voluntary work and did not fit the wants and needs of youth.

Thus, this study will answer such questions as: What is the level of participation of youth in volunteer activities?; and What hinders and motivates them to participate in volunteer work? This research identified volunteer profiles through their participation in volunteer activities. Specifically, it was aimed at profiling: 1) factors that motivate youth to participate in volunteer work; 2) the level of motivation towards participation in volunteer work among Malaysian youth; and 3) the most dominant motivation factor influencing youth participation in volunteer work.

Literature Review

Volunteerism is a crucial aspect of life because it has an element of sincerity in the aid provided. Studies defined volunteerism as an organised, ongoing and pro-social behaviour specifically to cater benefits and welfare to community through any particular organisation (Omoto & Syder, 1995; Penner, 2002; Snyder & Omoto,

2000). Turiman (1991) defined volunteerism as an individual's behaviour of assisting that is seen as valuable to him and it is neither intended to obtain material compensation nor forced by any party. According to Akintola (2011), volunteering is a deed of serving the community by providing time and energy without expecting money or any material gains in return. A volunteer is also defined as someone who always looks for opportunities to help others (Clary et al., 1998) and who provides aid willingly in any circumstances (Lavelle, 2010). Meanwhile, Azizan (2011) stipulated that volunteerism ought to encompass eight features, which are organisation and social mobility, volunteer development, various voluntary activities, knowledge regarding various aspects of volunteerism, the skills that are needed to volunteer, volunteer management, the management of voluntary organisations and volunteer leadership.

Volunteer participation or volunteerism can contribute significantly to the development of the country. Therefore, many social scientists have been interested in studying volunteerism, especially the reasons or motivation for engaging in this social behaviour (Wilson, 2012). Past research showed that the type of voluntary organisation, the family, teachers and time are motivational factors for youth to participate in volunteer activities (Gage III & Thapa, 2012). Bang and Ross (2009) categorised seven volunteer motivations: 1) expression of values; 2) community involvement; 3) interpersonal contacts; 4) career orientation; 5) personal development;

6) external rewards; and 7) interest to sport. Yeung (2004) on his part stated that besides altruism, social contract and personal desires, emotional needs can also influence an individual's motivation to volunteer. However, a study found that the link between emotion and volunteer participation is weak (MacGillivray & Lynd-Stevenson, 2013).

Many research studies focussed on three aspects of youth motivation to volunteer, which are altruistic, material and social motivation (Esmond & Dunlop, 2004; Hussin & Arshad, 2012; Morrow-Howell & Mui, 1989; Tapp & Spanier, 1973; Widjaja, 2010), while various other studies considered other aspects of motivation related to demographic profile (Clerkin, Paynter, & Taylor, 2009; Eley, 2001; Pauline & Pauline, 2009; Turiman et al., 2011). Ellis (2004) specified five volunteer motivation categories, which are personal feelings, personal needs, altruism, experience and personal inducements. Other than altruism, volunteers are also motivated by learning and development, a sense of belonging and recognition of their career (Ferreira, Proença, & Proença, 2012). Hyde and Knowles (2013) identified other factors that motivate youth to engage in volunteer activities as being the desire to help people who are suffering, make people happy in a given period of time, provide support to the local community, follow in the footsteps of family members similarly involved in volunteer work, give back to society, love people in need, contribute groceries, occupy free time and be responsible to voluntary

organisations. In addition, Turiman et al. (2011) found that religion, community development, reward, support, career development, trends and knowledge also have a significant relationship on motivation towards youth participation in volunteerism.

From the psychological perspective, the most widely proposed theory is the theory of functional approach (Clary et al., 1998; 1992; Omoto & Snyder, 1995; Snyder, 1993). The theory has validated its usefulness and practicality in explaining motivation towards volunteerism (Wilson, 2012). According to Clary et al. (1998), this theory states six types of motivation arising from the following:

1) Values: This function allows individuals to express their values such as altruism and humanitarian concerns.

2) Understanding: This function drives volunteers to learn, improve and exercise skills to ensure none is left untapped.

3) Career: This function drives volunteers to increase and to improve career-related experiences, to look for job opportunities and to increase their job prospects.

4) Social needs: This function allows individuals to satisfy their need to strengthen and increase social relationships and interaction.

5) Enhancement: This function motivates volunteers to increase in personal growth and self-development.

6) Sense of security: This function addresses volunteers' desire to overcome

negative feelings within the individual, to surmount personal problems and to decrease guilt for being more fortunate than others.

There are four assumptions of the Volunteer Function Inventory (VFI), which are: 1) People are purposeful, plan-driven and goal-directed i.e. volunteers engage in volunteer work in order to satisfy important personal goals; 2) Different people may do similar things for different reasons i.e. volunteers performing the same volunteer activity for the same organisation may have different reasons for volunteering; 3) Any one individual may be motivated by more than one need or goal i.e. an individual volunteer may be attempting to satisfy two or more motives through one activity; and 4) Outcomes depend on the matching of needs and goals to the opportunities afforded by the environment i.e. successful volunteer recruitment, satisfaction and retention are tied to the ability of the volunteer experience to fulfil important motives that drive the volunteer.

The functional motivation theory was derived from theories concerning attitude and persuasion at the centre of which were two considerations, namely: 1) individuals participate in purpose-driven activities to fulfil a certain goal; and 2) individuals can perform the same activities to serve different psychological functions (Clary et al., 1998; Widjaja, 2010). In other words, different volunteers engage in volunteer service to fulfil distinct psychological functions unique to the individual or a particular time of the individual's life. However, all volunteers are attracted to volunteerism because it fulfils certain psychological functions (Widjaja, 2010).

METHODS

Data for the study were collected from young Malaysian volunteers between the ages of 15 and 40 years old. The sample for this study included 342 active volunteers within nationally-recognised non-governmental organisations (NGOs) in Malaysia. A Youth Motivation on Participation in Volunteering Activities Questionnaire adapted from the Volunteer Function Inventory (VFI) by Clary et al. (1998) was administered to Malaysian youths. This study used a simple random sampling method for data collection, allowing all youths who engage in voluntary work to have the same opportunity to function as respondents of the study. The large study population was divided into five zones. Zone A represented the northern states of Perlis, Kedah, Penang and Perak, while Zone B represented the central and southern states of Selangor, Negeri Sembilan, Melaka and Johor as well as the Federal Territories of Kuala Lumpur and Putrajaya, Zone C represented the eastern states of Pahang, Terengganu and Kelantan, Zone D represented the state of Sabah and the Federal Territory of Labuan and Zone E represented the state of Sarawak. The simple random sampling method was used to obtain respondents for every zone. This study also used the quantitative

research design as it made use of numerical and numbering data. Thus, to measure and to fulfil the objectives of the study, this research used the correlation research design. This research design measures the relationship between two or more variables in the same group. Hence, it was suitable for the context, as the study attempted to reveal the relationship between each factor studied in this study and participation in volunteer work. Data were analysed using SPSS in order to answer the research objectives by way of descriptive and inferential methods. The descriptive analysis reported the mean, median, mode, frequency, minimum and maximum, percentage, average and standard deviation used to measure and describe the respondents' demographics and the level of each variable. This study used inferential statistical techniques to analyse the entire dataset in order to answer the problem statement and objectives of the study. The inferential statistical techniques used were the Pearson correlation analysis and Simple Linear Regression. The Pearson correlation analysis was used to determine the relationship between motivation of youth to engage in volunteer work and their participation in volunteer work. Meanwhile, the Simple Linear Regression analysis was used to determine the most dominant factor influencing youth participation in volunteerism within the framework. The following section presents the results from the analysis of the data collected from this study.

RESULTS AND DISCUSSION

Descriptive analysis was conducted to obtain volunteer profiles based on gender, race, age group and residence. Table 1 shows that the sample was considered balanced in terms of gender, with males making up 58.2% and females, 41.8% of the sample. The majority of the respondents were Malay, numbering 81.3%, while 10.5% were Chinese, 2.9% were Indian and 5.3% were of other ethnic groups. Among the 342 respondents, 84.2% were Muslims, 5.3%, Christians, 7.3%, Buddhists and 3.2%, Hindus. Table 1 also shows that 35.2% of the respondents were between 15 and 20 years old, 37.7%, between 21 and 25 years, 13.6%, between 26 and 30 years, 5.9%, between 31 and 35 years and 2.7%, between 36 and 40 years. A percentage of 44.7% of the respondents lived in urban areas, 50.9%, in sub-urban areas and only 4.4% lived in rural areas.

Table 1
Respondents' demographic profile (n=342)

Demographic Characteristics	Frequency	Percentage (%)
Gender (n=342)		
Male	199	58.2
Female	143	41.8
Race (n=342)		
Malay	278	81.3
Chinese	36	10.5
Indian	10	2.9
Others	18	5.3
Religion (n=342)		
Muslim	288	84.2
Christian	18	5.3
Buddhist	25	7.3
Hindu	11	3.2

Table 1 *(continue)*

Demographic Characteristics	Frequency	Percentage (%)
Age (n=342)		
15-20	122	35.7
21-25	129	37.7
26-30	47	13.6
31-35	20	5.9
36-40	12	2.7
Residence		
Urban	153	44.7
Sub-urban	174	50.9
Rural	15	4.4

To determine the level of the research variables, the researchers examined the means and standard deviation for the five motivational factors i.e. values, understanding, career, social needs, enhancement and sense of security using the mean scores (1.00 to 3.33 is considered low, 3.34 to 6.66, moderate and 6.67 to 10.00, high) shown in Table 2.

Table 2
Interpretation of mean scores into 3 levels (1-10)

Mean score	Interpretation
(1.00-3.33)	Low
(3.34-6.66)	Moderate
(6.67-10.00)	High

The motivational factors for participation in volunteer work discussed and measured in this study were based on the Voluntary Functions Inventory (VFI), which comprises the six elements i.e. values (concern for others people and the expression of humanitarian values through voluntary activities); understanding (desire to acquire knowledge, to practise unused skills and to utilise capabilities); career (career-related desires such as the desire to gain experience and explore career opportunities and job prospects); social needs (the need for interaction with others and for strengthening of social relationships); enhancement (the desire to increase in personal growth and positive self-development), and sense of security (need to remove negative and guilt feelings towards the less fortunate and to escape from personal problems).

As presented in Table 3, the respondents indicated that motivation to learn, explore their strengths, exercise their skills and expand their understanding of how to give aid was the strongest factor in driving them to participate in voluntary activities. This factor received a mean score of 7.50. The other factors, in order of influence from strong to weak, were enhancement (M=7.41), values (M=7.39), career (M=7.31), social needs (M=7.29) and sense of security (M=7.27). This finding implied that the overall level of motivation of the youth respondents to participate in voluntary activities spurred on by these six elements of motivation was high. Using VFI, this study found that there is a need to increase youth motivation by increasing their confidence and understanding of volunteerism. By assessing the influence of various factors such as family, educational institutions, relatives and peers, the present study can be of use to volunteer organisations as its findings can be translated into specific action designed to increase the rate of youth

participation in volunteer activities. This study also supported the findings of previous research such as Turiman et al. (2011), Hyde and Knowles (2013), Widjaja (2010), and Hussin and Mohd Arshad (2012). Thus, it was shown that several issues need to be addressed in encouraging youths to be motivated and to be willing to participate in voluntary work.

Table 3
Mean and standard deviation of six motivational functions

Variables	Mean	SD
Values	7.39	1.43
Understanding	7.50	1.53
Career	7.31	1.56
Social needs	7.29	1.48
Enhancement	7.41	1.55
Sense of security	7.27	1.69

Pearson correlation analysis was performed to test the relationship between each of the six motivational factors (values, understanding, career, social needs, enhancement and sense of security) and participation in volunteerism (M=7.37, SD=1.47) as shown in Table 4. Yielding an alpha level of 0.05, the results of the correlation showed that there was a significantly strong positive relationship between the values function and the participation function, with a score of r(342)=0.852, p =0.01. The results also indicated that the relationship between participation and the other functions was significantly, positively and strongly correlated with understanding, with a

score of r(342)=0.884, p=0.01, career, r(342)=0.853, p=0.01, social needs, r(342)=0.844, p=0.01 and enhancement, r(342)=0.855, p=0.01. Meanwhile, the correlation between the sense of security function and participation was found to have a moderately positive relationship, with r(342)=0.678, p=0.01. This indicated that youth motivation among the respondents towards participation in volunteer work was strongly related to values, understanding, career, social needs and enhancement, but only moderately related to sense of security.

The study also showed that the relationship between motivation and participation in volunteer work was positively significant. This showed that almost all the respondents were influenced by a number of motivating factors. The findings showed that these youth respondents were more likely to participate in voluntary activities when the activities could offer: positive values such as the opportunity to display altruism and humanism; provide understanding i.e. the opportunity to learn acquire knowledge, make improvements to existing skill and knowledge and to exercise existing skills; career-related benefits i.e. the opportunity to enhance experience for career development and readiness to find better jobs for the future); social needs i.e. the opportunity to improve communication skills and strengthen existing relationships and expand networking; enhancement i.e. the opportunity to enhance efforts towards self-development, personal growth and self-esteem; and sense of security i.e. the

opportunity to reduce a sense of guilt at being better off than others and to overcome negative feelings towards others.

The findings of the analysis of correlation between motivation and participation in volunteer work supported the principles underlined in the Functional Approach (Clary et al., 1998), with a focus on motivation as a driving force for participation in voluntary activities. The findings also supported those reported in previous studies such as Turiman et al. (2011), which showed that motivation as a factor was a huge influence on youth involvement in voluntary work.

Table 4
Intercorrelation between six motivational functions (values, understanding, career, social, enhancement and protective) and participation in voluntary work

	Participation in Voluntary Work
Values	0.852
Understanding	0.884
Career	0.853
Social needs	0.844
Enhancement	0.855
Sense of security	0.678

CONCLUSION

Profiling youth engagement and participation in voluntary activities in Malaysia is important. For a number of reasons, voluntary activities have increased in recent years, much of it driven by public and private sector. In this study, six factors were explored, which are values, understanding, career, social needs, enhancement and sense of security that act as predictors of

the motivational function to encourage participation in voluntary works. This study also showed a high level of participation among youth in voluntary activities.

This study identified volunteer profiles through volunteer participation in voluntary activities. Specifically, it was aimed at profiling the factors that motivate youth to become involved in volunteerism. Youth motivation to participate in voluntary activities is strongly related to values, understanding, career, social and enhancement function. Having values encourages people to volunteer even if few seem willing to do their part. Having values also helps explain why some volunteers are more committed to their work than others. Most of the volunteers in the sample explained that they volunteered because they realised there was a "need" for their involvement and they felt a sense of "responsibility" towards others. This led them to "dedicate themselves" to service because they were "concerned" about others and cared about "what happen[ed] to people in the community." They were also guided by "a warm and sincere desire to right human wrongs" and to give "their time and effort" as well as skills to helping their communities.

In this study, the findings showed that voluntary activities supported volunteers in using their knowledge for the community's benefit and to develop and practise skills that might have otherwise remained dormant. In terms of career, the findings revealed that improvement to the volunteers' skills was necessary to make them more employable.

Being involved in voluntary activities will pave the way of social interaction that could develop into friendship and career networking and employment opportunities. As for the factor of enhancement as an element of motivation, the study showed that the respondents experienced enhanced self-esteem as a result of participating in voluntary activities such as blood donations, helping the community and environment and becoming involved in health campaigns and sport activities.

These findings suggest that the six factors, which are values, understanding, career, social needs, enhancement and sense of security, are predictors of the motivational function that encourages participation in voluntary activities. This information would be beneficial to volunteer organisations as the data would enable them to tailor their promotions to meet the needs of youth volunteers, and in this way, ensure the success of their voluntary activities.

Recommendations

Future studies on this subject could include in-depth interviews to collect more data on what might motivate youths to participate in voluntary activities. The present study is cross-sectional and it is necessary to conduct longitudinal studies on volunteers in Malaysia. These results have clear practical implications. Being aware of motivational agenda can be useful when designing recruitment that is tailored to the profile of the volunteers. It will allow voluntary bodies to know which group of youths to attract and how to match their message to the motivation level of the youths for best impact on their community.

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Impingement Factors Affecting the Human Development Index among the River Communities of the Tembeling, Pahang and Muar Rivers

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ABSTRACT

There are few studies on the Human Development Index (HDI) with regard to the community and very little is known about the community development index and the factors that impinge on it. This study seeks to fill this gap, and makes the examination of the factors that impinge on the human development index among river communities its main focus. This is a quantitative study and the measurement of the HDI is based mainly on an established online instrument. A total of 240 respondents, who were the villagers of four selected villages, make up the respondents of the study. Analysis confirms that factors such as gender, race, level of education, area and job category lead to significant differences of the HDI, while further analysis concludes that factors such as income, period of stay, distance to the nearest city and size of household have a significant relationship with HDI. The discussion will help the concerned parties to construct a workable strategy to further improve the HDI of the locals, particularly those who are settled near the Tembeling, Pahang and Muar Rivers.

Keywords: Human development, Human Development Index, river communities

INTRODUCTION

Mahbub ul Haq (1990) in the Human Development Report 1990 envisioned human development as a crucial aspect of modern life. The major aim of human development is to create an empowering

environment that enables people to enjoy long, healthy and creative lives. Human development has two aspects to it: the formation of human capabilities and the use people make of their acquired capabilities. This concept seems to be easy to understand. It is not a really new way of looking at human development. In principle, human choices can be infinite and they can change over time. This is because human development is a process of enlarging people's choices.

The question of the impingement of human development is a big question as impingement of human development can have profound and far-reaching effects on human life. People are the real wealth of a nation. Among the vital factors that lead to better human development are good health, better education and a decent standard of living. Furthermore, some additional aspects are also considered, namely political freedom, guaranteed human rights and self-respect (United Nations Development Programme [UNDP], 1990). As Sen (1993, p. 3) argued, "Development can be seen… as a process of expanding the real freedom that people enjoy."

The Human Development Index (HDI) is a statistical mechanism used to compute a country's overall performance in its social and economic dimensions. The social and economic scopes of a country are based on the health of people, their level of education and their income. The ranking of countries based on HDI is different from the ranking by GNP per capita as GNP per capita and HDI are two different measures of human attainment.

In 2013, the Human Development reported that in 2012, Malaysia's HDI value had increased to 0.769 from 0.563. The increase of 37% represented an average annual increase of about 1.0%. Malaysia, an upper-middle-income Southeast Asian country with a population of 28.7 million, was ranked 64 out of 187 countries and territories based on the UNDP Human Development Index in 2012. Malaysia is on schedule to reach most of the Millennium Development Goals in aggregate terms by 2015. Furthermore, based on the Human Development Report 2013, the country had achieved the goal of halving poverty, which fell from 17% in 1990 to 3.8% per cent in 2009, according to the national poverty line. Malaysia took 19 years to reduce the poverty percentage of this country.

The Pahang, Tembeling and Muar Rivers

This study was conducted among three river communities living close to the Tembeling, Pahang and Muar Rivers. The Tembeling River is one of the main tributaries of the Pahang River. The Pahang National Park is situated near this river. Ulu Tembeling is where the National Park was established and the first Superintendent's office was in nearby Kuala Tahan (Daim, Bakri, Kamarudin, & Zakaria, 2012). Aboriginal villages are scattered along the banks of this river. They are believed to have a long history of dwelling in this area. The Pahang River system, on the other hand, begins to flow in the southeast, passing finally through

Pekan town and emptying out into the South China Sea. The Pahang River courses through three states, which are Pahang, Johor and Negeri Sembilan. It is the main and the longest river in Peninsular Malaysia (Yassin et al., 2013). The Pahang River and the Muar River are separated by a distance of only 300 m and are linked at Jambu Lapan in Jempol, Negeri Sembilan. This is because the Serting River flows into the Bera River, a tributary of the Pahang River. Formerly, from 1930 to 1950, the Muar River from Bukit Kepong to Muar was the premier path for transporting palm oil. In addition, this river is where historical places such as the Bukit Kepong police station, Kota Buruk and a World War 2 bombed bridge are located. The Muar River is also well known among fishing enthusiasts, especially for its fresh lobster, which can fetch up to USD12 per kilo (Yassin et al., 2010).

Problem and Objectives

Efforts to eradicate poverty can be associated with the success of the country in uplifting the HDI of local communities. Studies across the globe have proven the success of better HDI in combating poverty (Deusche Bank, 2006; Legatum Prosperity Index, 2013; New Economic Foundation, 2013; OECD, 2013; The American Human Development Project of the Social Science Research Council, 2012). Provision of adequate food, shelter and clothing, access to health facilities, education and greater employment opportunities can inspire absolute poverty (Todaro, 1989). Moreover, social security

measures, such as public assistance and the pension system are also needed to help mitigate poverty (Ishida & Asmuni, 1998). The HDI seems to play an important role in community development in Malaysia and much understanding is needed before any development strategies can be concretely strategised. Nevertheless, though the need is mounting, that thaere are few studies related to the HDI is a concern. To date, not much is known about the level of HDI and the factors that might impinge on it, and this has eventually resulted in plans or strategies not in line with the need, ability and interests of the targetted community. In response to this, the main objective of the current study has undertaken to examine the impingement factors of HDI among the communities that live near the Tembeling, Pahang and Muar Rivers.

METHODS

The quantitative approach was used for this research. An established instrument developed by The American Human Development Project of the Social Science Research Council (2012) was used. It consisted of three parts, namely health (23 items), income (1) and education (1). For each of the questions the respondents were given either a closed-ended or open-ended type of answer.

This study relies on the G-Power software, which is able to determine a suitable size of sample based on the needed analysis. It can also be understood as the power of the probability for rejection of

the null hypothesis when necessary. It is generally accepted that the power should be 0.80 or greater, that is, 80% or more in terms of the opportunity of finding the statistically significant difference or relationship when there is one. The current study aims to run analyses such as the independent t-test, ANOVA and Pearson product-moment correlation. Based on a moderate effect size, an alpha value of 0.005 and a magnitude of power between 0.90 and 0.95, the appropriate size of the sample to run an independent t-test was 176, the appropriate number to run the ANOVA was 232 and the appropriate number to run the Pearson product-moment correlation was 191. This study aimed to have a sample size of 240 respondents. A bigger sample size was not a problem as Mohammad Najib (1999) has stressed that a bigger sample size can strengthen the reliability and validity of a study.

This study involved two phases of sampling. The first phase involved cluster sampling, where a list of the villages located close to the Tembeling, Pahang and Muar Rivers was obtained. Subsequently, a total of four villages were randomly selected, namely the villages of Jorak, Bantal, Gintong and Langkap. At the second stage, a total of 60 villagers were randomly selected based on a list provided by the village leaders, which made the total respondents for the study 240 (60 respondents x 4 villages = 240 respondents).

The data collection process was facilitated by trained and experienced enumerators and monitored by the research team members. The survey was the main data collection technique used. The enumerator read the questions in Malay to the respondents. On average, each survey session took between 20 and 45 minutes to be completed. The respondents were allowed to ask questions if they did not understand the questions clearly.

The SPSS was employed for analysis to obtain the general data. The independent t-test and ANOVA were used to discover differences that might occur between the independent and dependent variables. In addition, Pearson product-moment correlation was used to analyse any possible relationship between the HDI and the selected independent variables.

RESULTS AND DISCUSSION

Table 1 presents the data pertaining to the respondents' background. A total percentage of 74.6% of the respondents were Malay, while 24.6% were Aborigine. About 22.1% of the respondents were working in the agricultural field and only 4.2% were retired or engaged in other jobs. About 22.1% of the respondents had lived in the village for more than 51 years. The mean for length of stay in the village was 31.5. A total of 105 (43.8%) respondents agreed that the distance to the nearest city was 11-20 km away and about 31.7% of the respondents lived near the river, which was about 0.251 to 0.500 km.

Table 1
Respondents' background

Level	Frequency	Percentage	Mean	SD
Job category				
Government sector	26	10.8		
Self-employed	50	20.8		
Housewives	47	19.7		
Retiree	10	4.2		
Agriculture related	53	22.1		
Students	14	5.8		
Private sector	21	8.8		
Businessman	9	3.8		
Others	10	4.2		
Race				
Malay	179	74.6		
Aborigine	59	24.6		
Chinese	2	0.8		
Length of stay in the village (years)			31.5	20.5
<10	46	19.2		
11-20	41	17.1		
21-30	43	17.8		
31-40	28	11.7		
41-50	29	12.1		
>51	53	22.1		
Distance to the nearest city (km)			29.2	24.2
<10 km	49	20.4		
11-20 km	105	43.8		
>21 km	86	35.8		
Distance to Pahang River or Muar River (km)			0.841	0.905
<0.0250	56	23.3		
0.251-0.500	76	31.7		
0.501-1	66	27.5		
>1	42	17.5		

Table 2 shows the first part of the Human Development Index (HDI), which is health. More than half of the respondents were male (54.2%) and the mean for the respondents' age was 39.7. All the respondents disagreeed with the statement that they lived in urban areas with a population of more than 2 million. The majority of the respondents (78.7%) stated that all their grandparents lived to the age of 80 years old or more and 68.2% answered "No" to the statement that one of their grandparents had lived to the age of 85 years old or more. A minority of the respondents (21.3%) had parents,

brothers or sisters under the age of 50 years old who was suffering from cancer or a heart condition or who had diabetes. One of the parents of 13.7% of the respondents had died of a stroke of heart attack before 50 years old. Table 2 shows that 94.6% of the respondents were not working beyond the age of 65 years old and 191 respondents were not office workers. A large majority of the respondents were living with a spouse or a friend and 85.8% had never lived alone since the age of 25 years old. About half of the respondents were not engaged in jobs that required heavy physical work. Only 18.8% exercised strenuously every week for at least half an hour and 197 respondents did not sleep more than 10 hr each night. The majority of the respondents were found to be easy-going and relaxed, and 96.7% were happy, while 2.5% were unhappy. Furthermore, the data showed that only 19 respondents had been issued a speeding ticket in the last year and only 0.5% smoked more than two boxes of cigarettes a day. Only six respondents drank the equivalent of two drinks or two measures of liquour a day. Last but not least, 73.8% of the respondents were not overweight and 64.2% went for an annual medical checkup.

Table 2
HDI part 1 – Health

Level	Frequency	Percentage	Mean	SD
Gender				
Male	130	54.2		
Female	110	45.8		
Age (years)			39.7	16.6
Under 30	95	39.6		
Between 30-40	38	15.8		
Between 40-50	38	15.8		
Between 50-70	61	25.4		
Over 70	8	3.4		
Live in urban areas with a population of more than 2 million				
Yes	0	0		
No	240	100.0		
Has one of your grandparents lived to age 85 or older?				
Yes	76	31.7		
No	164	68.2		
Have all your grandparents lived to age 80 or older?				
Yes	51	21.3		
No	189	78.7		

Table 2 *(continue)*

Level	Frequency	Percentage	Mean	SD
Has either one of your parents died of a stroke or heart attack before 50?				
Yes	33	13.7		
No	207	86.3		
Has a parent, brother or sister under the age of 50 had cancer or a heart condition or diabetes?				
Yes	51	21.3		
No	189	78.7		
Are you over 65 and still working?				
Yes	13	5.4		
No	227	94.6		
Do you live with a spouse or friend?				
Yes	231	96.2		
No	9	3.8		
How many years have you lived alone since age 25?				
0 yr	206	85.8		
1-5 yr	23	9.6		
>6 yr	11	4.6		
Do you work behind a desk?				
Yes	49	20.4		
No	191	79.6		
Does your work require heavy physical effort?				
Yes		42.9		
No	103	57.1		
How many times a week do you exercise strenuously (tennis, running, etc.) for at least ½ hour?				
5 times	45	18.8		
2-3 times	50	20.8		
Less than two times	145	60.4		
Do you sleep more than 10 hours each night?				
Yes	43	17.9		
No	197	82.1		
Are you intense, aggressive or easily angered?				
Yes	30	12.5		
No	210	87.5		
Are you easy-going and relaxed?				
Yes	225	93.8		
No	15	6.2		

Table 2 *(continue)*

Level	Frequency	Percentage	Mean	SD
Are you happy?				
Yes	232	96.7		
No	8	3.3		
Are you unhappy?				
Yes	234	97.5		
No	6	2.5		
Did you receive a speeding ticket last year?				
Yes	19	7.9		
No	221	92.1		
How many boxes of cigarettes do you smoke in a day?				
0	162	67.5		
0.5-1	29	12.0		
1-2	48	20.0		
>2	1	0.5		
Do you drink the equivalent of two drinks or two measures of liquour a day?				
Yes	6	2.5		
No	234	97.5		
Are you overweight?				
I'm not overweight.	177	73.8		
Yes, by 10 to 30 pounds.	17	7.1		
Yes, by 30 to 50 pounds.	45	18.7		
Yes, by 50 pounds or more.	1	0.4		
Do you go for an annual medical check up?				
Yes	154	64.2		
No	86	35.8		

The second part of the Human Development Index used for this study was income per year. The mean score for this question was obtained by dividing the annual income of those who only have established income. Those without established income for example housewives and students were excluded from the calculation. Table 3 reveals that the mean score for the income was M=RM13,421.50, which was a good indicator of the income development in the rural area. About 8.5% of the respondents surprisingly had income per year totalling more than RM30,001. However, 36.7% of the respondents had income between RM6001 and RM12,000 per year. In addition to this, analysis revealed that a total of 20.2% of the respondents managed to earn between RM12,001 and RM30,000 in a year.

Table 3
HDI part 2 – Income per year

	Frequency	Percentage	Mean*	SD
Income per year (N=188)			13,421.5	11819.9
No income	52	-		
<RM6000	59	31.4		
RM6001-RM12,000	69	36.7		
RM12,001-RM18,000	22	11.7		
RM18,001-RM30,000	22	11.7		
>RM30,001	16	8.5		

The mean score was gained by dividing the annual income of those who have established income only, while those without established income (e.g. housewives and students) were not included in the calculation

Table 4 denotes the final part of the human development index. This part focusses on the level of education of the respondents. More than half (61.3%) of the respondents had not completed high school or did not have a diploma. Furthermore, a small number of the respondents (5.8%) possessed a Bachelor's degree from college or university. A total of 17 respondents had some college credit or associate credit but had not received a Bachelor's degree. This study also revealed that none of them had attained higher levels of education i.e. a Master's degree or doctorate.

Table 4
HDI part 3 (Education)

Level of education	Frequency	Percentage
Did not complete high school/ No diploma	147	61.3
High school graduate or equivalent	62	25.8
Had college credit or associate credit, but no Bachelor's degree	17	7.1
Had Bachelor's degree from college or university	14	5.8
Master's degree/Doctorate	0	0

In this study, all of the index data had been keyed into the well-o-meter index developed by the American Human Development Project of the Social Science Research Council. The index yields a maximum value of 10.0. The respondents were asked 26 questions covering the indices of health, income and education. The overall HDI of the respondents was obtained from the cumulative value of the indices. The cumulative value of the indices had been calculated once the index data had been keyed into the SPSS. Soon after, the cumulative value was categorised into three groups, namely low (1.00-4.00), moderate (4.01-7.00) and high (7.01-10.0). Based

on the mean scored (M=3.36), as shown in Table 5, it can be concluded that the overall level community development index was low. Only 3.3% of the respondents obtained high levels of the HDI.

Table 5
Overall level community development index using the American Human Development Index (Well-O-Meter)

HDI Index Category	Frequency	Percentage	Mean	SD
			3.36	1.52
Low (1.00-4.00)	177	73.8		
Moderate (4.01-7.00)	55	22.9		
High (7.01-10.0)	8	3.3		

The independent t-test was used to discover differences that might occur in the factors of gender and race. This study revealed that there was a significant difference in both factors. The gender factor showed a significant difference when t(240)=3.36, p=0.001. Meanwhile, for the race factor, the significant difference was when t(240)=5.48, p=0.0001. Eventhough there was a slight difference between males and females, the mean score for females was higher at M=3.71, while Malay respondents were recorded to have the higher mean score (M=3.66).

Table 6
Differences between HDI and selected independent variables (Independent t-test)

Factor	N	Mean score	SD	t	P
Gender				3.36	0.001
Male	130	3.06	1.45		
Female	110	3.71	1.54		
Race				5.48	0.0001
Malay	179	3.66	1.58		
Aborigine	59	2.47	0.92		

ANOVA was employed to identify the comparison that might occur between the selected independent variables and the HDI. Four groups of level of education were studied to determine the significance difference at p<0.05. Based on the results obtained, there was significant difference that occurred between the four groups studied based on the F value (4,240)=46.622, p<0.05. The study discovered that the highest mean score for education level was M=5.59, obtained by the respondents who had acquired tertiary education.

Four groups were studied in terms of the areas settled. Table 7 shows that with the F value (4, 240)=17.786, p<0.05,

there was significant difference in the factor of areas. Kg. Langkap recorded the lowest mean score (M=2.49) among the four areas of study. In the last part of the ANOVA analysis, eight groups under job category were analysed. Job category was significant for the HDI when the F value $(4,240)=19.458$, $p<0.05$. The data indicated that the government sector had the highest mean score (M=5.76) for job category, followed by retirees (M=4.25). The lowest segment for job category fell to the agricultural sector at M=2.62.

Table 7

Differences between HDI and selected independent variables (ANOVA)

Variables	N	Mean	SD	F	P
Level of education				46.622	0.0001
Never been to school	28	2.66	0.83		
Primary school	84	2.69	0.91		
Secondary school	97	3.44	1.24		
Tertiary level	31	5.59	1.95		
Areas settled				17.786	0.0001
Jorak	60	3.80	1.33		
Bantal	60	3.01	1.02		
Gintong	60	4.15	2.01		
Langkap	60	2.49	0.92		
Job Category				19.458	0.0001
Government	26	5.76	1.94		
Self-employed	50	2.81	1.00		
Housewives/Unemployed	47	3.17	0.80		
Retirees	10	4.25	1.22		
Agriculture related	53	2.62	0.81		
Students	14	3.35	1.62		
Private sector	21	3.61	1.75		
Others	13	3.61	1.44		

Pearson product-moment correlation was utilised to show any relationship that might arise between HDI and selected independent variables in Table 8. Five independent variables were selected to run this analysis, namely income, length of stay in the village (years), distance to the nearest city and distance to the nearest river. Four out of five of the selected independent variables were found to be at $p<0.05$ with HDI, which was income (p=0.0001), length of stay (p=0.001), distance to the nearest city (p=0.035) and size of household (p=0.024). The income variable indicated the highest correlation, which was positive.

Table 8
Relationship between HDI and selected independent variables

Variables	r	p
Income	0.777	0.0001
Period of staying	-0.208	0.001
Distance to the nearest city	-0.136	0.035
Distance to the nearest river	0.077	0.236
Size of household	-0.146	0.024

CONCLUSION

The Human Development Index (HDI) seems to play an important role in community development in Malaysia, similar to in other countries across the globe, and much understanding on this issue is needed. Understandably, this can be done by conducting related studies such as the present study. The current study recorded a moderate score for HDI among the river communities that live near the Pahang, Tembeling and Muar Rivers. It managed to fulfil its objective by concluding that females, the Malay rather than Aborogine respondents, those with tertiary education, the Gintong community and government servants possessed a better HDI. The study concluded that the factors of income, length of stay, distance to the nearest city and size of household were significantly related for the river communities to the HDI. This study had several limitations; first, our focus was limited to only three river communities i.e. those near the Tembeling, Pahang and Muar Rivers. We recommend that future research focusses on other river communities, especially in Sabah and Sarawak, where such communities are much bigger. Second, the number of respondents involved was only 240; the results might be enriched if a bigger number of respondents were involved.
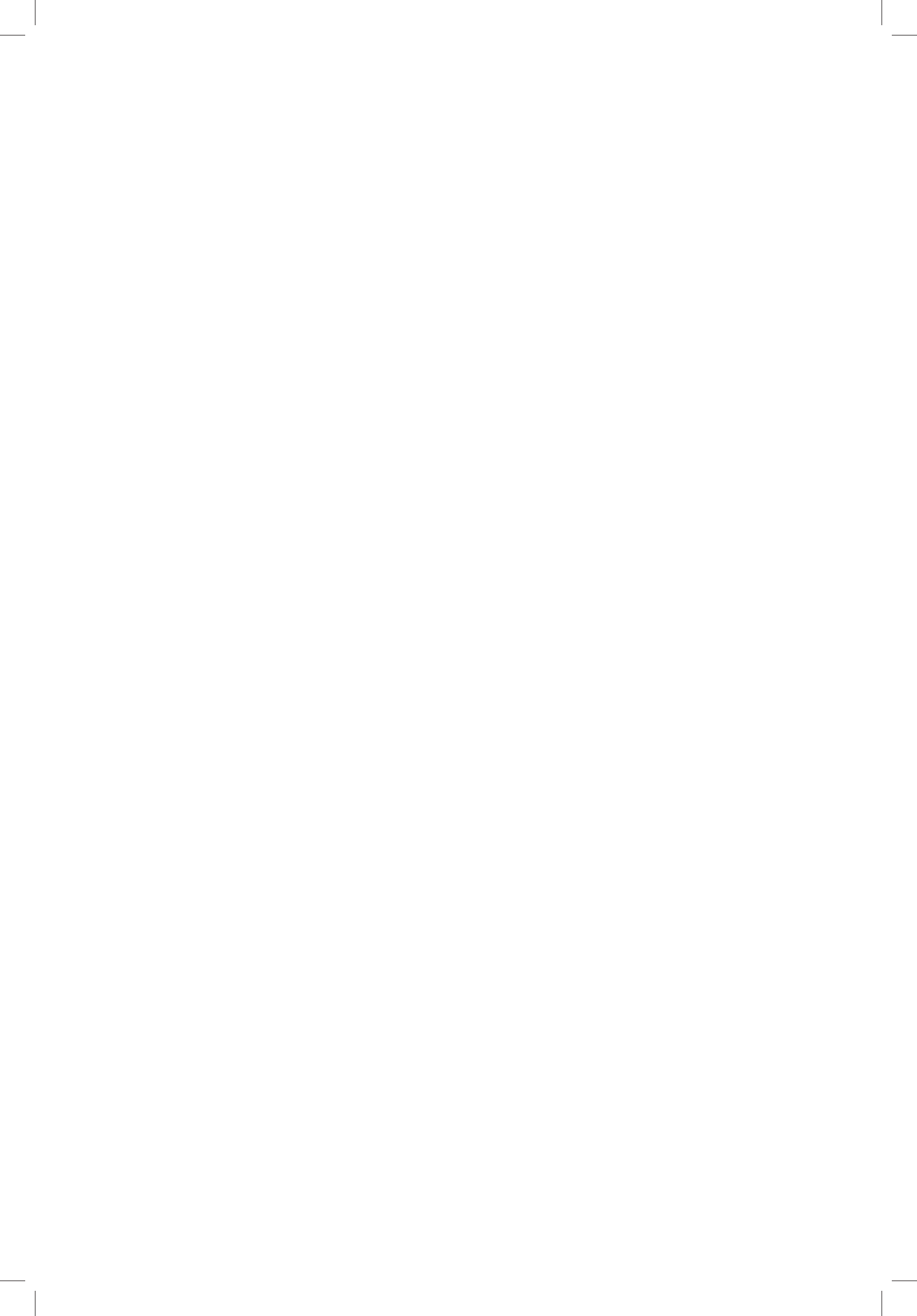
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Has the Environment Changed – What Can Be Done to Help the Fishermen Community? The Views of the Small Scale Fishermen in Malaysia

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ABSTRACT

The inconsistencies among findings and lack of related studies have led to this study, the main objective of which is to gain the views of Malaysian small-scale fishermen on environmental changes and to recommend several strategies that can assist the fishermen community in coping with changes. This study is qualitative in nature. A total of three FGDs and one in-depth-interview were conducted among small-scale fishermen. Based on the thematic analysis, their awareness of environmental changes, the causes of environmental changes, the impact of these changes on the community and measures taken to absorb this impact have been identified. A number of recommendations related to providing alternative skills, conducting research, encouraging proactive roles by influential persons, using fisheries technology, conducting extra monitoring activities and making conservation efforts are highlighted.

Keywords: Climate change impacts, environment changes, small-scale fishermen

INTRODUCTION

Agriculture is an important income-generating sector in Malaysia. The contribution of industries such as palm oil, rubber, livestock and paddy are significant towards the nation's income. In 2012 for example, these industries managed to generate more than RM16 billion (roughly

equal to USD4 billion). Additionally, the Malaysian economy is also benefiting from the significant contribution of another agriculture branch, the fisheries industry. In 2015 for example, the industry managed to generate a total of RM10.2 million (roughly equal to USD2.25 million) and employed more than 144,000 registered fishermen, most of whom were settled in rural areas (Department of Fisheries Malaysia, 2016).

Similar to other agriculture industries, the fisheries industry faces problems that threaten its sustainability. One of the most obvious problems is environmental changes. Within the marine-related scope, there are inconsistencies among scholarly findings on the causes of environmental changes. Some scholars relate the causes to certain fishing techniques (Cho, 2012; Kelleher, 2005), while others relate them to climate change (Awang & Abdul Hamid, 2013; Kajikawa, Yasunari, Yoshida, & Fujinami, 2012; Subramaniam, Kwok, & Wan Azli, 2011; Suhaila, Deni, Wan Zin, & Jemain, 2010; Tangang, 2007; Wan Azli, 2010; Zubaidi, 2010). Halfar and Fujita (2007), Darwin (2008) and Schmidt, McCleery, Seavey, Devitt and Schmidt (2012) claimed that the physical environment and pollution cause damage to the marine environment. These inconsistencies have led to confusion among researchers and policy-makers on what actually contributes to the changing environment in Malaysia.

Furthermore, although there is an abundance of international studies focussing on marine-related environmental changes such as by Kelleher (2005), Cho (2012),

Halfar and Fujita (2007), Darwin (2008), Ottersen, Kim, Huge, Polivina and Stenseth (2009), Kennedy (2010), Schmidt et al. (2012), and Kwiatkowski et al. (2015), a similar scenario cannot be found in Malaysia, as most existing literature focusses on scientific findings (Awang & Abdul Hamid., 2013; Kajikawa, 2012; Subramaniam et al., 2011; Suhaila et al., 2010; Tangang, 2007; Wan Azli, 2010; Zubaidi, 2010).

The inconsistencies in the findings and the lack of related studies have led to this study, with its main objective being to gain Malaysian small-scale fishermen's views on environment change and to produce several recommendations that can assist the fisherman community in coping with the worsening situation it finds itself in. Within the scope of this study, the small-scale fishermen's views are based on 1) their awareness of environmental changes; 2) their perception of the causes of such changes; 3) the impact of the changes on them and the community; and 4) their response towards the changes.

LITERATURE REVIEW

Small-Scale Fishermen in Malaysia

Fishermen play an important role in the country, especially in ensuring consistent marine supply to the public. In Malaysia, fishermen are registered under the Department of Fisheries Malaysia (DOF) and receive a monthly allowance of RM300 and subsidised fuel worth 65 cents (per litre), which is cheaper than the market price (Shaffril & Hamzah, 2016). Generally, fishermen in Malaysia are grouped based on

their catching areas. Zone A fishermen, also known as small-scale fishermen, operate their fishing routine less than 5 nautical miles from the shore while the other three groups, Zone B fishermen, Zone C2 fishermen and Zone C0 fishermen, also known as deep-sea fishermen, operate their fishing routine more than 5.1 nautical miles from the shore. To date, there are no official statistics on the number of small-scale fishermen in Malaysia; however, local studies done by Osman et al. (2014), Ramli et al. (2013), and Omar, Shaffril, Bolong and D'Silva (2013) have consistently proven that this group holds more than 65% of the overall registered fishermen in Malaysia. There are several characteristics of small-scale fishermen in Malaysia such as operating with a smaller vessel (fibre or sampan), conducting daily operations (less than 24 hours), having smaller horse power for boat engines, having a mobile phone as a basic communication tool at sea and conducting their fishing operation at a substantial level. These characteristics have led to problems for small- scale fishermen, especially with regard to environmental changes.

Potential Causes of Environmental Changes

Under this section, the discussion focusses on two main causes of environmental changes i.e. the human factor and the natural factor.

The human factor. Under this section, the discussion focusses on marine pollution, physical development, bottom trawling and overfishing.

Marine pollution. Marine pollution can be in several forms such as land runoff, ship pollution, atmospheric pollution and deep-sea mining (Darwin, 2008; Halfar & Fujita, 2007). Marine resources can result in the entry of chemicals, particles, industrial, agricultural and residential waste, noise or the spread of invasive organisms into the sea (Darwin, 2008). Several toxic chemicals adhere to tiny particles, which are then taken up by plankton and benthos animals, and then becomes either deposit or filter feeders. These toxins are concentrated upward within ocean food chains. Many particles combine chemically in a manner highly depletive of oxygen, causing estuaries to become anoxic. When pesticides are incorporated into the marine ecosystem, they can negatively impact the food web as these pesticides can cause deaths or intoxication to several marine species or their food resources, making them unsafe for consumption by the public (Darwin, 2008).

Physical development. The impact of physical development, especially in coastal areas covers a wide scope; however, in general, the development of coastal areas results in formidable challenges for conservation efforts related to marine fauna due to the loss and deterioration of their habitat that eventually will result in the decreasing quantity and quality of marine flora and fauna (Schmidt et al., 2012).

Bottom trawling. Bottom trawling is one of the fishing tools used by fishermen. It relies on a large net with heavy weights that is dragged across the seafloor; it catches almost everything in its way from big to small fish. Bottom trawling is unselective and results in severe damage to seafloor ecosystems (Kelleher, 2005). The net will drag everything in its way, including the reef, which is the main habitat of several marine species. Via this tool, many marine creatures end up being mistakenly caught and are thrown overboard dead or dying, including endangered fish and even vulnerable deep-sea coral that can live for several hundred years (Kelleher, 2005). This collateral damage, called bycatch, can amount to 90% of a trawl's total catch. Furthermore, the weight and width of a bottom trawl can destroy a large area of the seafloor, which provides shelter and food for marine species. Understandably, using bottom trawling can lead to permanent damage to our marine ecosystem (Cho, 2012).

Overfishing. Overfishing happens when marine resources are captured much faster than the rate at which they can reproduce. Overfishing is said to have exploited or significantly depleted 70% of the world's marine resources (Jetson, 2014). The main cause of overfishing is commercial fishing, which requires most of the ships or boats used to be equipped with advanced catching tools for greater productivity (Jetson, 2014; Pontecorvo, 2008). Overfishing posts a formidable challenge to small-scale fishermen as it reduces the harvest of targetted fish and untargetted/protected/endangered marine species, brings changes to the ecosystem and impacts the socio-economic condition of small-scale fishermen (Jetson, 2014).

The natural factor. Under this section, the impact of climate change on the environment and the impact of climate change on the quantity and quality of marine species are discussed.

Impacts of climate change on the environment. Studies by local and international scholars confirmed the impact of climate change on the environment, and among the obvious ones is rising temperature (Intergovernmental Panel on Climate Change, 2007; Kwan, Tangang, & Juneng, 2011), sea-level rise (Awang & Abdul Hamid, 2013; Zubaidi, 2010), unstable rain pattern (Subramaniam et al., 2011; Wan Azli, 2010), unstable monsoon pattern (Kajikawa, 2012; Suhaila et al., 2010), strong wind and waves and extreme events (Tangang, 2007). Climate change has also eroded coastal areas. A study conducted by Ekhwan (1997) concluded that 29.1% of coastal areas in Malaysia are considered as eroded, caused mostly by extreme waves and the rising sea level (Awang & Abdul Hamid, 2013). Mangrove areas are another affected component and according to the Food and Agricultural Organisation (FAO) (2007), the extinction rate of mangrove areas in Malaysia is 0.8%.

Impact of climate change on the quantity and quality of marine species. Ottersen et al. (2009) has looked into the impact of rising temperature on the quantity and quality of certain marine species, while Kwiatkowski et al. (2015) has confirmed that rising temperature can cause disease such as coral bleaching to the reef, the main habitat for marine species.

What Small-Scale Fishermen Can Expect from Environmental Changes?

Environmental changes are expected to pose problems and challenges to the fishing operations of small-scale fishermen. Among the expected problems and challenges are enhanced risks, lower productivity and lower income.

Enhanced risks associated with their fishing operations. Local and international studies (Awang & Abdul Hamid, 2013; Kajikawa et al., 2012; Subramaniam et al., 2011; Suhaila et al., 2010; Tangang, 2007; Wan Azli, 2010; Zubaidi, 2010) have confirmed that climate change impacts the stability of weather elements such as temperature, rain pattern, wind and waves and indicated that this change also increases the risks associated with fishing operations. As most small-scale fishermen are equipped with smaller vessels that have lower engine capacity, it makes them vulnerable to extreme weather such as strong winds and waves.

Lower productivity. Human factors such as physical development and pollution have

long been identified as the major causes of the extinction, intoxication and degrading of marine resources, while climate change has been said to increase sea temperature and force some species to move to another habitat. The same phenomenon is also confirmed as the cause of coral bleaching of reefs, which are the main habitat of several marine species.

Lower income. Lower productivity among small-scale fishermen results in lower income for them, while weather effects such as strong wind and waves force some of them to delay or cancel their fishing operations. Such decisions result in fewer operation days for them, resulting in lesser income for them.

METHODS

This study was qualitative in nature. It employed Focus Group Discussion (FGD) and in-depth interviews in collecting the required data. Both methods were chosen for their advantages. FGD stimulates new thinking about a topic to produce detailed and in-depth discussion and provide access to comparisons that focus group participants make based on their experience. The in-depth interview, on the other hand, offers in-depth discussion in a relaxed atmosphere that encourages people to share their knowledge and experience (Morgan, 1997). One FGD was conducted at each location, Batu Pahat, Kuala Besut and Tanjung Piai, while the in-depth interview was conducted only at Tanjung Piai. These three places were selected as they are faced with the

results of environment change caused either by human factors or natural factors. Batu Pahat is one of the places in the country that are seriously threatened by sea-level rise and some areas there are facing serious coastal erosion (Awang & Abdul Hamid, 2013), while Kuala Besut areas, especially Kampung Pengkalan Atap, are facing serious coastal erosion that has forced some of the community to settle elsewhere. Kampung Pengkalan Atap is situated near (roughly about 3 km) from the LKIM Jetty, where vessels and ships that employ several types of fishing tool inclusive of bottom trawling are anchored, while Tanjung Piai is a coastal area located in Southern Johor. Tanjung Piai has seen a rise in sea level (Awang & Abdul Hamid, 2013) and several mega projects have been developed here, for example, the Tanjung Bin Power Station. Tanjung Piai is also a location for the visit of big ships. Table 1 provides background information on the participants such as age and experience as a fisherman.

Table 1
Information on background of participants

Participants	Age	Experience as a fisherman
Batu Pahat (FGD)		
NBP1	52	15
NBP2	50	15
NBP3	33	7
NBP4	50	15
NBP5	55	15

Table 1 *(continue)*

Participants	Age	Experience as a fisherman
Kuala Besut (FGD)		
NT1	60	30
NT2	51	36
NT3	65	30
NT4	55	25
NT5	53	33
Tanjung Piai (FGD)		
NTP1	45	20
NTP2	50	25
NTP3	30	10
NTP4	35	18
NTP5	55	31
Tanjung Piai (In-depth interview)		
KNTP1	48	25

This study relied on the phenomenology approach, which emphasises a focus on people's subjective experiences and interpretations of the world (Creswell, 2007; Marshall & Rossman, 2011). This technique allowed the researchers to identify the life experience of the small-scale fishermen in relation to environmental changes based on the meaning of their experiences and at the same time, providing a rich and thick phenomenological description of the views of the small-scale fishermen on the environmental changes. The total number of participants selected for each FGD for this study was based on the quality of the data collected and the findings, as is recommended for most qualitative methodology. The FGDs

and the in-depth interview were continued until the researchers believed that they had reached the point of saturation, where full understanding of the experience was obtained that would not be altered through further discussion with the participants (Laverty, 2003).

The first FGD was conducted at Batu Pahat involving a total of five participants and lasting 45 minutes, while the second was conducted at Kuala Besut involving a total of five participants and lasting 45 minutes. The third FGD was conducted at Tanjung Piai involving a total of five participants and lasting 50 minutes. The in-depth interview was conducted at Tanjung Piai with the President of the Association of Small-Scale Fishermen of Peninsular Malaysia and lasted 1 hr and 17 min. Both the FGDs and the in-depth interview started with the researchers introducing themselves to the participants and then proceeded with collection of background information, after which the participants were informed of the purpose of holding the FGDs and the in-depth interview. From there, the FGDs moved into deeper discussion of the issue at hand. Prior to data collection, a guiding question was prepared in order to keep the interview protocol in line with the study objective and to maintain flow of conversation. These key questions were constructed based on the literature review and the documents analysed were associated with environmental changes related to the sea. The questions were designed to address the following areas: 1) their awareness of the environmental changes; 2) their views on the causes of such changes; 3) the impact of the changes on them and the community; and 4) their response to the changes. The questions also served as a guide, and the respondents were allowed a degree of freedom and flexibility in their answers. The President of the Association of Small-Scale Fishermen of Peninsular Malaysia, who was later engaged in the in-depth interview, and village leaders assisted in choosing appropriate and suitable respondents for the FGDs. To avoid bias in the selection of participants, the leaders were informed of the study objective. The researchers emphasised the criteria for recruiting suitable participants and provided a briefing on why they were needed. In general, questions related to the impact of the changes on the community took the longest time to explore in the FGDs and the in-depth interview. The data obtained were later transcribed verbatim and analysed using thematic analysis.

RESULTS AND DISCUSSION

Are They Aware of the Changes?

Several themes emerged during discussion, namely awareness of the changes, temperature rise, difficulty in predicting the climate, extinction of mangrove swamps, eroded coastal areas, unstable rain pattern and decreasing marine resources.

Awareness of the changes. Most of the participants were aware of the environmental changes in their areas; studies done by local and international scholars have confirmed that the climate in Malaysia is changing

(Awang & Abdul Hamid, 2013; Kajikawa et al., 2012; Subramaniam et al., 2011; Suhaila et al., 2010; Tangang, 2007; Wan Azli, 2010; Zubaidi, 2010). Shaffril et al. (2015a) has stated that local fishermen communities are aware of environmental changes as they impact their daily routine. This was acknowledged by NBP2, who stated, "There are lots of differences (regarding the climate nowadays)." This was supported by NBP 1, who claimed that the season nowadays was no longer the same as before: "The season nowadays is not similar to the past."

Temperature rise. The participants stated that rising temperature was among the obvious changes to the climate in their areas. Kwan et al. (2011) and IPCC (2007) have confirmed the phenomenon of rising temperature in several coastal areas in Malaysia, while social studies by Abu Samah, Shaffril, D'Silva and Uli (2011), and Shaffril et al. (2015b) have confirmed that awareness of rising temperature in their areas is growing among small-scale fishermen. NTP 1 confirmed this, saying, "It is very hot nowadays." NT6 also supported the researchers' findings with this insight: "In my early days as [a] fisherm[a]n, the temperature [was] less hot than this day."

Difficulty in predicting the climate nowadays. The participants also confirmed that it was difficult to predict the climate nowadays. This was highlighted by Suhaila et al. (2010) and Kajikawa (2012), who looked into the instability of the weather in Malaysia, and Omar et al. (2013), who

explained that indigenous knowledge in predicting the climate is no longer reliable nowadays. Indeed, according to one of the participants, "We cannot predict (the climate), the climate nowadays is too difficult to predict" (NBP 1). NP 2 said that it was difficult to predict the climate nowadays and stressed the instability of the wind, adding, "The wind nowadays is unpredictable. In the previous days it is easier to predict on what type of wind that you are expecting to face at the sea."

Extinction of mangrove swamps. The extinction of mangrove swamps is another change mentioned by the participants. Sea-level rise is one of the many causes of this (Awang & Abdul Hamid, 2013) and human development (FAO, 2007) is another. In Malaysia, according to the FAO (2007), the rate of extinction of mangrove swamps has reached 0.8%. Data extracted from the participants of this study seemed to echo the findings of other studies on this matter. According to NTP 1, for instance, "(Due to the development) There [are] no more mangrove trees in front of my house, all of them [are] extinct." Another participant from the FGD group in Batu Pahat stated, "The mangrove areas over here are degrading, we need to think [of] the best way . . . to preserve the remaining areas" (NBP 2).

Eroded coastal. Most of the participants explained that some coastal areas where they lived were eroded. This agreed with the findings of Mohd Ekhwan (1997), who stated that out of 4,809 km of coastal land

in Malaysia, 29.1% was considered eroded. Serious erosion can be seen in areas such as Kuala Besut, Tanjung Piai and Batu Pahat (Awang & Abdul Hamid, 2013). NTP 5 referred to this, stating, "Here, the coast has been eroded." This was confirmed by NTP 4, who referred to the main cause of erosion, stating, "The coastal is eroding over here and it is mostly caused by extreme waves and in certain situation, (the waves) can reach 3 metres in height."

Unstable rain pattern. Unstable rain pattern is another phenomenon of changing climate highlighted by the participants. This was in line with the findings of Wan Azli (2010) and Subramaniam et al. (2011), who confirmed that rainfall pattern, particularly in the West and East Coast of Peninsular Malaysia was unstable. One of the participants said, "The rainfall has decreased, in the previous days, before going out to the sea, due to frequent rain, I need to take out all of the water inside the boat almost every day, but not anymore in this day." Another participant shared that it sometimes rained for a week, stating, "It (the rain) can be up to three days, and sometimes even up to a week." (NT1)

Decreasing marine resources. According to the participants, marine resources, especially fish, are reduced. NP 1 said that compared to his early days as a fishermen, the number of fish how has significantly decreased in number. He further stated, "No, the number of the fish is decreasing, in my early days as a fisherman the situation was different." Another participant in the group,

NT 2, stated that "the sea produces less fish for us, it affects our income."

What Are the Causes?

With agreement among the participants that there were visible signs of weather change such as temperature rise, difficulty in predicting the weather, extinction of mangrove swamps, an eroded coastline, unstable rain pattern and decreasing marine resources, the discussion then moved on to their views on the causes of these changes. Two themes emerged, namely the human factor and the natural factor.

The human factor. Further discussion with the participants yielded several sub-themes under this topic, namely physical development, overfishing, intrusion of foreign fishermen and bottom trawling.

Physical development. Schmidt et al. (2012) and Devoy (2015) found that physical development was one of the causes for changes in the weather. The participants seemed to agree with this. One of them, NTP 4, stated, "There is a lot of physical development over here." This was supported by KNTP, who stressed on the impact of physical development in coastal areas, saying, "[C]oastal erosion for me is not caused by the climate change, it is caused by the physical development."

Overfishing. According to one of the participants, overfishing was caused by big boats engaged in commercial fishing operations. This agreed with the findings

of Jetson (2014) and Pontecorvo (2008), who claimed overfishing by commercial fishermen forced small-scale fishermen to explore new catching areas. NT 4 said, "There are big numbers of big ships nowadays, which potentially cause overfishing." This was affirmed by NBP 3, who emphasised that some fishermen cared less about the environment and the future, revealing that, "Some of them, they catch everything, even the small one (fish)."

Intrusion of foreign fishermen. According to the participants, the intrusion of foreign fishermen is another reason for degrading marine resources. Shaffril et al. (2013) pointed out that the use of prohibited fishing techniques used by foreign fishermen degraded local marine resources; this issue is a major concern among local fishermen. The participants shared possible reasons for foreign fishermen intruding in Malaysian waters. NT4, for example, said, "It is difficult for the fish to sustain in our sea. Comparatively, in the previous days, there is plenty of fish in their areas (the neighbouring states), but nowadays, fish in their sea are decreasing and as the solution, they intrude our sea and catch our fishes."

Bottom trawling. One of the participants highlighted that bottom trawling is a fishing technique that has many negative consequences. According to Kelleher (2005) and Cho (2012), it is one of the most destructive ways to catch fish and it causes up to half of fish and marine life worldwide

to be discarded. One of the participants, NT 5, said, "With bottom trawling, they take almost everything – small fish, big fish, the seedlings and even the egg." Another participant from the FGD group in Kuala Besut, NT 1, stated, "It (bottom trawling technique) is the fishermen's worst enemy, it takes almost everything from our sea and leaves nothing for us."

Natural factors – The changing climate. In addition to human factors, the participants also referred to natural factors such as climate change. Several studies have also pointed out that the impact of climate change such as rising temperature, a rise in sea level, extreme wind and waves and coastal erosion (Awang & Abd. Hamid, 2013; Kwan et al., 2011; Mohd Ekhwan, 1997; Razali, Sapuan, Ibrahim, Zaharim, & Sopian, 2010). According to NBP 5, "The changing environment is caused by the climate change." NBP 2 agreed with this, adding, "It is the natural causes that cause the changes (the environment)."

Impact of Environmental Changes on the Community

The discussion then focussed on the impact of these changes on the community. Sub-themes such as lower marine productivity, pollution, decreased income, unpredictable fishing season, impact on fishing routine, damaged marine habitat, increased risk to their fishing routine and increase in pressure to explore new catching areas emerged. The details of these findings are discussed below.

Lower marine productivity. One of the participants stated that productivity had decreased and some of the causes for this were rising temperature, bottom trawling and overfishing, as echoed in the literature (Jetson, 2014; Kelleher, 2005; Ottersen et al., 2009; Pontecorvo, 2008). According to NBP 5, "In the previous days, we can easily bring back 10 kilos of fish, but nowadays, it is difficult for us to catch even five kilos (marine catches)." Another participant, NBP 1, referring to the decreasing sources of prawns in his catching areas, stated, "At my places there is no more prawn." Despite the impact on the quantity of the marine sources, the environmental changes are also detrimental to the size of fish caught in this area. One of the participants expressed his view on this issue, saying, "The size (of the catch) nowadays is smaller, it is not [the] same as during my early days as a fisherman" (NTP 2).

Pollution. The participants claimed that the sea and coastal areas were polluted. They further stated that most of the pollution in their areas were caused by development. One of the participants stated, "Our sea and the coastal are polluted, when there [is] development at your place, there is high potential for such problem" (NTP 5).

Unpredictable fishing season. The participants found it difficult nowadays to predict the actual catching season. NBP 1 explained, stating, "During the previous days, our catching season is in April, but not more in this day, we do not know the actual time for catching the fish." The participant added, "Sometimes, it (the catching season) [is] delayed for three months. For example, during West Season (local name for the prawn-catching season), supposedly there should be plenty of prawns, but surprisingly, there is no prawn for us to catch during that season."

Damage to marine habitat. Although damage to the marine habitat can be caused by climate change, especially rising temperature (Kennedy, 2010; Ottersen et al., 2009), most of the participants in this study highlighted the disastrous impact of the bottom trawling technique on the marine habitat. According to NTP 2, simply put, "it destroys the coral reef." NTP 4 agreed, saying, "Sometimes, they trawl including our artificial reef, it destroys everything, and it destroys the ecosystem."

Increased risk to their fishing operations. As climate change brings a number of extreme events (Tangang, 2007), the risks to fishing routines are increased. The fishermen shared that the situation is worsening as they are only equipped with a small vessel and smaller engine capacity, and this increases their vulnerability to extreme events. One of the participants stated, "We cannot go out to the sea during September and October, the rain is too heavy and the waves are too big, it is too dangerous for small-scale fishermen like us" (NT 3). NBP 5 agreed, stating, "We cannot go out to sea, we just stay at home."

Decreased income. One of the participants referred to the decreasing income of small-scale fishermen due to the impact of development, pollution and the changing climate. This is in line with a study done by Shaffril et al. (2013). According to the participant, "Most of our income is coming from the fish and prawn, nowadays, the number is decreasing and it means less money for us" (KTNP). Another informant from the FGD group stated, "During September and October, the small-scale fishermen need to stop their fishing operation, the weather by that time is very unpredictable. They need to stop their works" (NT3).

Increased pressure to explore new catching areas. As the fish in their waters have depleted in number, some of the participants said they were taking the risk of intruding into international waters. Some of them have been unlucky and have got caught. The informant in the in-depth interview, KNTP, said, "Some of us get caught and get warned by the authorities, but what to do, we need to catch more fish, and we need money." Another participant from the FGD group in Batu Pahat said, "The only thing to do is to explore new areas; however, the risk increases as we do not know things to expect at the new places" (NBP 4).

What They Have Done in Response?

As the environmental changes are threatening their socio-economic life, the participants are taking several initiatives to adapt to the changes. Among the themes that emerged are enhancing their safety and security, practising information and experience sharing, seeking alternative sources of income, wearing the right clothing, and practising systematic record keeping.

Enhance safety and security aspects. Most of the participants said they took their mobile phone during their fishing operations, the main purpose of which was to enhance their chances of safety and security. According to Shaffril et al. (2015a) and Omar et al. (2012), a mobile phone can act as an emergency communication tool for the SSFM. Previously, the only thing they could do during an emergency (engine breakdown, bad weather) was to wait for someone to appear to rescue them; this could result in days or weeks of waiting. However, a mobile phone allowed them to raise the alarm and seek help immediately. NBP 2 stressed the importance of taking along a mobile phone when out at sea, saying, "We need to bring mobile phone together (to the sea) that is the most important thing." NBP 5 agreed with this, adding, "It is like our life," in referring to the mobile phone.

Practise information and experience sharing. For the participants, information and experience sharing is an effective method for minimising the impact of environmental changes. This is common practice among fishermen, and such sharing usually occurs in places of communal gathering such as the *waqaf* and coffee stalls (Shaffril et al. 2013). Shaffril et al (2015a) claimed that this practice strengthens social

relationships and allowed smooth flow of related information among the fishermen. One of the participants stated, "Everyone has their own information and they can share it among them" (NT4). Another participant stated, "We can consider others' experience and apply it in our fishing routine if we find it suitable" (NBP 5).

Alternative sources of income. Some of the participants have alternative sources of income and this offers them multiple sources of income. As financial sources are important for any reactive and proactive plans to combat environmental changes, having multiple financial sources can strengthen their flexibility and stability in adapting to any change in the system (Islam, Sallu, Hubacek, & Paavola, 2014). One of the participants stated, "That's why now I turn my attention to business" (NBP 5). According to KNTP, boat rental for angling is among the popular alternative income-generating activities. Such activities, according to him, provide a stable income for the fishermen. He said, "They rent their boat to anglers for RM350 (roughly equal to USD90) for a trip. Sometimes, they can get up to 20 trips in a month."

Clothing. To adapt to the rising temperature, the participants have changed their style of dressing for sea. On hot days, for example, NTP 1 said he wore a hat to reduce the impact of being exposed to the excruciating heat, while NTP 5 said he wore thin clothing on hot days. He stated, "It depends on the weather… if it is hot… we will wear ultra-thin clothing." On cold days, they wear thicker clothing.

Systematic record system. One of the participants shared that one of his friends kept a systematic written record and it allowed him to track and identify the changing patterns of weather and catching seasons. "He has a systematic report, he makes a record on the season, on the tide, the patterns of current and wind, fishing tools that suit to be used in different season, he has that record" (KNTP).

IMPLICATIONS, CONCLUSION AND RECOMMENDATIONS

This study succeeded in gaining the views of small-scale fishermen on the changing environment. Their views are valuable for constructing effective community adaptation strategies, and should be considered as reliable and should be emphasised by the parties concerned as they consistently 'communicate' with nature. Understandably, their experience from interacting with Mother Nature can yield valuable information and can be used by the parties concerned for helping other community groups to deal with the changing environment.

It can be concluded from this study that the effects of the changing environment in the views of the small-scale fishermen included temperature rise, difficulties in predicting the weather, extinction of mangrove swamps, eroded coastal areas, unstable rain pattern and decreasing marine resources. The fishermen believed that

among the main contributors to these problems are people and nature. As the fishermen relied heavily on weather stability, they believed that the changing environment posed several problems such as decreasing marine productivity, decreasing income, pollution, unpredictable fishing season, damaged marine habitat, increasing risks associated with their fishing operations and increased pressure to explore new catching areas. In order to overcome these challenges, these small-scale fishermen have taken several initiatives such as enhancing their safety and security, practising information and experience sharing, acquiring multiple sources of income, using protective clothing and keeping a systematic record system on the weather pattern. In addition to the recommendations made by the small-scale fishermen, this study would like to suggest a number of additional recommendations as given below.

More Research into the Causes of Environmental Changes and Its Impact on SSFM

There is a need to conduct more research related to the causes of environmental changes and their impact on SSFM. More research into this topic will assist the parties concerned to develop strategies based on in-depth understanding of the problems affecting SSFM that will suit their needs, ability and interests. Several research grants are offered by the related ministries and international agencies for local researchers such as the Fundamental Research Grant Scheme (Ministry of

Higher Education), e-Sciencefund (Ministry of Science and Technology Innovation) and Research University Grant Scheme (Ministry of Higher Education), Sumitomo Grant (Sumitomo Foundation), Toyota Foundation Grant (Toyota) and many more. It is important to research findings are shared with and disseminated among SSFM so that they will be informed and will know how to address problems that affect them and their livelihood.

Role of Influential Persons

As information and experience sharing is important for enhancing SSFM awareness of environmental changes, it is suggested that the influential people among SSFM such as the skipper, jetty leaders and village leaders be enlisted to help in strengthening environmental awareness among SSFM. These influential persons can act as 'volunteer extentionists' who will relay important information to SSFM first before they disseminate and share the information with SSFM either in formal or informal ways. This would be a successful dissemination strategy as, according to Hassan et al. (2011), rural communities consider information received from influential persons such as village leaders as being reliable and highly trustworthy.

Additional Monitoring and Enforcement of Illegal Bottom Trawling

Monitoring and enforcement activities are needed to lessen any illegal bottom trawling activities and the intrusion of

foreign fishermen in local waters. Although monitoring and enforcement activities are conducted periodically, their frequency should be increased for adequate enforcement and penalties should be imposed to deter illegal, unreported or unregulated trawling activities. Furthermore, on-board observers should be hired to monitor bycatch and ecosystem-habitat interaction to identify and report evidence of bottom trawling activities.

Conservation Activities

Small-scale fishermen through their fishermen's association need to conduct conservation activities as one of their initiatives to take care of the environment. Cooperation with NGOs, universities, private companies and government agencies for the purpose of conserving the environment needs to be conducted, while at the same time public awareness of the importance of the environment needs to be enhanced. Among potential conservation activities that can be conducted are mangrove replanting and artificial reef placing in potential catching areas.

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SOCIAL SCIENCES & HUMANITIES

Participation and Empowerment among Self-Help Groups in Kano City

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ABSTRACT

Self-Help Groups (SHGs) are local organisations that create avenues for grassroots participation at the community level in self-help activities. SGHs play an important role in helping people participate in community development activities that eventually lead to empowerment. In line with this, this paper examined the relationship between dimensions of participation and empowerment among SHG members in Kano City, Nigeria. Data were collected using a structured questionnaire from 400 respondents from four local government areas of Kano City. The descriptive analysis showed a high level of participation and empowerment among the respondents. Pearson correlation analysis revealed a significant positive relationship between the dimensions of participation and empowerment. This study supported previous literature on SHG sustainability. Practically, SHG activities have the potential to become a model for sustainable community development projects at the locality level.

Keywords: Community development, empowerment, Nigeria, participation, Self-Help Groups (SHGs)

INTRODUCTION

Participation is a central concept in community development (Barab & Duffy, 2000). The majority of development agencies have emphasised that participation is a concept of development and without participation, sustainable development

cannot be achieved. Therefore, sustainability and effectiveness of community development depend on the level of people's participation in grassroots organisations and other concerned development agencies. Thus, citizen participation in community organisations such as Self-Help Groups (SHGs) has been viewed as a major vehicle for enhancing services, preventing crimes and improving the social conditions of citizens (Chavis & Wandersman, 1990).

The idea of local participation has led to the birth and rise of grassroots organisations such as community-based organisations. Community-based organisations such as SHGs are critical players in community development, apart from the State and non-governmental organisations. In this regard, we argue that for real community participation to take place, it has to be through grassroots organisations. These organisations are locally based and run and managed by community members themselves (Blaikie, 2006). They are less structured, so participation is more intensive and more authentic. This enhances the learning process more rapidly (Wenger, 1998). Members of such groups accept new ideas easily and are more ready to implement them, making them achieve more than most people who work alone. Introduced changes are likely to be maintained in a group situation and members are motivated to be more productive in the presence of others in problem-solving situations (Wenger, 1998).

Empowerment, on the other hand, is a multi-dimensional social process that helps people gain control over their lives. Empowerment refers to the ability of people to gain understanding and control of affairs personally, socially, economically and politically in order for them to take action to improve their life conditions (Zimmerman & Rappaport, 1988). Consequently, empowerment may develop more readily from activities aimed at influencing individual decision making, increased responsibility and organisational problem-solving, all of which are also expected to contribute to the individual's self-confidence. Thus, through participation in any organised activity such as government-mandated advisory boards, voluntary organisations, mutual-help groups and community service activities, an individual eventually can be empowered (Zimmerman & Rappaport, 1988). This gives a broader definition for capturing the possibility that people can find multiple avenues for engagement in their community. This paper aimed to investigate whether participation in SHGs correlated with group members' level of empowerment in the City of Kano.

Formation and Activities of Self-Help Groups in Nigeria

In Nigeria, people formed SHGs in order to undertake development programmes and projects that they feel are needful (Dore & Mars, 1981). SHGs in Kano state, which was the location of this study, have been providing services that help in routing and channelling development information together with resources required for the improvement of their respective communities. The use

of SHGs is characterised as a process of collective action in which the people of a community organise themselves for planning action and making group and individual plans to meet their needs and solve their problems (Atkinson, 2007). SHGs have been recognised as important actors in the development of their various communities both in urban and rural areas in Kano state. From the official records, there are about 8,000 registered SHGs, about 5000 unregistered SHGs and 4600 vigilante groups distributed across the 44 local governments of the State (Olaniyi, 2005). Therefore, sustainability of SHGs is an essential condition for sustainable community development in Kano State. SHG sustainability can be viewed as a stage of empowering organisations so that members are capable of planning and implementing their development initiatives independently.

Participation and Empowerment for Self-Help Groups

Participation is not a new idea in rural and community development; it has existed under different names for more than three decades (Gow & Vansant, 1983). What is new is the increasing emphasis and confidence being placed in participation by host governments and international donors alike. Therefore, Midgley (1986) defined participation as the creation of opportunities to enable members of a community and the larger society to actively contribute and to influence the development process to

share equitably in the fruits of development (Midgley, 1986). In an attempt to illuminate some fundamental issues about participation that relate to human nature, collective action and systemic strategies/interventions to overcome challenges (Abu Samah, 2006; Wandersman, 2009), participation enhances the quality of the environment, programme or plan because the people who are involved in implementation or usage have special knowledge that contributes to their quality of life. In line with this, Heller, Price, Riger, Reinharz and Wandersman (1984, p. 339) added that participation is the "process in which individuals take part in decision making in the institutions, programs, and environments that affect them."

For this reason, participation has different meanings to different people, and varies depending on how it is applied. Bulmer-Thomas (2003) viewed participation as a contribution of the local people in public programmes up to the stage of complete inclusion of their involvement in the decision-making process. Cohen and Uphoff (1977) defined participation "as people's involvement in decision making process on what should be done and how it is done; their involvement in implementing programs and decision by contributing various resources and cooperating in specific organisations or activities; their sharing in the benefits of development program; and their involvement in efforts to evaluate such a programs" (p. 6). For Mishra, Shirma and Shirma (1984), participation refers to joint and continuous efforts by the

people themselves in setting goals, pooling resources together and taking action that aims at improving their living conditions.

Operationally, participation is viewed as empowering the local people through participation in grassroots organisations such as self-help organisations. This means that participation can be seen as a process of mobilising people through community grassroots organisations, eventually giving participating members of the group more power to gain control over their resources and their lives. In order to support this argument, Haddad (2006) claimed that without participation in grassroots organisations people might not feel empowered to act. Participation by people in grassroots organisations makes them assume responsibility in the development process. Participation fosters a more equitable distribution of power and resources (Baldwin & Cervinskas, 1993) by transforming social, political and economic injustice. For the purpose of this paper, Cohen and Uphoff's idea (1977) of participation was adopted focusing on participation in decision-making and implementation.

Participation in SHGs certainly help members to empower themselves (Chesler, 1991) because SHGs are usually formed by peers who have come together for mutual assistance to satisfy a common need, overcome a common problem and bring about desired social and/or personal change (Trojan, 1989). Kamaraj (2005) defined SHGs as small informal associations of the poor created at the grassroots level

for the purpose of enabling members to reap economic benefits out of mutual help solitarily and joint responsibility. SHGs are formed voluntarily by the rural and urban poor to save and contribute to a common fund to be lent to its members as per group decision and for working together for social and economic upliftment of their families and community (Sabhlok, 2006). Numerous research studies have concluded that SHGs are effective in helping group members, both in the short term and the long term (Spiegel, Bloom, & Yalom, 1981; Spiegel, Kraemer, Bloom, & Gottheil, 1989).

Empirically, it was found that participation in SHG activities is instrumental for reducing family burdens, loneliness and guilt feelings; and at the macro-level, SHG members' advocacy activities can affect government policies (Citron, Solomon, & Draine, 1999). A strong correlation between SHG participation and self-confidence, self-efficacy, civil responsibility and political efficacy has also been supported in research studies (Wandersman & Florin, 2000; Zimmerman, 1995). So, empowerment is the process by which participation in SHGs helps members to build their capacities and confidence for making decisions about their life at the individual and collective levels at which gaining control over productive resources are developed (Pandey, 1993). This means that the process of empowerment in SHG is facilitated by creating awareness about one's rights and responsibilities in the group. Becoming empowered as a result of participation in SHG gives the members an opportunity to develop

skills for utilising group resources and involving themselves in collective activities and the community, which subsequently helps in developing a sustainable group (Pandey, 1993). Participation in SHGs provides members with greater access to knowledge and resources, giving them opportunity of autonomy in the decision-making process (Chesler, 1991). This will create an avenue for SHG members to have greater ability to plan for their lives and to have greater control over circumstances that may influence their lives.

In line with this argument, this study aimed at examining the relationship between dimensions of participation (participation in decision-making and implementation) and dimensions of empowerment (self-efficacy, knowledge and skills, self-esteem and perceived control) among SHG members in Kano City, Nigeria.

METHODS

In this study, a total of 400 respondents were surveyed out of the entire population of 2500 registered members of the SHGs from four selected local government areas. Sample size was determined based on Krejcie and Morgan's (1970) criteria that illustrate that in a population of 2600 the estimated sample size is 335 at α=0.05 level of significance (95% confident interval). However, many researchers commonly add 10% to the sample size to compensate for persons whom the researcher is unable to contact. Israel (1992), and Singh and Masuku (2013) have suggested adding at least 10% of the determined sample size to

avoid sampling error. Therefore, we decided to increase the sample size to 400.

The cluster sampling technique was used to select the respondents from the four local government areas (LGAs) in Kano, namely Tarauni, Gwale, Nassarawa and Kano Municipal. According to Ary, Jacobs and Razavieh (2010), cluster sampling is a sampling technique that requires the researcher to select a random sample of members within the selected cluster groups. In this study a two-stage cluster random sampling technique was used. The sampling selection was as follows:

Stage 1: Random selection of four LGAs from Kano Central Senatorial District – The researcher wrote the names of all six LGAs in Kano Central Senatorial District on slips of paper, put the slips in a container and then select slips at random using the lottery method.

Stage 2: Random selection of the sample was based on the proportion of the population of the four selected LGAs. The four selected LGAs had the following population distribution: Tarauni, 567 SGH members; Gwale, 482 SGH members; Nassarawa, 818 SGH members; and Kano Municipal, 633 SGH members. Therefore, 91 respondents were randomly selected from Tarauni, 77 from Gwale local, 131 from Nassarawa and 101 from Kano Municipal. This brought the total sample size to 400 respondents from the four selected LGAs.

Instrumentation

The researcher chose to use a structured questionnaire, and the items in the questionnaire were all measured using a 5-point Likert scale. The questionnaire was divided into two sections, namely empowerment and participation, and was adopted and modified. The empowerment construct had four dimensions including self-efficacy (Schwarzer & Jerusalem, 2010), knowledge and skill (Ristic, 2005), self-esteem (Rosenberg Self-Esteem Scale 1965; cited in Crandall, 1973) and perceived control (Bodja, 2006; Smith, 1998). The empowerment construct consisted of 26 items with a 5-point Likert scale with options ranging from strongly disagree (1) to strongly agree (5). The second section was participation, and consisted of two dimensions, namely participation in implementation and participation in decision-making. The participation construct was adopted from Saidu (2014), and the 21-item questionnaire used a 5-point Likert scale with options ranging from strongly disagree (1) to strongly agree (5).

Data-Collection Procedure

Data collection was carried out over four months, and eight research assistants (two from each LGA) were recruited from the respective study areas because they were familiar with the SGH members and also familiar with the sociocultural aspects of the people. The researcher organised a three-day training session for the research assistants in order for them to get acquainted with the instrument. Data collection started from Kano Municipal LGA, followed by Gwale LGA, then Tarauni LGA and finally Nassarawa LGA. Fieldwork involved 17 days to cover the survey in each LGA. Upon completion of data collection in a survey cluster (area), one day was reserved for data checking to ensure that there were no much mistakes and for some rest before moving on to the next cluster. The respondents were met at their respective SHG offices.

Validity and Reliability of the Research Instrument

Content validity of the adopted measurement instrument was assessed by rural and community development experts from the Ministry of Rural and Community Development, Kano state. The experts reviewed the questionnaire and made suggestions, and this resulted in changes made that led to the elimination of ambiguous statements. In addition, the supervisory committee of this study also reviewed the questionnaire and offered very valuable suggestions on clarity and misconceptions; their suggestions were incorporated. Moreover, the data collected for both the pilot and final study were subjected to a reliability test to test the consistency of the data collected. Therefore, 40 questionnaires were administered for the pilot study. This was to ensure that the persons chosen for the groups has similar characteristics to those of the main study respondents in the target

population. This helped in detecting any problems in the questionnaire design. The statistics that were used to test the reliability were the internal consistency test reported as the Cronbach's alpha; it refers to as the reliability index that reflects the internal consistency of a measured instrument in which the value of its coefficient ranges between 0 and 1 (Cronbach & Meehl, 1955). According to Creswell and Newman (1989), in order to reduce possible errors in measurement, the reliability analysis should be conducted to improve the tests' statistical power. The minimum acceptable reliability is 0.70 (Hair, Anderson, Tatham, & Black, 2010). Certainly, the reliability test of both the pilot and final study indicated reasonable Cronbach's alpha coefficients; the Cronbach's alpha coefficients for the pilot study were within 0.733 to 0.932. The final study also had a similar range within 0.721 to 0.835, respectively.

RESULTS

Participation Level of Self-Help Group (SHG) Members

The assessment of the level of participation was measured based on two dimensions, namely participation in implementation and participation in decision-making among SGH members. As shown in Table 1 below,

about 55% of the respondents had a high level of participation in implementation, 41.7% had a moderate level of participation in implementation and only 3.3% were reported to have a low level of participation in implementation. This shows that the majority of the respondents (55%) had a high level of participation in implementation, considering the mean score of 35.83 (SD 4.93).

Similarly, out of the 400 respondents, 53% were reported to have a high level of participation in decision-making, 37.25% had a moderate level and only 9.75% indicated a low level of participation in decision-making. This indicated that there was a high level of participation in decision-making among the members of SHGs in Kano. This led the researcher to conclude that there was a high level of participation among the respondents in SHGs. This shows that there was direct involvement of group members in the implementation and decision-making processes, and this subsequently helped in sustaining the life of the groups. Those processes generally centred around members of the groups in terms of generating ideas, formulating and assessing options, making choices relevant to the group as well as formulating group plans for putting the selected options to effect.

Table 1
Levels dimensions of participation (n=400)

Dimensions	Mean	SD	Levels		
			Low	Moderate	High
			(9-21)	(22-33)	(34-45)
Participation in implementation	35.83	4.93	13 (3.3%)	167 (41.7%)	220 (55.0%)
			Low	Moderate	High
			(7-16.33)	(16.34-25.66)	(25.67-35)
Participation in decision-making	26.38	3.31	39 (9.8%)	149 (37.2%)	212 (53.0%)

Source: Fieldwork

Empowerment Level of the Self-Help Group (SHG) Members

The analysis described the level of members' empowerment in the groups. Four dimensions of empowerment were used to measure SHG members' empowerment level, and these included self-efficacy, knowledge and skills, self-esteem and perceived control. As shown in Table 2, there is a high level of self-efficacy among the respondents, given the mean of 38.09 (SD=5.64). Similarly, the descriptive analysis also revealed that there is a high level of knowledge and skill ($\bar{x}$ =26.43; SD=3.15), self-esteem ($\bar{x}$ =20.52; SD=2.96) and perceived control ($\bar{x}$ =19.75; SD=2.87) among the respondents. The results revealed that groups members have attained a certain level of power in terms of being empowered through participating in the activities and programmes of SHGs. The results also indicated that SHG members did not only individually become empowered but did so collectively as well by coming together to work. This caused a rise in their awareness and increased their participation level in activities and programmes that concerned their respective groups. Furthermore, the results also indicated that many SHG members had become empowered after joining a group as levels of efficacy, knowledge and skills, self-esteem and perceived control had increased.

Table 2
Levels of dimensions of empowerment (n=400)

S/N	Dimensions	Mean	SD	Levels		
				Low	Moderate	High
				(10-13.33)	(13.34-36.66)	(36.66-50)
1	Self-efficacy	38.09	5.64	10 (2.5%)	118 (29.5%)	272 (68.0%)
				Low	Moderate	High
				(6-14)	(15-22)	(23-30)
2	Knowledge and skills	26.43	3.15	16 (4.0%)	139 (34.7%)	245 (61.3%)
				Low	Moderate	High
				(5-11.66)	(11.67-18.32)	(18.33-25)
3	Self-esteem	20.52	2.95	16 (4.0%)	146 (36.5%)	238 (59.5%)
				Low	Moderate	High
				(5-11.66)	(11.67-18.32)	(18.33-25)
4	Perceived control	19.75	2.87	41(10.3%)	157(39.2%)	202(50.5%)

Source: Fieldwork

Relationship between Dimensions of Participation and Empowerment

The Pearson correlation analysis was conducted to examine the relationship between the dimensions of participation (participation in implementation and participation in decision-making) and dimensions of empowerment (self-efficacy, knowledge and skills, self-esteem and perceived control) as shown in Table 3 below.

With regard to the first dimension of participation, that is participation in implementation, the Pearson correlation analysis showed a significant positive and medium relationship between participation in implementation and self-efficacy (r=.327**, p<0.01) and knowledge and skills (r=0.326**, p<0.01). The analysis also revealed a significant positive and low relationship between participation in implementation and self-esteem (r=0.209**, p<0.01); however, the results indicated there was no significant relationship between participation in implementation and the perceived control (r =0.052, p>0.05).

For the second dimension of participation, participation in decision-making, the correlation analysis revealed that there was a significantly positive and high relationship between participation in decision-making and self-efficacy (r=0.505**, p<0.01). However, the analysis indicated a significantly positive but low correlation between participation in decision-making and self-esteem (r=0.253**, p<0.01) and perceived control (r=0.256**, p<0.01). The analysis showed no significant relationship between participation in decision-making and knowledge and skills (r =0.023, p>0.01).

Table 3
Correlation matrix of independent and dependent variables

Variables	Y_1	Y_2	Y_3	Y_4	χ^1	χ^2
Y_1 (Self-efficacy)	1					
Y_2 (Knowledge and skills)	0.427**	1				
Y_3 (Self-esteem)	0.353**	0.377**	1			
Y_4 (Perceived control)	0.346**	0.457**	0.631**	1		
χ^1 (Participation in implementation)	0.327**	0.326**	0.209**	0.052	1	
χ^2 (Participation in decision-making)	0.505**	0.023	0.253**	0.256**	0.054	1

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

DISCUSSION

In this study, both descriptive and inferential statistics were conducted for data analysis. The descriptive statistics revealed that there was a high level of participation among the respondents in SHGs. This shows that there was active involvement of the group members in implementation and decision-making processes, and this helped in SHG sustainability. The decision-making process usually helps SHG members to create ideas and assess decisions in order to choose better options in the implementation process. Likewise, the descriptive analysis also showed a high level of empowerment among the respondents due to their participation in SHGs. This means that members of the groups had been empowered after participating in activities and programmes in their respective SHGs. The finding, moreover, indicated that the SHG members were collectively empowered, which subsequently raised their awareness and increased their participation level as well.

Moreover, the Pearson correlation analysis showed significant and positive relationships between participation in implementation and self-efficacy, knowledge and skills and self-esteem. This finding was in line with that of Zimmerman and Rappaport (1988), who found a significantly positive relationship between participation in community organisations and empowerment. In addition, Mok (2001) obtained a similar result, indicating that participation in SHGs has direct correlation to benefit from empowerment outcomes such as self-efficacy, improvement of perceived control, self-esteem, life satisfaction, information and resources.

With regards to the other dimension of participation, which is participation in decision-making, the result revealed a significantly positive relationship between participation in decision-making, self-efficacy, self-esteem and perceived control. This result supported the findings of Hardina (2006) and Pretty (1995), who

had asserted that empowerment could be achieved through participation as an end. Therefore, empowerment involved action at the grassroots level, helping to create self-esteem, perceived control and transformation of the society through participation in grassroots organisations. So, empowerment leads members of these groups to develop a negotiated power-sharing technique through interactive participation in the groups.

Arguably, the respondents' empowerment is directly associated with participation in the SHGs' community activities and programmes. Residents are empowered through collective reflection and decision-making, which includes building a positive self-image and confidence, developing the ability to think critically, building group cohesion and action and ensuring equal participation of all members of the group. Through this type of participation in the groups' activities and programmes, members can be encouraged to participate in more group action that will bring social change to their community and provide the groups with the opportunity of economic independence as argued by Oakley (1991). On a similar note, practices in SHGs have the potential to become a model for sustainable community development projects as proved in the study that members who participated in decision-making and taking action experienced psychological change and capacity development. These two aspects are part and parcel of the effort of creating a self-reliant community as the

end product of the community development process.

CONCLUSION

Analysing the results of the study using descriptive statistics revealed that a considerably high level of participation and empowerment was achieved, meaning that all the dimensions that measured the level of participation and empowerment among SHG members in the study area had a high percentage level. For the statistics of inference, the Pearson correlation analysis showed a significantly positive relationship between participation and empowerment, indicating that higher empowerment among SHG members is directly associated with their high level of participation in SHG activities and programmes. The direct link between these two constructs was evidence of sustainability of the SHGs in the urban city of Kano state, Nigeria.

This study supported previous literature on SHG sustainability as the results were able to show a significantly positive relationship between participation and empowerment of SGH group members in Kano, Nigeria. The direct relationship between participation and empowerment confirmed that these variables were among the factors associated with SHG sustainability in Kano. Also, the study was relevant to policy-makers, especially the Ministry of Rural and Community Development for policy formulation, programme evaluation and data analysis. For SHG members, the findings of this study will serve as a guide for strengthening group

membership relations in the empowerment process. However, this study was limited to urban SHGs and was gender-biased. Therefore, the researchers recommend further studies on rural SHGs with more emphasis on gender equity.

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PERTANIKA
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Impingement Factors of Rural Library Services on Community Lifestyle in Malaysia

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ABSTRACT

This study attempts to provide a comprehensive overview of the impingement factors of rural library services on rural community lifestyle in Malaysia. The quantitative method is used in this study and a survey and distributing questionnaire are employed as the main instruments in collecting the data. A total of 400 rural communities that used 16 rural libraries are selected as the respondents using multi-stage cluster sampling. The results of the study show that all the factors studied, namely sources, services, access criteria and interaction have a positive and significant relationship with rural community lifestyle. Further analysis using multiple linear regression confirmed interaction as the factor that most contributed to developing the rural community lifestyle. A number of recommendations are highlighted that can assist the parties concerned in constructing the best strategies to further develop rural library services in Malaysia.

Keywords: Community lifestyle, information development, rural development

INTRODUCTION

In this modern era, the evolution of information technology has resulted in bigger digital and information gaps between rural and urban communities (Abu Samah, Hayrol Azril, Jeffrey, & Musa, 2010; Omar, Shaffril, D'Silva, Bolong, & Hamzah, 2014; Sahharon, Omar, Bolong, Shaffril, & D'Silva, 2014; Tobgay & Wangmo, 2008). The Malaysian government has

taken the initiative to narrow the gaps via the establishment of several rural Internet projects such as 1 Malaysia Internet Centre and Rural Internet Centre and the establishment of rural libraries. Rural libraries, although 'traditional' in approach, remain viable in today's fast-paced and service-orientated society. At the same time, rural libraries are also able to face the challenges connected to ICT usage while staying on the cutting edge of technology. Consequently, rural libraries are able to act as lifelong learning centres that help to narrow the existing information and digital gaps in communities (Omar et al., 2014; Omar, Shaffril, Bolong, & D'Silva, 2012).

To date, there are 1114 rural libraries across the country with Sarawak, Sabah and Kedah having the highest number. Additionally, the number of rural library visitors across the country is huge; in 2012 for example, a total of 6.3 million rural library visitors were recorded, and out of whom 1.34 million were registered users (National Library, 2013). Among the major objectives of rural libraries are to cultivate the reading habit among rural communities, to provide useful reading sources to rural communities, to offer educational resources for students and to conduct related recreational activities for rural communities. Some rural libraries offer ICT services such as use of computer, notebook and the Internet to the community.

Albeit the services offered and the huge number of visitors and users, policy-makers and scholars have begun to ask if the services offered by rural libraries are able to develop a positive lifestyle among rural communities. However, not many studies have been conducted on rural library usage and any resulting positive lifestyle among rural communities. The existing studies focused on the patterns and problems of rural library services usage. The dearth of related studies in this area has resulted in lack of understanding among policy-makers, consequently affecting decision-making, causing it to be not in line with the needs and interests of the main users of rural libraries i.e. rural communities.

This study aimed to fulfil two main objectives i.e. to examine the relationship between the factors studied, namely sources, services, access criteria and interaction relationship with rural community lifestyle and to identify the factors that most contribute to rural community lifestyle.

Rural Libraries in Malaysia

Malaysia's first library was established almost 100 years ago in 1817 in Penang. The number of libraries in Malaysia increased consistently from then, particularly in 1881 in states such as Malacca and Kuala Lumpur (Tee, 1986). Among the main purposes of its establishment was to guide the people towards alignment with the social, political and recreational purposes set for the nation at the time. Although it was aimed at serving the elitists, the Malayan Public Library Association attempted to upgrade the social, educational and cultural standards of rural

communities. However, it met with little success due to financial limitations (Tee, 1986).

Library development in Malaysia entered a new era after the country gained its independence on 31 August, 1957 with the establishment of a blueprint for public library development in 1968, an effort of the Library Association of Malaysia (Tee, 1986). Among the focus points of the blueprint were a comprehensive survey of public library services in Malaysia and references for the minimum standards of a library. A plan for the establishment of independent library corporations to operate public library systems on a state basis was also included (Tee, 1986).

In addition to this effort, the establishment of the National Library of Malaysia (NLM) in 1966 was another significant achievement towards library development in the country. For almost 12 years, the NLM was placed under the National Archives and eventually, in 1977 it became a full federal department. Presently, NLM is a unit under the administration of the Information, Communications and Culture Ministry and is the forerunner of much of rural library administration in Malaysia. The history of the rural library started in 2000, when a total of 25 rural libraries were established in a number of selected states (National Library of Malaysia, 2011). To date there are 1,114 rural libraries in Malaysia, with the most located in Sarawak (212 rural libraries), Sabah (124) and Kedah (96) (National Library, 2013).

The Emerging Community Lifestyle Created by Rural Library Services

Rural library services that are available in rural areas have proven to foster positive community lifestyles. Rural libraries are capable of producing knowledgeable and well-informed communities via the inculcation of positive lifestyles (Omar et al., 2012). Among the lifestyle traits that are recommended for communities is the habit of reading and writing. Rural libraries contain a lot of reading materials (Omar et al., 2014) that meet the needs of various age groups from children and teenagers to adults. Omar et al. (2014) demonstrated the rural community's ability to transform what they have read at the rural library into practical things, for example, housewives can now prepare a variety of dishes for their family after reading cookbooks in the library. In addition, rural libraries are also seen to encourage users to buy their own reading materials and to establish their own reading corner in their house (Omar et al., 2012).

Rural libraries offers a conduit through which communities can strengthen family ties (Scott, 2011). These libraries can now become a 'low cost' viable option to parents as a venue for spending time with family members Apart from bringing their children to the library, parents can also use the opportunity to teach their children to read, spell, count, participate in community activities and so on (Omar et al., 2012; Samsuddin, Omar, Abu Samah, & Bolong, 2016).

Doubtlessly, rural libraries foster a culture of knowledge sharing among their visitors. The wide space available in rural libraries can be utilised to organise pleasant group discussions, and this offers a myriad of knowledge sharing opportunities among the users. In addition to this, the rural library is a place where the learning culture is cultivated (Scott, 2011; Omar et al., 2014). With the availability of reading materials, ICT facilities and adequate space can encourage users, especially students, to make rural libraries a proper place for revision or group discussion. Rural libraries are also seen as an avenue for fostering ICT culture among the users. With most of the rural libraries now equipped with computers, laptops and the Internet, rural residents now have wider access to ICT, reducing the digital gap between urban and rural communities (Samsuddin et al., 2016).

In addition, activities organised by the rural libraries serve as an access point for the rural community to further strengthen social bonds among themselves (Scott, 2011). Apart from coffee-shops, rural libraries can now be made avenues for social discussion. Omar et al. (2014) looked into the ability of rural libraries to curtail social problems that are rampant through activities that can encourage rural residents, especially the youth, to visit the library and to use its services.

Potential Factors Affecting Community Lifestyle

Although several factors are believed to affect community lifestyle, the scope of this study was the four main factors suggested by McDonald and Micikas (1994), namely sources, services, access criteria and interaction.

Sources. Sources, according to McDonald and Micikas (1994), refer to all of the resources offered at the rural library. In the modern context, among the pertinent resources that must be available in libraries are updated reading sources (Norshila, Masitah, & Wan Norhazila, 2011), ICT facilities (Tveit, 2012; Tenopir, King, Edwards, & Wu, 2009), resources and facilities that are updated and free from damage (Howard, 2011), large space (Dewe, 2006; Omar et al., 2012) and relevant community activities (Omar et al., 2014).

Services. Services, according to McDonald and Micikas (1994), refers to the effectiveness of library services. Among the effective services that must be considered in developing a positive community lifestyle is the adequacy of search tools (Corradini, 2003; Melentieva, 2009), availability of library staff (Omar et al., 2014), proactiveness of library staff in promotion efforts (Omar et al., 2012), efficiency of the borrowing and returning process (Omar et al., 2012) and a conducive environment (Howard, 2011; Islam, 2009).

Access criteria. The factor of access criteria refers to access to library resources and frequency of usage of library resources and services (McDonald & Micikas, 1994). Omar et al. (2014), Howard (2011) and

Corradini (2003) have looked into the superior condition of infrastructure in rural areas such as roads, street lamps and telecommunication connection that make it possible for a rural library to be accessed by the rural community. Albeit the availability of most of the components of the infrastructure that ease access to rural library services, the unavailability of signage has caused difficulties for users, especially first timers (Omar et al., 2012). Due to the availability of most of these components of infrastructure, Omar et al. (2012) concluded that rural communities are actively interacting with rural library services.

Interaction. Interaction refers to the effectiveness of the interaction between the library and the user based on the user's awareness of library resources and services and how the user 'interacts' with the library services provided (McDonald & Micikas, 1994). To create effective interaction between rural communities and rural library services, according to Omar et al. (2014), Zickuhr, Rainie and Purcell (2013), and Omar et al. (2012), the library services must be visible to the community and they should perceive that the library is important. Furthermore, Zickuhr et al. (2013) stated that the library must provide the information needed by the community and the services offered must be related to their ability, needs and interests.

METHODS

Research Design and the Questionnaire

In conducting this research, a cross-sectional quantitative study was employed. The advantages of using this method is that it contains multiple variables at the time of the data snapshot, findings and the outcomes from the study can be analysed to create new theories/studies or in-depth research and the data can be used for various types of research.

A questionnaire was used as the main instrument for obtaining the required data. The questionnaire was developed based on a literature review. After the first draft of the questionnaire was completed, two focus group discussions were conducted, one with rural library staff and the other with rural library users. The main purpose of the focus group discussions was to seek the opinion of the staff and the users on the appropriateness and suitability of the questions included in the questionnaire. Based on the feedback from the focus group discussion, the questionnaire was further strengthened. The final version of the questionnaire consisted of seven sections, namely demographics, pattern of rural library usage, sources, services, access criteria, interaction and community lifestyle (Table 1). In order to fulfil the study objective, the paper focused only on demographics, sources, services, access criteria, interaction and community lifestyle.

Table 1
The instrument

Part	Number of Questions	Option of Answers	Type of Questions Asked	Example of Item(s)
Demographic	7	Open-ended and closed ended	Related to demographics	Age, gender, income, education achievement
Sources	23	5-point Likert scale	Related to reading sources, ICT facilities, building spaces and activities conducted	"The available reading sources at the library are updated."
Services	15	5-point Likert scale	Related to assistance offered by staff, number of staff, the returning and borrowing process, ICT services and arrangement of sources	"The library staff encourage me to use the services provided."
Access criteria	8	5-point Likert scale	Related to access to the sources, services and activities conducted at the rural library, condition of the infrastructure (road) to the rural library	"I am allowed to join activities organised by the library."
Interaction	10	5-point Likert scale	Related to the purpose of visiting the rural library	"I come to the library for group discussion."
Rural community lifestyle	23	5-point Likert scale	Related to the impact resulting from the services used such as users' attitude, habits, personal achievement and their activeness in social and recreational activities	"The services provided at the library cultivate my reading habits."

The Pre-Test

After the questionnaire was developed, it was pre-tested among 30 rural library users at a selected rural library in Kuala Selangor. The pre-test resulted in most of the parts obtaining values exceeding the 0.700 recommended by Nunnally (1978) (Table 2). The factor of services, C2_8, which did not exceed the recommended value, was deleted as suggested by the reliability analysis to increase the Cronbach's alpha value to 0.919.

Table 2
Results of the pre-test

Factors	Cronbach's Alpha Value
Sources	0.912
Services	0.919
Access criteria	0.785
Interaction	0.870

Population and Sampling

The population of the sample was made up of the registered users of the rural library, numbering 1.34 million. The sampling

process of the study was based on the multi-stage cluster sampling. At the first process of sampling, zones in Malaysia were listed. Then, a total of four zones out of five were randomly selected. The selected zones were central, southern, east coast and Sabah/Sarawak. At the second stage, all the states within the selected zones were listed. Then, states were randomly selected to represent their zones. The selected states were Perak (central), Negeri Sembilan (southern), Terengganu (east coast) and Sabah (Sabah/Sarawak). At the third stage of the sampling, all rural library zones in the selected states were listed and one zone for each state

was then randomly selected. The selected rural library zones were A8 (Perak), N5 (Perak), T8 (Terengganu) and S13 (Sabah). At the fourth stage of sampling, a total of four rural libraries were randomly selected to represent each selected zone (Table 3). At the last stage of sampling, a total of 25 library users from each selected rural library were randomly selected as the respondents (25 respondents x 4 rural library x 4 zones = 400 respondents). Each library was represented by 25 respondents to ensure that all the selected libraries were represented by an equal number of respondents.

Table 3
List of selected states and rural libraries

States	Name of the rural library
Sabah (Zone S13)	1) Rural Library of Kg. Mesilou
	2) Rural Library of Kg. Terolobou
Perak (Zone A8)	3) Rural Library of Kg. Mohimboyon
	4) Rural Library of Kg. Kauluan
Negeri Sembilan (Zone N5)	1) Rural Library of Kg. Pdg tembak
	2) Rural Library of Kg. Lekir Batu 15
Terengganu (Zone T8)	3) Rural Library of Batu Tiga Segari
	4) Rural Library of Teluk Raja Bayang
	1) Rural Library of Kg. Serting Tengah
	2) Rural Library of Kg. Serting Ulu
	3) Rural Library of Taman Tunku Puan Chik
	4) Rural Library of Kg. Bukit Kerdas
	1) Rural Library of Kg. Banggol Katong
	2) Rural Library of Kg. Alor Limbat
	3) Rural Library of Kg. Tasik
	4) Rural Library of Kg. Padang Tanjung

Data Collection

The data collection was carried out over seven months from June 2014 to December 2014. The data collection process was assisted by trained and experienced enumerators and monitored by the research team members. The survey was the main method used to collect the required data, and the respondents took between 25 and 35 min to complete the survey.

Analysis

Analysis was based on the descriptive and inferential analyses. Descriptive analyses such as frequency, percentage, mean score and standard deviation were performed to describe the general data of the study, while inferential analyses such as Pearson product moment correlation were performed to identify any relationship that might occur between the variables. Multiple linear regression was performed to identify the factor that most contributed to rural community lifestyle. Four factors, namely sources, services, access criteria and interaction acted as independent variables, while community lifestyle acted as the dependent variable.

The mean score gained for sources, services, access criteria, interaction and community lifestyle was categorised into three levels, namely low, moderate and high.

The categorisation was based on the range of score calculation, where a range of possible scores (in this case, 1-5) were divided by the number of categories required (in this case three, low, moderate and high). The resulted range, four (5–1), was divided by three, resulting in the class of interval, 1.33. Based on the class of interval, the mean score for the low category ranged between 1.00 and 2.33, the mean score for the moderate category ranged between 2.34 and 3.67 and the mean score for the high category ranged between 3.68 and 5.00.

RESULTS AND DISCUSSION

Table 4 shows the demographic data of the respondents studied. More than half of the rural library users were female (63.0%), and the majority (70%) of them who used the rural library were aged below 30 years old. This indicated that many of the rural library users were from the younger generations (mean 24.9), which included school children, housewives and the unemployed (66%). In terms of race, nearly three quarters of the respondents were Malay (74%), while the rest were Dusun. A total of 43.8% possessed an SPM/SPMV certificate and most were unemployed (66.2%). The mean score for income per month among the employed respondents was RM1415.44 and slightly more than half of them had between 4 and 6 household members.

Table 4
Demographic factors

Factor	Frequency	Percentage	Mean
Gender			
Male	148	37.0	
Female	252	63.0	
Age (years)			24.9
<20 years	184	46.0	
21-30 years	93	23.3	
>31 years	123	30.8	
Race			
Malay	297	74.3	
Others	103	25.7	
Education achievement			
Never been to school	3	.8	
Primary school	14	3.5	
PMR	112	28.0	
SPM/SPMV	175	43.8	
Skill certificate/STPM	43	10.8	
Diploma	33	8.3	
Degree/Master/PhD	20	5.0	
Employment status			
Working	135	33.8	
Not working	265	66.2	
Income (n=135)			RM1415.44
<RM700	27	20.0	
RM701-RM1500	79	58.5	
>RM1501	29	21.5	
Size of household			
1-3	62	15.5	
4-6	208	52.0	
>7	130	32.5	

In seeking the influential factors of rural library services on rural community lifestyle, a total of five factors were studied. The selected factors were based on the model suggested by McDonald and Micikas (1994). All of the factors studied recorded high mean scores ranging from 3.77 to 4.19. The factor of criteria recorded the highest mean score, with M=4.19, followed by services, M=4.03, while the lowest mean score was recorded by the factor of sources (M=3.77) (Table 5).

Table 5
Level of mean score for factors studied

Factors	Mean score
Sources	3.77
Services	4.03
Criteria	4.19
Interaction	3.99

As mentioned earlier, rural libraries have managed to develop a positive lifestyle among rural communities. This leads to a pertinent question: What are the factors that influence this lifestyle? To identify the possible factors, relationship analysis using the Pearson product moment correlation was performed to examine any relationship that might occur between the factors studied and rural community lifestyle. The analysis showed that all of the factors had a positive and significant relationship with rural community lifestyle (Table 6).

Table 6
Relationship between factors studied and rural community lifestyle

Variables	r	p
Sources	0.629	0.0001
Services	0.609	0.0001
Access criteria	0.556	0.0001
Interaction	0.719	0.0001

The factor of access criteria has been confirmed as one of the factors that had a positive and significant relationship. The resulted value is not surprising and is in line with previous studies done by Omar et al. (2014), Howard (2011) and Corradini (2003). Omar et al. (2012), for example,

concluded that infrastructure such as roads, street lamps, telecommunication networking and signage to further enhance the number of visitors to rural libraries was important. The rural library has benefitted from the government's efforts to ensure huge rural areas equipped with basic infrastructure such as road and electricity. To date, more than two thirds of rural areas in Malaysia have tarred roads and are equipped with electricity (Yassin, Samah, Idris, Hamzah, & Shaffril, 2013). Having better basic infrastructure provides better access to the rural library for the community, thus enhancing their chances of frequently visiting the library and using the services offered.

Source is another factor identified as having a significant relationship with community lifestyle. Updated reading sources, ICT, large space and related community activities are among the important resources that must be made available in a rural library (Norshila et al., 2011; Tenopir et al., 2009; Tveit, 2012). According to Howard (2011), such resources must be up to date and free from damage. Although libraries are associated with traditional ways of offering information to the community, equipping the rural library with ICT facilities is one of the ways of ensuring its sustainability. Moreover, larger building space is vital for the rural library, not only to house its resources but also to accommodate and to ensure the comfort of a large number of visitors and members (Dewe, 2006; Omar et al., 2012). This will also ensure that all of the community

activities conducted at the rural library meet the interests and needs of all users from both genders and all age groups (Omar et al., 2014).

Services was confirmed to have a significant relationship with community lifestyle. Currently, although the numbers are discouraging, Omar et al. (2012) have looked into the ability of the small number of library staff to create a positive perception among visitors on the services offered. Their promotional efforts can motivate and cultivate interest among the community to visit and use the services offered in rural libraries.

Interaction is another variable that recorded a significant relationship with community lifestyle. Most of the users 'interacted' with the reading resources and activities available at the library. Within the scope of Malaysia, Omar et al. (2012)

had concluded that the rural community are aware of the rural library services offered. Referring to Omar et al. (2012, 2014), among the rural library services preferred by the rural community are reading materials such as novels, newspapers, magazines and educational resources; ICT-related services such as computers, laptops and the Internet; and community activities such as sewing and cooking classes and drawing and essay competitions.

Sources, services, criteria and interaction were used in multiple linear regression (enter method) analysis to predict lifestyle. The prediction model was statistically significant $F(4, 400)=140.507$, $p<0.001$ and accounted for approximately 58% of the variance of lifestyle. The lifestyle was predicted by lower levels of sources and services and to a lesser extent by higher levels of interaction (Table 7).

Table 7
The contributing factor towards rural community lifestyle

Variables	b	SE	Beta	t	p
Constant	0.203				
Sources		0.059	0.198	3.932	0.000
Services		0.055	0.137	2.641	0.009
Criteria		0.052	0.060	1.263	0.207
Interaction		0.041	0.482	11.012	0.000

R=0.766; R^2=0.587; Adjusted R^2=0.583, F=140.507, p<0.0001

CONCLUSION AND RECOMMENDATIONS

Analysis performed confirmed that all of the four factors studied were significantly associated with community lifestyle, denoting that having better sources, services, criteria and interaction in rural libraries increased the possibility of creating a positive lifestyle among the rural community. Eventually, having library services in rural areas is seen as one of the efforts in further strengthening family

and community bonds and, at the same time, reducing social problems among the community, particularly among the younger generations.

This study had several limitations. Firstly, it involved only a total of 400 respondents and secondly, it did not include states from the northern zone. The data can be enriched if a bigger number of respondents and all five zones in Malaysia were included.

As interaction plays a major role in developing a positive community lifestyle, several recommendations are highlighted based on four main criteria, which are to make library services 'visible' to the community, to create positive perception of the rural library among the community, to fulfil information needed by the community and to ensure that the services offered meet the community's ability, needs and interests.

Create Visible Services and Positive Perception among the Community

To create visibility for the services of the rural library and to encourage a positive perception of the rural library among the community, promotional efforts must be intense. Efforts to inform people of what the library offers are highly recommended. Hassan et al. (2011) looked into the effectiveness of using printed materials such as brochures and newsletters in disseminating information among the rural community, while Omar et al. (2012) highlighted the proactive roles of the librarian in conducting door-to-door promotions, school-to-school promotions exhibitions and community

activities and in cultivating the reading habit among children. Abu Samah et al. (2010) highlighted the roles of village leaders or the village leadership committee known as the JKKK in encouraging the rural community to use government services as these leaders are trusted and considered reliable sources among the rural community. These efforts will ensure that the rural library is visible and will also encourage a positive perception of the rural library among the community.

Fulfil the Needs of the Community

To fulfil the community's need for information and to provide services that are in line with the community's ability, needs and interests, the services and sources offered by the rural library must be of good quantity and quality. It is important to acquire sufficient resources at the rural library, particularly those related to ICT. To date, efforts have been made to strengthen ICT services offered at the rural library. The Malaysian Communication and Multimedia Commission, for example, have provided free notebooks to rural libraries and placed several modems in rural libraries as part of the wireless village programme. Nevertheless, such efforts are can only be seen at selected rural libraries and these efforts should be widened to include other rural libraries. Doubtless, a limited budget would be the main constraint in ensuring a good quantity and quality of resources in the rural library. This can be overcome with donations of reading materials and learning resources from NGOs, private agencies and universities. It is crucial for the rural library

to provide information and services that meet the community's ability, needs and interests as the libraries need to be customer-based rather than place-based or collection-driven. Responsive programming targeted at meeting the needs of the rural community will offer much help in building a positive community lifestyle. This can be done by conducting periodical assessments among rural library users. Such assessment will alert librarians what needs to be upgraded and how to do so.

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Attitude of Small-Scale Fishermen Towards Adaptation to Climate Change

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ABSTRACT

It is globally accepted that the earth's climate is changing. Such a phenomenon affects communities across the globe. One of these communities is that of small-scale fishermen. Past studies have shown poor understanding of climate change and low progress in development among fishermen because of the failure among stakeholders in understanding the mindset of beneficiaries such as their attitudinal setting. Much of the top-to-bottom development is impromptu, and most of the time, this makes them disorientated and may open them to the risks associated with climate change. Therefore, a better understanding of their attitude in relation to climate change will provide an important foundation for future planning for climate change mitigation and engagement of fishermen communities with stakeholders. In general, this paper aims to determine the attitude of small-scale fishermen towards adaptation to climate change. The nature of this study is quantitative and the study uses a set of questionnaires and involves a total of 300 respondents from two fisheries districts in Peninsular Malaysia. The fishermen surveyed had a high level of adaptation with regards to attitude towards climate change, while their level of education, catching area, fishing technology, type of vessel and income are confirmed as influential factors.

Keywords: Climate change adaptation, fishermen attitude, small-scale fishermen

INTRODUCTION

The fisheries sector is an economic contributor for many countries around the world. Indeed, it plays a prominent role in economic earnings for coastal communities.

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Currently, maintaining this role is a challenge as the fishery sector is facing the effects of climate change. Such a phenomenon is expected to result in temperature rise, high density rainfall, storms, big waves and unpredictable weather patterns that will affect small-scale fishermen in all aspects of their life from economic and social activities to safety and health (Intergovernmental Panel on Climate Change [IPCC], 2007; Zarnetske, Skelly, & Urban, 2012).

Previously, small-scale fishermen used the traditional methods of observation and experience to predict the weather. However, due to unpredictable weather conditions nowadays, such traditional methods cannot help much. Information colleted through the use of advanced technology is needed to predict the weather today. According to Allison, Beveridge and Van Brakel (2009), the majority of fisher folk (from 250 million) living in the region are widely exposed to climate change (human-induced), and a big portion of their livelihood resources are dependent on and influenced by climate variation. Most of the countries in Asia-Pacific are coastal countries, while several are landlocked. The majority of coastal communities in the Asia-Pacific region are involved in fisheries-related activities, depend greatly on ocean resources and are highly exposed to the impact of climate change (Heenan et al., 2015).

According to the Department of Fisheries, Malaysia, small-scale fishermen are defined as those working as fishermen in the Zone A catching area, which is from the shoreline up to 5 nautical miles, while vessels operating in the inner zones are allowed to fish in deeper waters (Zones B, C and C2). Small-scale fishermen are also known as traditional fishermen due to their use of traditional fishing gear (tools) and small vessels made from timber or fibre.

In 2010, a study on the impact of climate change on sea-level rise in Malaysia was carried out by the National Hydraulic Research Institute of Malaysia (NAHRIM) to project sea-level rise (SLR) for the Malaysian coast from the year 2010 to 2100. The study showed a tremendeous increase in SLR trend over the recent five years, compared with the SLR trend 20 years ago. NAHRIM also forecast that SLR for the year 2100 in Peninsular Malaysia will range between 0.25 and 0.5 m (Awang & Abdul Hamid, 2013).

The phenomenon of temperature rise is one of the impacts of climate change in Malaysia. Tangang, Juneng and Ahmad (2007) recorded higher temperatures for the East Coast of Peninsular Malaysia. Kota Bharu and Kuantan, for instance, recorded a temperature rise between 0.5°C and 1.5°C over the last 40 years. While scientific studies by Kwan et al. (2013) projected that most areas in Malaysia will be facing an increasing heat pattern at day and night, some areas in Pulau Pinang and Perak are projected to record the highest change in terms of day heat. Several areas in Melaka and Sarawak are projected to record the highest change in terms of increasing heat at night. Climate change was also found

to affect the distribution pattern of the frequency of rainfall in Malaysia. Wan Azli (2010) in his study found that Malaysia is facing frequent rains and floods unnaturally, and the number of days for the occurrence of storm and thunderstorms has increased.

Extreme temperature rise will also be a cause of the occurrence of environmental disasters such as forest fires and the resulting smoke haze pollution and degradation of air quality in several places including Malaysia (Othman, Sahani, Mahmud, & Ahmad, 2014). Such a situation will force traditional fishermen to cancel or delay their fishing routine as most of them are not equipped with advanced navigation technology. This will see a reduction in their economic and social standards.

Badjeck, Allison, Ashley and Nicholas (2009) suggested that priority should be addressed in order to strengthen public lives and establish policies to deal with climate change phenomena. Strengthening individual adaptation to climate change is crucial because it is a mechanism that will reduce the risk of exposure to climate change and enable those affected to be better prepared to cope with extreme weather events. Due to the importance of understanding public engagement with climate change (Wright, Price, & Leviston, 2015), this study was undertaken to discover the factors of attitude among fishermen in relation to climate change adaptation to provide adequate information for drafting a mitigation plan to offset the impact of climate change on the lives and livelihood of small-scale fishermen.

Literature on Attitude

Research into attitude and attitude change is a popular topic in many fields of study including community development. Attitude is defined in psychology as the personal evaluation of specific targets or issues or situations that include mental process, belief and behaviours (Allport, 1935). Zimbardo and Leippe (1991) defined attitude as:

> The belief or affective component consisting of a person's evaluation of, liking of, or emotional response to some situation, object, or person. The cognitive component is conceptualized as a person's factual knowledge of the situation, object, or person, including oneself. In other words, the cognitive component refers to how much a person knows about a topic, such as climate change. The behavioral component of an attitude involves the person's overt behavior directed toward a situation, object, or person.

Through that basic knowledge and resulting evaluation, attitudes are believed to be a personal way that people are likely to act in specific situations. Even though attitudes are not observable, they do serve to help produce observable actions in people (Delamater & Myers, 2010). Several characteristics have been recognised by scholars as helping others to better understand attitudes such as having

a relatively stable relationship between the subject and the object, being motivated by relationship, not naturally existing, being relatively durable, having valence and diversity (Redzuan, 2001). Scholars tend to believe that attitude can be changed using the correct technique. In understanding attitude among fishermen faced by climate change adaptation, the Theory of Reason Action (TRA) was applied by some scholars, who approached the subject through the lens of the functional approach to attitude change (Eagly & Chaiken, 1993; Katz, 1960; O'Keefe, 1990). The functional approach assumes that personality plays an important role in interpreting the needs of attitude change. Katz developed four categories to differentiate the personality function as (a) utilitarian function, (b) knowledge function, (c) ego-defensive function, and (d) value-expressive function. In this study, we used the knowledge function as a basis for interpreting the critical need for attitude change among small-scale fishermen to prepare themselves for an uncertain future.

The main focus of the Theory of Reason Action (TRA) is the influence of attitude, norm and intention towards behaviour (Fishbein & Ajzen, 1975). TRA suggests that the cause of behaviour is the individual's intention to engage in the behaviour. Attitudes influence behaviour through intention, which is the decision to act in a particular way. Besides that, some other variables, especially the existence of demographic factors, have been predicted as influential factors on individual attitude such

as age, location, level of education and years of experience (Fishbein & Ajzen, 1975).

Fishermen's Attitudes Towards Climate Change Adaptation

Fishing displays a different risk pattern from that of other professions (Mistiaen & Strand, 2000). Many studies have been conducted across the globe to discover the pattern of impact among fishermen based on climate change events. Fisherman have been seen to be victims of climate change, which has brought big impact on the landscape and the fisheries industry. Fisherman are greatly affected because of poor knowledge and awareness as climate change happens slowly over a long time of period (Huchim et. al, 2016; Kupekar & Kulkarni, 2013). Without proper knowledge, skill and experience on climate change, they may be affected by cyclones, fluctuations of weather and loss in fishing days, all of which lead to reduced income and livelihood. At the same time, all these circumstances will demotivate fishermen and disrupt their wellbeing (Salim & Shridhar; 2014).

Several researchers have confirmed that socio-demographic factors such as age, level of education, household size, income, vessel type, fishermen categories and catching area also have a significant relationship with attitude (Al-Oufi, 1999; Mohamed Shafrill et al., 2013a; Villareal, 2004). In Malaysia, the impact of climate change on human life has been studied by several government agencies, universities and private corporations (Mohamed Shaffril,

Abu Samah, D'Silva, & Md. Yassin, 2013; Tangang, Juneng, & Ahmad, 2007). The findings showed that attitude change was needed to adapt to the changing climate in order to obtain a better livelihood. However, information on small-scale fishermen among and such attitude change is still lacking. Such information is crucial for establishing ways to help small-scale fishermen improve their lives.

METHODS

Data collected for this study was obtained from a survey conducted among fisherment from two selected fisheries districts, namely Kota Bharu in the state of Kelantan and Nibong Tebal, located at the border of the states of Pulau Pinang and Perak. The locations were selected based on specific criteria including the fact that the areas were affected by erosion and sea-level rise (SLR) (Awang & Abdul Hamid, 2013; Toriman, 2006). Besides that, both locations were determined by NAHRIM to be points for the particular study of issues related to the impact of climate change on SLR in Malaysia.

A total of 300 fishermen (150 respondents for each location) were involved in the study and data were collected using a developed questionnaire. This study adopted a 5-point Likert scale pertaining to attitude towards climate change adaptation. For each question, the respondents were given a scale that indicate their level of agreement, from strongly disagree (1) to disagree (2), neither agree nor disagree (3), agree (4) and strongly agree (5). A pilot study was conducted among a small set of respondents to test the reliability of the instrument. The results of the reliability test indicated a Cronbach's alpha value of more than 0.699, which met the recommended value of Nunally (1978). Therefore, this instrument was reliable for use among a bigger scale of respondents.

The data were analysed using the SPSS software, from which descriptive statistics such as mean score, frequency and percentage were run. In addition, inferential statistics such as comparison of means tests (t-test and one-way ANOVA) and the Pearson product moment correlation were conducted to illustrate the difference and correlation of fishermen's attitude towards climate change.

RESULTS AND DISCUSSION

The results of the study summarised the respondents' profile and the descriptive and inferential analysis. For inferential analysis, comparison of means tests was applied in order to identify the differences in the fishermen's attitude towards climate change based on selected demographic factors such as level of education, catching areas, category of fishermen, usage of fishing technology, state and type of vessel. In addition, the Pearson product moment correlation analysis was used to identify the relationship between fishermen's attitude towards climate change and the selected demographic factors such as age, monthly income, total catch, household size, experience and frequency of working days.

Respondents' Profile

Table 1 shows the demographic profile of the fishermen based on gender, age groups, education, marital status and monthly income. A huge majority of the respondents were male (99.3%), while 0.7% were female. A total 63.7% of the respondents came from the age group of 40 years old and above, while 36.3% were below 40 years old; the average age was 45 years old. The majority of the respondents had formal education; most had primary education (43.7%), followed by lower-secondary education (26.7%), upper-secondary education (23.3%) and tertiary education (2.7%). A total of 93 fishermen had income from non-fishing activities. As part of the income per month from non-fishing activities, 44.1% of the respondents recorded a monthly income of RM500 and below, followed by those who had an income of RM1001 and above (23.3%). For the majority, spouse's income ranged between RM751 and RM1000 (36.5%), while other household members earned from RM1001 and above (61.8%). More than 76% of the household income was generated by fishing-related activities.

Table 1
Demographic background of the fishermen

Variable	n	%	M
Gender			
Male	298	99.3	
Female	2	0.7	
Age group (years)			45
<40	109	36.3	
>40	191	63.7	
Education achievement			
Never been to school	11	3.7	
Primary school	131	43.7	
Lower secondary school	80	26.7	
Upper secondary school	70	23.3	
Tertiary level	8	2.7	
Income/month (non-fishing activities) (n = 93)			1318.6
<RM500	41	44.1	
RM501-RM750	9	9.7	
RM751-RM1000	21	22.6	
>RM1001	22	23.7	
Income/month (Spouse) (RM) (n=52)			930.8
<RM500	16	30.8	
RM501-RM750	9	17.3	
RM751-RM1000	19	36.5	
>RM1001	8	15.4	

Table 1 *(continue)*

Variable	n	%	M
Income/month (Other household members) (n=102)			1752.0
<RM500	8	7.8	
RM501-RM750	11	10.8	
RM751-RM1000	20	19.6	
>RM1001	63	61.8	
Percentage of household income generated by fishing-related activities (%)			75.9
<50%	76	25.3	
51-75%	47	15.7	
>76%	177	59.0	

Table 2 presents the background information on the fisheries activities engaged in by the respondents. Most of the respondents were the skipper of the crew (65.7%), while the rest were crew members (34.3%). The majority of the respondents used fibre boats with a length size that was less than 21 ft (53%) as their vessel for their fisheries activities. Hence, the catching areas were suitable for coastal areas only (72%). Based on the findings of this study, most of the fishermen had more than 21 years of experience (43.3%), and spent between 16 and 20 days/month (54%) on fishing activities. A total of 30.3% of the respondents recorded a monthly income between RM751 and RM1000, followed by 27.3% whose income was RM1001 and above, 22.4% with income ranging from RM501 to RM750 and 20% with an income of RM500 and below. Most of the total catch recorded was below than 50 kg per week (40%), followed by 101 kg and above per week (30.3%) and 51 to 100 kg per week (29.7%). A large proportion of them used *pukat* (net) (66%), while 64% did not use fishing technology (GPS, echo sounder etc.).

Table 2
Fisheries activities background

Variable	n	%	*M*
Fishermen category			
Skipper	197	65.7	
Crew members	103	34.3	
Vessel type			
Sampan	29	9.7	
Fibre (<21 ft)	159	53.0	
Boat (Wood)	46	15.3	
Fibre (>21 ft)	66	22.0	

Table 2 *(continue)*

Variable	n	%	*M*
Catching areas			
Deep sea	84	28.0	
Coastal	216	72.0	
Experience as a fishermen (Years)			21.7
<10	88	29.4	
11-20	82	27.3	
>21	130	43.3	
Number of days spent on fishing operation (per month)			20.5
<15	45	15.0	
16-20	162	54.0	
>21	93	31.0	
Income per month (Fishing activities)			1288.3
<500	60	20.0	
RM501-RM750	67	22.4	
RM751-RM1,000	91	30.3	
>1,001	82	27.3	
Total catch (kg/week)			137.0
<50 kg	120	40.0	
51-100kg	89	29.7	
>101kg	91	30.3	
Main fishing tool			
Bubu	23	7.7	
Pukat (Net)	198	66.0	
Fishing rod	63	21.0	
Others	16	5.3	
Using fishing technology			
Yes	108	36.0	
No	192	64.0	

The findings capture the real-life picture of the current situation among small-scale fishermen, in particular, in region that are not much different from those studied in other research (Al-Oufi, 1999; Mohamed Shaffil et al., 2013a; Mohamed Shaffril, Abu Samah, & D'Silva, 2013b). As predicted, the majority of the fishermen were poorly educated. Even though the majority of the respondents had worked for many years as fishermen, they showed a positive number of working days i.e. they were still engaged in fishing-related activities for more than 15 days a month. However, they received

very little monthly income i.e. it was below RM1000.00. They were also still using traditional equipment and not any current technology. Studies have shown that they were heavily impacted by climate change, especially the small-scale fishermen, and that this demotivated them. Without proper intervention, the fisheries industry will collapse, severely impacting on the supply of marine products.

Descriptive Analysis

The description of the overall mean core and each statement is presented in Table 3 and 4. To test the level of attitude towards climate change adaptation, the cumulative mean score for the eight statements was used as the attitude scale measurement was obtained. Subsequently, it was divided into three levels based on the mean score: low (1.00 to 2.339), moderate (2.34 to 3.669) and high (3.67 to 5.00). Table 3 shows that the respondents in this study recorded a high level of attitude towards climate change adaptation with overall mean score of 3.96 and at a high percentage of 67%. The outcome of this study is similar to that obtained by Mohamed Shaffril et al. (2013a), who showed a high level of adaptation with regard to attitude towards climate change among small-scale fishermen in the East Coast of Peninsular Malaysia.

Table 3
Overall mean score on attitude towards climate change adaptation

Level	n	%	*M*
			3.96
Low (1.00-2.339)	9	3.0	
Moderate (2.34-3.669)	90	30.0	
High (3.67-5.00)	201	67.0	

Table 4 demonstrates the mean score of each statement for measuring attitude towards climate change adaptation. The respondents had the highest mean score on the statement "I value the friendship with my fellow fishermen," with a mean score of M=4.70. Based on observations and verbal information obtained during the data collection process, the bonds of friendship between the fishermen are very strong and this reflects the importance of friendship among them.

The majority of the respondents agreed with the statement, "It is important for me to preserve the ocean and its environment," which yielded the second highest mean score (M=4.43). A study by Muhammad et al. (2016) showed that the coastal area of the fishermen's community was still natural and protected, while many other natural coastal areas such as mangrove swamps, wetlands and sea reclamation land had become deteriorated due to the development of tourism activities.

Table 4
Statement measuring attitude towards climate change adaptation

No.	Statement	M
1.	I value the friendship with my fellow fishermen.	4.70
2.	It is important for me to preserve the ocean and its environment.	4.43
3.	I would like more information regarding climate change (causes, effects towards sea, fish and community).	4.39
4.	I am willing to explore new areas to increase my catch.	3.98
5.	It is important to perform extra jobs in order to increase my family income.	3.73
6.	I like to use fisheries technology as it helps a lot with my fishing activities (e.g. dealing with uncertainties in the weather).	3.59
7.	I encourage my wife and other family members to work in order to increase our family income.	3.58
8.	I am interested to learn new skills (besides fishing activities/besides depending on fisheries resources).	3.31

Source: Authors' research

A majority of the fishermen also agreed to the statement of "I would like more information regarding climate change" (M=4.39). This reflected their desire for better understanding of the causes of climate change and their effects on the sea, fish and community. Although the fishermen had good knowledge of the ocean based on their experience, their knowledge of climate change was only general (Mohamed Shaffril et al., 2013a).

According to psychologists, attitude can be assessed through cognitive, affective and behavioural elements that can be computed from several psychometrical statements. Based on the combination of eight statements measuring attitude in this study, the fishermen were found to show a moderate and high level of mean, portraying a positive attitude towards adaptation. Scholars who subscribe to the functional approach of attitude believe that in order to create a new form of attitude towards acceptance of and readiness for adaptation in environmental phenomenon such as climate change, a positive change of attitude is essential (Eagly & Chaiken, 1993; Katz, 1960; O'Keefe, 1990). Therefore, before stakeholders plan to move in and penetrate particular communities with their ideas and programme intervention, they must explore the current status of the community regarding their perception, attitude, knowledge, skills, experience and local setting (Muhammad et al., 2016).

Although this study did not focus on influential factors on adaptation, we believe that the current positive attitude among small-scale fishermen was due to their long tenure as fishermen. They realised that environmental changes were a fact, in addition to other influential factors such as government agencies' intervention, the news and other fishermen communities.

Comparisons of Means

Analysis of the data confirmed that there were significant differences between those who had primary-school education or below (M=3.86) and those who had secondary-school education or higher (M=4.04) (t=0.058, p=0.040), between the coastal (M=3.86) and deep-sea fishermen (M=4.21) (t=3.591, p=0.0001) and between fishermen who used technology in fisheries (M=4.20) and fishermen who did not (M=3.83) (t=4.198, p=0.0001). No significant differences were detected in the attitude towards climate change (t=1.370, p=0.172) between skippers (M=3.92) and crew members (M=4.05) and between fishermen in Penang (M=3.89) and those in Kelantan (M=4.04). Further analysis using ANOVA confirmed significant differences [F=6.517, p =0.0001] between different types of vessel towards climate change. To summarise, level of education, catching area, fishing technology usage and vessel type were factors that influenced attitude towards climate change adaptation among small-scale fishermen (Table 5).

Table 5

Differences in attitude towards climate change adaptation among small-scale fishermen in selected independent variables using t-test and ANOVA analysis

Variable	M (S.D)	T	p	Variable	M (S.D)	F	p
Education Level		2.058	0.040*	Vessel type		6.517	0.0001*
Primary school or below	3.86 (0.744)			Fibre boat	3.83 (0.599)		
Secondary school or higher	4.05 (0.770)			*Sampan*	3.82 (0.819)		
				Big boat (Wood)	4.11 (0.620)		
Catching area		3.591	0.0001*	Fibre boat (>21 ft)	4.26 (0.672)		
Coastal	3.86 (0.787)						
Deep sea	4.21(0.633)						
Category of fishermen		1.370	0.172				
Skipper	3.92 (.788)						
Crew members	4.05 (.704)						
Usage of fishing technology		4.198	0.0001*				
User	4.20 (0.790)						
Non-user	3.83 (0.630)						
State		1.759	0.080				
Pulau Pinang	3.89 (.801)						
Kelantan	4.04 (.715)						

Notes: *Denotes significance at p<0.05

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Correlations

Income was the only factor that recorded a significant positive linear relationship with attitude towards climate change adaptation (Table 6). However, the strength of this relationship was negligible (r=0.146, p=0.011). Such findings denote that a higher income will produce a better attitude towards climate change.

Table 6
Relationship between attitude towards climate change adaptation and selected independent variables

Variable	r	p
Age	-0.088	0.127
Income (from fishing activities)	0.146	0.011
Total catches (kg/week)	0.101	0.334
Household size	-0.085	0.547
Experience as a fisherman	-0.024	0.677
Days spent on fishing operation (in a month)	0.000	0.994

CONCLUSION

Fishermen are an important group, particularly in their role as protein suppliers for the community. However, their high reliance on weather stability has resulted in climate change bringing a negative impact on their fishing routine. The effects are even worse for small-scale fishermen who operate their fishing routine traditionally and at subsistence level. The results of this study showed that small-scale fishermen in two states in Peninsular Malaysia, Kelantan and Pulau Pinang, have a high level of positive attitude towards climate change adaptation. This study also indicated that

the differences in education background, catching areas, fishing technology usage and type of vessel can be independent factors that influence fishermen's attitude towards climate change adaptation. However, it was found that only income as a factor had a significant relationship between attitude towards climate change adaptation.

Based on the findings of this study, it is necessary to widely expose the information regarding climate change from related parties to the public, especially to communities with high vulnerability towards the impact of climate change i.e. small-scale fishermen in this context. This is very important because such information will enable small-scale fishermen to be better prepared to cope with the phenomenon of extreme weather events in order to reduce the risk of exposure to climate change.

The use of technology in fishing activities is one of the factors that influence attitude towards climate change. Besides helping to increase the catch, the use of technology can also help in terms of safety while at sea through the use of GPS, for instance, in addition to using a safety jacket and communication devices such as mobile phones and walkie-talkies. Improving safety conditions will strengthen the level of adaptation to climate change among fishermen.

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Examining the Relationship between Ranchers' Demographic Profile and Success of Small Ruminant Farming

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ABSTRACT

Small ruminant (goat and sheep) farming is one of the emerging farming sectors that has a lot of potential that waits to be developed. It is constantly supported by various Malaysian government agencies in order to increase the self-sufficiency level of ruminant food. Several factors directly influence ranch farming and could contribute to the marginal profits. Hence, some ranchers are successful, while other ranchers facing similar circumstances are not. Therefore, the aim of this study is to determine the relationship between ranchers' demographic profile and the factors that contribute to success in small ruminant farming. The primary data was collected via face-to-face interviews using a well-structured questionnaire. The collected data were analysed using both descriptive and chi-square analysis. The results showed that age, marital status, educational attainment and level of experience have a significant relationship with the factors of success in this type of farming. The Department of Veterinary Services as the agency responsible for this type of farming needs to take action and make the necessary improvements, taking into consideration the ranchers' demographic profile, especially their age, marital status, educational attainment and level of experience in order to design training and innovative farm visits, among other initiatives. This will enable ranchers to reach higher levels of success in small ruminant farming. This in turn will enhance and boost the livelihood activities of the ranchers and subsequently develop the small ruminant industry in Malaysia.

Keywords: Critical success factor, demographic profile, farming, goat, sheep

INTRODUCTION

Small ruminant farming is an important sector of the livestock industry in Malaysia. In terms of self-sufficiency level (SSL) comparison, the chicken industry (121.39%) leads, followed by the egg industry (113.79%) and the cattle industry (24.88%). However, self-sufficiency of small ruminant production in 2016 was only at 10.77% (Department of Veterinary Services [DVS], 2017a). The development of ruminants, especially small ruminants, was quite slow compared with that of non-ruminants such as pigs and poultry. The development of pig farming and poultry has been ongoing since the 1960s (DVS, 2017b; Hashim, 2015). However, the Malaysian small ruminant industry is becoming more important and significant in encouraging the economic growth of the country. In the third National Agriculture Policy (NAP), the government gave more importance to fresh beef, mutton and milk production for the domestic market (Ministry of Agriculture, n. d.). The small ruminant has a very strong market among the Malay population during festivals i.e. *Aqiqah* and *Qurban*. The Indian population is also a sizeable market for small ruminant products (Melissa, Norsida, & Nolila, 2016). Nevertheless, the live population of small ruminants in Malaysia was only at 592,853 heads in 2016 and unable to meet market demand (DVS, 2017c). Therefore, Malaysia depends on the import of small ruminants from countries like Australia, New Zealand, Indonesia, South Africa and Thailand. Malaysia needs to increase the production and total population of small ruminants in order to increase their self-sufficiency level and meet local market demand. Ranchers face several problems in producing small ruminants, namely lack of high quality breeds that can adapt to our climate, high cost of feed, lack of knowledge and a skill gap among the ranchers (Sithambaram & Hassan, 2014). Traditionally, small ruminant husbandry was considered a complementary livelihood activity of smallholder farmers (Devendra, 2006). Hence, this study encourages ranchers to step up their farming activities and to move into commercial farming to boost their production (Ministry of Agriculture and Agro-Based Industry [MOA], 2011).

Factors that impact small ruminant farming include business planning, management and prevention of diseases, neighbourhood relations, support from family members and friends, labour, feed sources, facilities, infrastructure and livestock area, stock and breed, veterinary services, price and market, government support and policy and production system (Abdolmaleky, 2012; Benoit & Laignel, 2010; Devendra, 2006; De Vries, 2008; Huirne, Harsh, & Dijkhuizen, 1997; Kosgey, Baker, Udo, & Van Arendonk, 2006). These factors are among other issues that directly influence ranch farming and contribute to marginal profits. Hence, some ranchers are successful, while others facing similar circumstances are not (Rozhan, 2015). However, in Malaysia, there is insufficient information about the real factors and problems, especially those related to growth and development of this industry. Therefore,

the objective of this study was to determine the relationship between the ranchers' demographic profile and the factors of success in small ruminant farming. This study was expected to provide better understanding and knowledge to livestock extension agents (EAs), policy-makers and researchers of the current practices used by small ruminant ranchers in Malaysia. The study also aimed to encourage ranchers to shift from their present status of farming to commercial farming and to step up their farming production with an increase in the self-sufficiency level of small ruminants in Malaysia.

Literature Review

Small ruminant production is mainly affected by internal and external factors. Both sets of factors are interrelated and must be in optimal conditions to facilitate favourable and optimal impact on the efficiency and performance of livestock. Internal factors affect the ability of genetic influences and usually have certain limitations. External factors include a non-genetic preservation system, which includes management, nutrition, housing and health (Kosgey, 2006). In addition, the preservation of a place is also closely linked with environmental climate, natural vegetation and the socioeconomic area. Therefore, livestock with high genetic ability will not show the actual ability of a poor environment (De Vries, 2008). The important factors that impact small ruminant farming are business planning in projects, labour, feed sources, breeding, location

and infrastructure, technical skill and knowledge, veterinary services extension, marketing and prices, government support and policies, production system, disease management and prevention, neighbourhood relationships and support from friends and family (Abdolmaleky, 2012; Benoit & Laignel, 2010; Devendra, 2006; Huirne et al., 1997).

Business planning is an important part of owning and managing a farm (Nelson, 2003), while a proper business plan serves as a map (Crow & Goldstein, 2003; Kime, 2004). A good business plan is an important tool that has a sound strategy before proceeding to adopt and implement the plan (Honig & Karlsson, 2004). Furthermore, the development of a strategic direction is one of the crucial steps for business planning that directly influences the knowledge and capability of the management team, staff and advisors and enhances improvements in the right direction for the organisation to lead a better chance for success (Honig & Karlsson, 2004).

The importance of labour for this type of farming cannot be overemphasised. It depends largely on the agricultural systems of an area. The division of labour between gender and age in rural systems differs from agro-rural systems and mixed crop-livestock farming systems (Tangka, Jabbar, & Shapiro, 2000). Gurung, Tulachan and Gauchan (2005) in their study on variation in livestock farming management found that women spent more time on various livestock raising activities by participating in tasks such as collecting of folders, milking,

feeding and cleaning of animal sheds with occasional and limited support from men, depending on the crop production season, which takes away the women's time.

Feed provided to small ruminants can be categorised into two different groups: roughage and concentrates. Roughage is high in fibre (18% crude fibre or more). Fibre adds bulk to goats' diet and keeps their digestive tract working well. Fibre has a laxative effect. It can also influence the butterfat content of a doe's milk. Diets that are high in fibre tend to increase butterfat content, resulting in creamy milk, while low fibre diets decrease butterfat content. Most roughage is forage, that is, it comes from the green vegetative parts of the plant. An example is the blade of grasses. Forage tends to be low in energy. In contrast, concentrates are low in fibre and high in either energy or protein. They often come from the seeds of a plant. Examples of concentrates include corn, oats, brewers' grains and soybeans. Chandrawathani et al. (2006) stated that daily feeding of neem leaves can control worm infestation in small ruminants. Home remnants and grasses (grazing) are used by ranchers to feed their animals. Most of the farms practise semi-intensive management and need to avoid morning grazing, which is one of the causes for high nematode infestation in the animals. Therefore, grazing management is imperative in monitoring nematode and worm infestation in small ruminants (Khadijah et al., 2014; Mursyidah, Khadijah, & Rita, 2017; Sani & Rajamanickam, 1990). Adesehinwa, Okunola and Adewumi

(2004) reported that feed affects livestock production significantly. Feed cost, which has a large influence on the performance of the enterprise, results in either a loss or small profit. Natural pastures and agricultural by-products are the main feed resources for goat production.

Building is an important component of infrastructure that is needed for small ruminant farms, especially in tropical areas where the animals spend most of their time grazing or live all the time in confinement. Building infrastructure is very important for the wellbeing of ruminants, particularly young ruminants, and thus, for overall flock performance and productivity.

There are two main aspects regarding the breeding of small ruminants i.e. the breeds themselves and the breeding system. Being very popular domestic animals everywhere and having been domesticated for thousands of years now (>12,000 years), there are hundreds of breeds of sheep and goats in the world, mainly in Europe and Asia (Iñiguez, 2005; Iñiguez & Mueller, 2008). However, in the tropical areas of the Caribbean and Latin America, there are only a few breeds of each species (Devendra & Burns, 1983; Fitzhugh & Bradford, 1983).

Veterinary services are considered the most important factor in the husbandry of small ruminants. These services provide practical extension activities among ranchers (De Vries, 2008). According to Adesehinwa et al. (2004), the availability of extension activities of veterinary services significantly impact on goat and sheep husbandry through visits of extension agents

as such visits enhance their productivity. They also disseminate information and provide advisory services among the farmers on the sources of input and credit facilities required to optimise their production (Adesehinwa et al., 2004). In Malaysia, the Department of Veterinary Services under the Ministry of Agriculture and Agro-Based Industry is one of the government agencies responsible for providing veterinary services that support the development and growth of the small ruminant industry (Mohd Nor, Mustapa, Abu Hassan, & Chang, 2003). A good relationship between small ruminant ranchers and the Department of Veterinary Services is an important factor for ensuring the successful development of the small ruminant industry.

Technical skills and knowledge required by ranchers are essential for farm management and its operations. Training and farmer education are mostly related to common practices, farm management, feed sources, marketing and utilisation of the animals' manure for composting and other purposes. Some farmers have basic information and knowledge of animal husbandry, but what they possess is not sufficient or proficient enough for successful farming. There are several related practices that require higher proficiency, and farmers need to acquire these proficiencies. Such practices include maintaining animal health and treating diseases, advance breeding and increasing the productivity of the animals. All these ought to be taught and strengthened until farmers become proficient in these skills. However, the best and proper way

to train ranchers is through information sharing among the farmers themselves, where the farmers 'teach' one another in a kind of mentor-mentee programme. The ranchers can visit nearby model farms that are doing well to see first-hand what practices and activities they can adopt for use on their own farms. In addition, these regular meetings between the members in associations or groups are also possible opportunities for sharing best practices and addressing potential challenges.

The demand for small ruminant meat in the market is still a great issue and it needs to be improved upon through a proper supply mechanism. The demand for meat in the market and its price are unstable, largely unpredictable and not well organised. The meat market for small ruminants has no established standards that can be helpful for the adequate supply of this meat.

Government policies directly focus on national herd population rather than on growth (Agyemang, 1997). The government needs to consider support for the development of small ruminant farming including giving subsidies for building farm houses, production of feed, veterinary services, extension services and introduction of more breeding centres. In addition, the government supports this industry by preparing proposals that can be directly addressed and that are responsible for facilitating the growth of the small ruminant industry. There is a need for ideas and concepts from the ranchers that could be included in decision-making at the national management level. Research into

small ruminants has progressed vibrantly in recent years, providing dependable solutions to the numerous problems that have been highlighted at the level of production and in the different subdivisions. Many countries have several associations looking into enhancement of their research and development sectors.

The major production systems of small ruminant farming can be categorised into three types of farming based on the feeding and management methods i.e. the extensive, intensive and semi-intensive systems. Each system has its own strengths and weaknesses (Devendra, 2006; Devendra, Thomas, Jabbar, & Zerbini, 2000; Umunna, Olafadehan, & Arowona, 2014). A successful breeding production programme must have an expected output, including set goals and aims geared at facilitating the growth of the market towards rationalisation of the producer's investment, while successful implementation of technology depends on its compatibility with the demands of the farmer for a production system that is comparatively simple and cheap and accommodates fewer risks. An important aspect is the thorough assessment of the production system, which comprises the producer at different stages in the planning and operation of the breeding programme while assimilating traditional attitude and values. Moreover, it should be kept in mind that with breeding programmes, like any other programme that comes with high risk, there may be a chance of failure or success. However, we should expect some failure along the way as being natural instead of setting unrealistic achievements for success

that in the long run may be detrimental to the development of the industry (Kosgey et al., 2006).

The relationship with neighbours is an important factor for the success of this type of farming. Relationships should be in such a way that neighbours will not be disturbed. The small ruminant project would be successful if the farm is able to contain the odour that comes from such farming so that neighbours living close by will not be faced with a problem. The farm also has to ensure that these animals will not intrude into the neighborhood. The importance of this farm should be explained to the neighbours while ensuring their understanding of the needs. There should be enforcement of social responsibility, which ought to be highlighted to communities where livestock is maintained in the neighbourhood. The high cooperation and support of the neighbourhood enhances and facilitates the success of the ranch. In addition, small ruminant farms should be sheltered from rain, wind and excessive heat and cold (Adams & Ohene-Yankyera, 2014).

Livestock disease management is one of the biggest issues globally along with huge amounts of agricultural product trade, human travel and the realisation that many diseases pose a threat to livestock, wildlife and humans (Wolf, 2005). Disease and insufficient nutrition in terms of quality or quantity constitute serious constraints to small ruminant production (Tadesse, 2012). However, disease can be reduced or decreased using modern and traditional methods (Mursyidah et al., 2017; Chandrawathani et al., 2006). Public policy

involvement in livestock disease planning can directly influence producers' decisions. In Malaysia, the Department of Veterinary Services is the responsible agency for preventing, controlling and eradicating animal and zoonotic diseases (Mohd Nor et al., 2003).

Several research studies have been conducted on small ruminant farming such as Huirne et al. (1997) and Kosgey et al. (2008). Huirne et al. (1997) in their research used a well-structured questionnaire. The study was analysed using descriptive statistical analysis, chi-square ($\chi2$), t-tests and factor analysis. Similarly, Kosgey et al. (2008) used the well-structured questionnaire approach to gather the required data. Data were analysed using descriptive analysis, chi-square ($\chi2$), t-tests and the logit regression model. They reported that over 98% of the farmers surveyed had found incidence of disease, while over 95% of the farmers fed supplements in both dry and wet seasons.

METHODS

The data for this study were collected using a survey of 600 ranchers in Peninsular Malaysia. Three districts ranked as having the highest number of ranchers in Kelantan, Terengganu, Pahang, Johor, Negeri Sembilan, Melaka, Selangor, Perak and Pulau Pinang were selected for this study. However, in Kedah two districts and in Perlis one district ranked as having the highest number of ranchers were selected. These districts were chosen for the survey

because of their positive economic growth through the development of small ruminant farming (Table 1).

Table 1
List of study areas and the number of respondents

State	District	Number of Respondents
Kelantan	Kota Bharu	20
	Pasir Mas	20
	Bachok	20
Terengganu	Kuala Terengganu	20
	Marang	20
	Setiu	20
Pahang	Kuantan	20
	Bera	20
	Maran	20
Johor	Kluang	20
	Segamat	20
	Batu Pahat	20
Melaka	Melaka Tengah	20
	Jasin	20
	Alor Gajah	20
Negeri Sembilan	Seremban	20
	Jempol	20
	Kuala Pilah	20
Selangor	Kuala Selangor	20
	Kuala Langat	20
	Hulu Langat	20
Perak	Kinta	20
	Hilir Perak	20
	Larut,Matang, Selama	20
Pulau Pinang	Prai Utara	20
	Prai Tengah	20
	Prai Selatan	20
Kedah	Alor Star	20
	Kubang Pasu	20
Perlis	Kangar	20
Total		600

The study also identified the categories of ranchers. The main reason for categorisation was to capture all categories of ranchers who were available and operating in Malaysia. A total of 20 ranchers were selected from each of the districts (Table 1). The random sampling technique was employed for this study. The survey method was used to gather the data through face-to-face interviews using a well-structured questionnaire that was divided in the following way:

Part A: Demographic profile

Part B: Farm profile

Part C: Factor influence, and

Part D: Other factors of influence.

For this article, Part A and Part B were included. Descriptive statistical analysis and the chi-square analytical technique were employed to analyse and describe the data to arrive at dependable conclusions about the phenomenon represented by the information.

Chi-square analysis is one of the simplest methods for describing relationships by means of cross-tabulation. It is an inferential set of statistics that is typically used to analyse the association between two variables (Field, 2009). The main target of the research was the association among the variables that directly impacted the factors for the ranchers' success. The subsequent hypotheses were developed based on the review of literature to determine the affiliation between the demographic factors and the perception of the factors of success

for the various individual characteristics. The study tested the following hypotheses:

The null hypothesis

$H_0 : \quad \beta_0 = \beta_1 = \beta_2 = \ldots\ldots = \beta_p = 0$

The alternative hypothesis

$H_A: \quad \beta_1 \neq 0$ for at least one i

$\quad\quad\quad i = 1, 2,\ldots\ldots, p$

The null hypothesis (H_0) showed that there was no significant influence between the dependent mutable (perception of factors of success) and the independent mutable (age, race, experience, education level, farm size and income), while the alternative hypothesis (H_A) showed that there was a significant influence or relationship between the dependent variable and the independent variables.

Hypothesis:

H_o: There is no significant relationship between ranchers' perception of factors of success and demographic factors.

H_A: There is a significant relationship between ranchers' perception of factors of success and demographic factors.

However, there were a few limitations to the chi-square test where it was sensitive to the sample size. In this case, the results of the study may be argued in terms of its significant level due to the large sample size. Besides that, chi-square only indicates that two variables are related to one another and

does not necessarily imply that one variable has any causal effect on the other.

RESULTS AND DISCUSSION

Descriptive statistical analysis was carried out, where frequency counts, percentages of data and interpretation of the demographic profile of respondents were easy to comprehend. It was used to describe the sample population of the study. Normally, each category in the demographic and socio-economic profile was assumed to have impacted the factors of success in small ruminant farming.

Demographic Profile of Respondents

In this section, outcomes on the ranchers' socio-economic status are presented. The socio-economic profile of the ranchers included age, gender, religion, marital status, educational level, family involvement in farming, levels of farming experience and year started. Table 2 shows the distribution of respondents using frequency counts and percentages. The majority of the respondents, numbering 368 (61.3%), involved in small ruminant farming were above the age of 40 years, while 129 (21.5%) were between 31 and 40 years old and 103 (17.2%) were 30 years and below, making the average age of the respondents 45.32 years old. The majority of the respondents involved in small ruminant farming were males 557 (92.8%), while females numbered only 43 (7.2%). Due to the drudgery of small ruminant husbandry, this type of farming seems more popular among males. This

is supported by the findings of Chah, Obi and Ndofor-Foleng (2013), who reported that the majority of their respondents, who were engaged in small ruminant husbandry, were males. The majority of the respondents were Muslims, numbering 549 (91.5%), followed by Hindus, numbering 33 (5.5%), Buddhists, numbering 13 (2.2%) and Christians, numbering 5 (0.8%). The majority of consumers of small ruminant products in Malaysia are Muslims, who use small ruminants for religious ritual during festivals such as *Qurban* and *Aqiqah*. The majority of the respondents were married, numbering 502 (86.7%), while 89 (14.8%) were single and only nine (1.5%) were widows/widowers. It has been suggested that business is mostly driven by married people because of the family support they enjoy. This finding was supported by Chah et al. (2013), who stated that many of the ranchers in their study were married and involved in traditional farming i.e. raising food production along with tree crop production, while the women were involved in food processing and marketing.

The majority of the respondents in this study had secondary education, numbering 353 (58.8%), followed by 133 (22.2%) who had tertiary education, 107 (17.8%) who had primary education and only seven (1.2%) who were illiterate. Table 2 shows that the majority of the respondents had received some form of education, suggesting that communication of knowledge and innovations in small ruminant farming could be done effectively.

Table 2
Demographic profiles of respondents involved in small ruminant farming

Variables	Parameter	Frequency	(%)
Age	≥30 years	103	17.2
	31-40 years	129	21.5
	41-50 years	141	23.5
	51-60 years	135	22.5
	≥61 years	92	15.3
	Means	45.32	
Gender	Male	557	92.8
	Female	43	7.2
Religion	Muslim	549	91.5
	Christian	5	0.8
	Buddhist	13	2.2
	Hindus	33	5.5
Marital status	Married	502	86.7
	Single	89	14.8
	Widow/Widower	9	1.5
Education qualification	Illiterate	7	1.2
	Primary	107	17.8
	Secondary	353	58.8
	Tertiary	133	22.2
	0	77	12.9
Number of family members involved	1-2 members	407	67.8
	3-4 members	93	15.5
	5-6 members	18	3.0
	7-8 members	3	0.5
	≥9 members	2	0.3
	4-5 years	216	36.0
	6-10 years	226	37.7
	11-15 years	73	12.2
Experience	16-20 years	54	9.0
	21-25 years	7	1.2
	≥26 years	24	4.0
	Means	9.60	

It was believed that those involved in small ruminant farming would likely have minimal or no education (Table 2), but Chah et al. (2013) and Harris (2011) stated the most of small ruminant ranchers were able to understand the requirements of this type of farming and could handle the problems such as disease and other related issues.

The majority of the respondents, numbering 407 (67.8%), had one to two family members involved in the work. Another 93 (15.5%) had three to four members involved in the work, while 18 (3.0%) respondents had five to six family members involved in the work. Three (0.5%) of the respondents had seven to eight family members involved in the work and two (0.3%) had nine or more family members involved in the work. On the other hand, 77 (12.9%) respondents stated that they did not have family members engaged in small ruminant husbandry. This finding was supported by Chah et al. (2013), who found a high number of respondents with family members involved in small ruminant farming. This encouraging fact may have been due to support from the family for income generation.

The majority of the respondents, numbering 442 (73.6%), had between four and 10 years of experience in small ruminant farming, while about 134 (22.3%) had more than 10 years of experience. According to the Department of Veterinary Services, researchers need to collect data from respondents who have more than four years of experience to show the factors of success of small ruminant farming. Seven respondents (1.2%) had between 21 and 25 years of experience in the industry. Indeed, small ruminant farming is a potential industry for boosting the income of the poor and the low-income group.

Table 3 shows the small ruminant farm profile. The majority of the respondents, numbering 312 (52.0%), had a farm size ranging from 1 to 50 heads, followed by 129 (21.5%) respondents who had a farm size of between 51 and 100 heads. About 85 (14.17%) respondents had a farm size of between 101 and 150 heads, while 74 (12.33%) had above 150 heads of small ruminants. This study documented that the majority of small ruminant ranchers in Malaysia fell in the category of small-scale farming (1-50 heads). This suggested that the small ruminant farming industry in Malaysia is based on the small-scale model. The study also highlighted that small-scale farming made it easier to control and take care of the animals.

A total of 542 (90.3%) respondents were farm owners, a vital position for ensuring the success of small ruminant farming. This was followed by the position of supervisor, which was held by 54 respondents (9%) and four other positions (0.7%) such as labourer or worker. Most of the ranchers managed their farms by themselves as they were small. In addition, they received support from their family members in managing their farm, thus bring down operational costs.

Table 3
Small ruminant farm profile

Variables	Parameter	Frequency	(%)
Scale farming	Small scale (1-50 heads)	312	52.0
	Medium scale (51-100 heads)	129	21.5
	Large scale (101-150 heads)	85	14.17
	≥151 heads	74	12.33
Farm Personnel	Owner	542	90.3
	Supervisor	54	9.0
	Other	4	0.7
Farm category	Breeder	151	25.2
	Cross breeder	431	71.8
	Trader	155	25.9
Production system	Other	113	18.8
	Intensive	282	47.0
	Semi-intensive	253	42.2
	Traditional system	65	9.8

The majority of the respondents were classified as cross breeders, numbering 431 (71.8%). This was followed by the category of breeder, with 151 respondents (25.2%) and trader, with 155 respondents (25.9%), as recorded in Table 3. The category "other" in Table 3 refers to ranchers who reared small ruminants for milk and who were also involved in more than two farm categories. Most of the ranchers preferred to adopt cross breeds instead of pure breeds due to the price and selectivity of the breed. A similar finding were reported by Ebegbulem, Ibe, Ozung and Ubua (2011). In terms of the production system, 282 (47%) of the respondents practised intensive farming, while 253 (42.2%) practised semi-intensive farming. About 65 (9.8%) of the respondents practised the traditional system of production (Table 3). The majority of the ranchers practised intensive farming probably because of the shortage of land for agricultural purposes. It may also have been their decision to help reduce possible outbreaks of disease. In this system, ranchers just need to keep small ruminant in houses similar to those in the feedlot system. In their study, Chah et al. (2013) reported that about 96.7% of the respondents practised the intensive system.

Factors of Success in Small Ruminant Farming

Table 4 shows the summary of the average mean scores and the ranking (average position) for each factor of success in small ruminant farming. The 13 factors were arranged in sequence based on their average mean score from the highest to the lowest (4.255 to 2.353). The highest average mean score was for technical skill (4.255), followed by feed sources (4.246) and

disease and prevention management (4.221). The fourth most influential factor was marketing and price (4.197), the fifth was breeding (4.167), the sixth was building, infrastructure and farm area (4.139) and

the seventh was government support and policies (4.055). The least influential factor of success was neighbourhood relationships (2.353).

Table 4

Mean score and rank of factors of success in small ruminant farming

Factors	Average Mean Score	Ranking
Technical skill	4.255	1
Feed sources	4.246	2
Management and prevention of disease	4.221	3
Marketing and price	4.197	4
Breeding	4.167	5
Building, infrastructure and area	4.139	6
Goverment support and policies	4.055	7
Veterinary services extention	4.048	8
Production system	4.025	9
Support of family and friends	3.920	10
Labour/Worker	3.857	11
Business planning (Project)	3.840	12
Neighbourhood relationship	2.353	13
Overall Mean Score	3.977	

Note: (n=600)

The importance of the factors of success on the basis of the respondents' response suggested that technical skills, feed sources and disease and prevention management were the components impacting the small ruminant industry. In addition, all these factors are important and play a main role in the development of this industry. Similar findings were reported by Yang, Shen, Ho, Drew and Chan (2009) and Li, Akintoye, Edwards and Hardcastle (2005). They have categorised the factors in small ruminant

farming on the basis of their average mean scores.

Chi-Square Analysis Result

Chi-square analysis was the primary tool used for computing the statistical significance of the cross-tabulation table. Chi-square is used to test for statistical independence (Field, 2009). The hypotheses formulated earlier were tested in order to determine the statistical relationship of some demographic factors with respondents'

perception of the factors of success in small ruminant farming. If the variables had no relationship, the result of the statistical test would be non-significant and the null hypothesis would have failed, meaning that there was no statistical relationship between the ranchers' demographic profile and the factors of success. If the variables were related, the results of the statistical test would be significant and the null hypothesis would be rejected, meaning that there was a statistical relationship between the dependent and independent variables (Zikmund, 2003).

Testing Relationship between Ranchers' Demographic Profile and Factors of Success in Small Ruminant Farming

Table 5 shows the summary of the chi-square test results for relationship between ranchers' demographic profile and factors of success in small ruminant farming. The result of the chi-square analysis indicated that some of the ranchers' demographic profile showed a significant relationship with the factors of success in small ruminant farming.

Table 5
Testing relationship between ranchers' demographic profiles and factors of success in small ruminant farming

Variables	χ^2	p-value	Decision
Age	69.425	0.001**	Reject H_0
Religion	2.337	0.506	Failed to reject H_0
Marital status	22.663	0.001**	Reject H_0
Education level	10.805	0.005**	Reject H_0
Experience	6.344	0.042**	Reject H_0
Number of family members	5.285	0.382	Failed to reject H_0
Farming category	7.637	0.106	Failed to reject H_0
Farming system	3.775	0.289	Failed to reject H_0
Income	4.548	0.337	Failed to reject H_0
Scale of farming	5.519	0.138	Failed to reject H_0

Note: **Significant at 5% level of significance

The results shown in Table 5 indicate that four out of the 10 variables have a statistically significant relationship with the success factors for small ruminant farming at a 5% significant level (α=0.05). The four variables were age (p=0.001), marital status (p=0.001), educational level (p=0.005) and level of experience (p=0.042). This indicated that there was significant interaction between age and success factors, status and success factors, educational level and success factors and level of experience and success factors. Thus implies that the factors of success in small ruminant farming were significantly

dependent on age, status, educational level and level of experience of the respondents or ranchers. For age, the results suggested that ranchers of different ages have a different view and perspective of the success factors in small ruminant farming. The finding also suggested that ranchers with different marital status have a different perspective and view of the factors of success in small ruminant farming. For level of education, the results suggested that respondents with a different level of education had a different perspective regarding the factors of success in small ruminant farming. Finally, ranchers with different levels of experience had a different perspective regarding the success factors in small ruminant farming.

CONCLUSION

Small ruminant farming is currently an important type of farming based on the high demand for small ruminant meat in Malaysia. It is an important source of income for small ruminant ranchers across the country. These ranchers have a close relationship with the small ruminants. In general, the findings of the current study suggested that the majority of the respondents (ranchers), numbering 368 (61.3%), who were involved in small ruminant farming were above the age of 40 years old, while the majority of the ranchers were males, numbering 557 (92.8%). Due to the drudgery of small ruminant husbandry, this type of farming is more suitable for males. The majority of these ranchers, numbering 442 (73.6%), had between four and 10 years of experience. In this study,

an attempt was made to explore the present socio-economic level of the ranchers, their farm profile and the factors of success in small ruminant farming.

Ranchers of small ruminant farming in Malaysia were found to use semi-intensive farming as their production system. This requires Research and Development (R&D) of feeding issues, improvement in veterinary services, financial assistance from agencies and extension services to encourage and enhance the production of small ruminants. Additionally, government departments, especially the Department of Veterinary Services, need to take action in terms of ranchers' demographic profile, especially their age, marital status, education level and experience to study how their ranchers' productivity can be enhanced to increase their success in small ruminant farming. It is clear that small ruminant farming can enhance and boost the livelihood of small ruminant ranchers and subsequently, facilitate development of the industry.

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SOCIAL SCIENCES & HUMANITIES

Motivational Virtual Training for People with Disabilities in Rural Areas of Malaysia

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ABSTRACT

Virtual training with its interactive and inclusive features is a very suitable psychological empowerment tool for people with disabilities in Malaysia's rural areas. Since the conduct of virtual supervision does not require any trainer or instructor to be physically present at the training premise, it is accessible for the usage of minority groups, who usually face the issue of mobility and accessibility. A session of virtual training involving 50 people with disabilities in Kota Kinabalu, Sabah was conducted for market validation of the virtual training. Post-training, the participants were interviewed to obtain their feedback on the virtual training in which they had participated. Overall findings from the interview showed that the participants had found the motivational virtual training to be relevant to them. The themes that emerged as the findings of the study are the conduciveness of virtual training for people with disabilities, modelling behaviour and error management. It has been found that virtual training could actually provide people with disabilities with the skill development and knowledge enhancement opportunities that lead to positive implications in their career development.

Keywords: Empowerment, people with disabilities, rural area, virtual training module

INTRODUCTION

Recent years have demonstrated that technology advancement has contributed to the fast growth of corporate online and virtual training. Such a revolution has allowed for wider opportunities of knowledge, skills and attitude changes as well as enhancement for individuals of various backgrounds. These include

the minorities who usually have limited accessibility to conventional learning and training, such as rural communities and people with disabilities. In the context of Malaysia, virtual training has never been developed to benefit people with disabilities.

According to Malaysia's Persons with Disabilities Act 2008, people with disabilities have the right to access information, communication and technology on equal basis with persons without disabilities. The government and the provider of information, communication and technology shall in order to enable persons with disabilities to have such access, provide the information, communication and technology in accessible formats and technologies appropriate to different kinds of disability in a timely manner and without additional cost. The government and the private sector shall accept and facilitate the use of Malaysia sign language, Braille, augmentative and alternative communication and all other accessible means, modes and formats of communication of their choice by persons with disabilities in official transactions. Hence, virtual training for the career success of people with disabilities is an effort to provide an alternative way of psychologically empowering this particular group (Disability Act, 2008).

Interventions such as training are necessary for effective change in skills, attitude and behaviour of people with disabilities. As a matter of fact, previous research has empirically shown that the challenge of dynamic global forces of change has made training necessary for the professional development and career success of people with disabilities (Spence, 2003). It helps people with disabilities to achieve formal qualifications as well as to enhance their self-confidence through training tasks besides other employment aids such as counselling, travel to work assistance and job search. (Steven, 1992).

Nevertheless, mobility and accessibility are the main issues in providing training for this particular group. Thus, virtual training is the most suitable mode of training for them, as the features of such training would not require them to be physically present at the training premise. The content of the training is accessible at any time and from anywhere (Lim, Lee, & Nam, 2007). However, there has never been any conduct of virtual training for people with disabilities in Malaysia, what more for those living in rural areas. It is high time that such implementation was initiated.

Literature Review

People with Disabilities in Malaysia's Rural Areas. Until 5 February, 2017, the registered number of people with disabilities in Malaysia reported by the Department of Welfare was 413,345. The number of people with disabilities residing in the rural states of Malaysia is illustrated in Table 1.

Table 1
Statistics of people with disabilities in rural states of Malaysia in 2017

State	Number
Perlis	5,094
Kedah	36,749
Kelantan	29,512
Terengganu	20,706
Pahang	24,503
Sabah	25,897
Labuan	1,171
Sarawak	28,562
Total	172,194

Source: Department of Welfare Malaysia, 2017

According to Hosseini, Niknami and Chizari (2009), the challenges faced by rural communities in using ICT include organisational, financial, technical, social, regulatory and human-related issues. Nevertheless in Malaysia, the establishment of the Village Development and Committee Security or VDSC in accordance with Order No. 3 Plan on Country and Development 1962 to create more developed rural communities has led to many programmes that made ICT more accessible to those living in rural areas, including people with disabilities. As a matter of fact, the Malaysian Communications and Multimedia Commission (MMMC) has implemented the Malaysia ICT Volunteer initiative to help and teach rural community members to utilise ICT tools.

Virtual Training. Virtual training that generates simulated objects and events allows for interaction and thus, has now become more commonly and popularly practised to enhance individuals' capacities (Stephens & Mottet, 2008). Its flexibility features allows the training to be conducted in accordance with participants' needs and circumstances (Chen, Weinberger, & Blitzer, 2011). According to Tichon (2007), the features of virtual training when built and customised according to participants' diverse backgrounds and needs, would be able to engage their focus and thus, increase the training's effectiveness. Wilson, Foreman and Stanton (2009) have identified the features and technologies of virtual training to enable people with disabilities to engage in a range of activities despite their limitations in movement.

As mentioned by Schweizer (2004) as well as Newton and Doonga (2007), among the benefits of virtual training is budget efficiency. The conduct of virtual training saves not only the travelling costs of the trainer as well as the participants, it also helps to reduce the costs of material printing, rental and refreshments. This is because all that is involved in virtual training is simply the interaction between the participants and the training content. There is no need for any trainer or facilitator to be physically present at the training site. The other benefits are flexibility and consistency in content delivery. In terms of flexibility, the participants may pursue the training content at their own pace. They are also free to access it anywhere as long as Internet connection is available. Virtual training has been found to be as beneficial as real-life training. The virtual environment is able to motivate learning in people with

disabilities (Brooks, Rose, Attree, & Elliot-Square, 2009).

Nevertheless, there are issues and challenges in implementing virtual training. Among them are lack of awareness of the usage of virtual training, low level of adaptation, limited wireless connectivity and computer illiteracy (Ali, 2010).

Baldwin and Ford Model (1989). The Baldwin and Ford Model, which was developed in 1989, presents how the effectiveness of training can be achieved. It proposes answers to issues that influence training transfer, including the important criteria of training transfer and output of training transfer (Baldwin, Ford, & Blume, 2009). This model is illustrated in Figure 1.

The model focusses on training input, training output and the conditions of transfer as main components for effective training. Training input encompasses trainee characteristics (cognitive ability, self-efficacy, motivation and perceived utility of training), training design (behavioural modelling, error management, realistic training management) and work environment (transfer climate, support, opportunity to perform, follow-up). However, this particular study focusses mainly on the training design of the virtual training. Last but not the least, a realistic work environment refers to the surroundings of the training.

The training design of this virtual study is the focus component due to the fact that the content material, process flow as well as features of the virtual training must be designed to be inclusive enough for the use of people with disabilities. In terms of behavioural modelling, the content material is designed in forms that allow the participants to model or do their observational learning from the shared experiences of other persons with disabilities (PWDs) that have become successful in both their career and life.

Usually, the modelling or observational learning takes place in two steps i.e. acquisition and performance. Acquisition refers to the observation of other people's acts and the consequences of those acts. Such acquisition forms mental images that encourage imitation of the shared experiences or actions. This happens especially when the mental images result in positive consequences such as success, happiness, satisfaction or competency.

The goal of error management in training is to improve the quality of training performance. The initial errors that occur during the training serve as an enhancer of learning, eventually leading to better performance. This component of error management in developing and improving virtual training is essential for ensuring the effectiveness of the virtual training. Meanwhile, realistic training environments refer to training that takes place not in a controlled environment. Nevertheless, this particular component is not relevant or applicable in designing virtual training for people with disabilities.
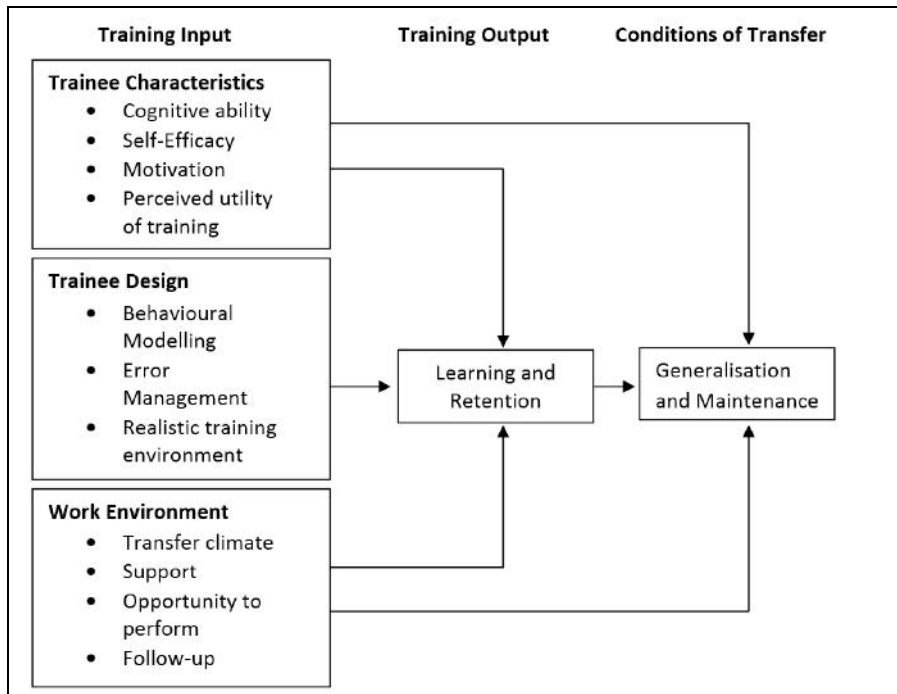
Figure 1. Training transfer model
Source: Baldwin and Ford Model, 1989

METHODS

A total of 50 persons with disabilities (PWDs) from Sabah were invited to participate in virtual training for career success of PWDs. Their names were obtained from the Welfare Department of Sabah. Sabahans have been listed as living in rural communities by the Ministry of Rural and Regional Development. The participants were from various ethnic backgrounds including Malay, Bidayuh and Kadazan. In terms of gender, the number of participants in this study from both genders was equally balanced. The majority had a low level of formal education. Fewer than five had tertiary education. Most of the respondents had physical disabilities, while 10 were hearing impaired.

The virtual training consisted of four parts. The first part entitled *Redha* (Acceptance) covered the acceptance of disabilities. The content was spiritual in nature, emphasising intimate relationship with the Creator. The closer one feels to God, the higher is one's level of acceptance of one's condition. The second part entitled 'The Importance of Training' covered the topic of person-job fit. This session highlighted the importance of enhancing one's knowledge as well as upgrading one's level of skills for continuous development and success. The aim was to

motivate continuous self and professional development of people with disabilities in pursuing career success. The third part entitled 'Love Yourself' covered the basics of self-evaluation among PWDs. It focussed on the essence of one's internal locus of control and self-esteem to remain in pursuit of career success. Last but not the least, the fourth part entitled 'Career Success' considered the importance of subjective career success for PWDs. Career success does not necessarily mean receiving a high salary and promotions. It could also translate as happiness and gratitude at having a job (Steven, 1992).

The average duration for the training was 1.5 hours. There was no instructor, only a facilitator for the virtual training session. The facilitator was not involved in the virtual training content at all. The facilitator was in charge of seating in the computer labs set aside for the training and the briefing session on the purpose of the virtual training for the PWD participants. Likewise, an interpreter was recruited to assist the hearing impaired participants.

The virtual training was interactive in nature, allowing the participants to engage with the content of the virtual training throughout the 1.5 hours on their own based on the audio instructions provided. Instructional text was also provided on the computer screen. The participants were required to click the relevant buttons based on the instructions provided. The objectives of the training were shared first prior to beginning the modules. The participants were required to complete the modules in sequence before proceeding to the following modules. All the modules contained the real-life experience of people with disabilities who had journeyed through adjustment, self and professional development, success establishment and maintenance.

Upon completion of the virtual training, the participants were interviewed for their feedback and views on the usefulness of the training. The researchers also observed the participants' reaction and engagement during the virtual training.

RESULTS AND DISCUSSION

Observation of the participants' engagement during the virtual training sessions showed that all of the participants were highly focussed on the content of the training. They did not stop or pause during the training session at all. Most of them were observed to be focused while interacting with the content of the training modules. They were able to work through the training modules without assistance. Nevertheless, a few of the participants who were computer illiterate seemed to face some difficulty interacting with the content of the virtual training.

The Conduciveness of Virtual Training for People with Disabilities

As mentioned by Tichon (2007), the features of virtual training that are built and customised to participants' diverse backgrounds and needs can engage their focus and increase the training's effectiveness. It is indeed very true in this particular context of study.

Several of the participants reported that the virtual training content was not only very interesting but had also captured and engaged their hearts, as the content was actually a sharing of experience by people with disabilities to people with disabilities. Thus, the content was able to address the motivational and inspirational needs of the participants. According to one participant,

> I actually cried when I was reading and listening to the shared stories in the virtual training. It reminded me of my own coping and adjustment experiences when I had initially become disabled due to an accident. What was being shared in the virtual training was almost similar to my own experience. That is why it touched my heart so much. What was being shared was indeed very true. Yes. I had also initially felt so down after the accident. It took me some time to accept the reality. It was a struggle. Yet it is finally 'Redha' and the acceptance of my condition that finally helped me through, besides the support from my loved ones. If the training content could touch my heart, I believe it can touch the hearts of many more people with disabilities out there. The virtual training should be widely shared and promoted.

Behavioural Modelling

The training design of this virtual study was the focus component as the content material,

process flow as well as features of the virtual training must be designed to be inclusive for the use of people with disabilities. In terms of behavioural modelling, the content material was designed to allow the participants to model or do their observational learning from the shared experience of other PWDs who were successful in both their career and life.

Usually, the modelling or observational learning takes place in two steps i.e. acquisition and performance. Acquisition refers to the observation of other people's acts and the consequences of the acts. Such acquisition forms a mental image that encourages imitation of the shared experience or actions. This happens especially when the mental image results in positive consequences such as success, happiness, satisfaction or competency (Taylor, Russ, Chan, & Daniel, 2005). This was reflected in the findings of this study. Interviews with the participants echoed this finding that behavioural modelling is an important element for ensuring training transfer effectiveness.

According to one of the participants, the virtual training had motivated her to resume her studies. She said,

> Before this I had pursued my studies at a distance learning centre. However due to mobility and transportation issues, I had to quit my studies. Nevertheless, after listening to the shared experience of successful people with disabilities who have narrated their persistence

in enhancing their knowledge and skills, I feel so motivated to resume my studies.

This participant was obviously encouraged to imitate the actions of other successful people with disabilities. She was convinced that she would experience the same results if she persistently and similarly pursued developing new knowledge and skills like the successful people with disabilities whom she had been introduced to through the virtual training.

Error Management

The interviews with the participants on conduct of market validation showed that there were several points for improvement that needed to be addressed. One was the content of the virtual training itself. It was reported by the interpreter for participants with hearing impairment that textual materials should be lessened for this particular group. Initially, it was thought that hearing-impaired participants would have benefitted from textual-based content as they could not listen to audio recordings. However, the assumption was found to be wrong.

The hearing-impaired participants suggested that the content be given in point or bulleted format. In addition, a small screen with a Malaysian Sign Language interpreter would have been more helpful. This is because they were used to the Malaysian Sign Language format, which seldom used full sentences to deliver messages. Most of their communication

through Malaysian Sign Language is simplified and not delivered in complete sentences.

This feedback enabled the researchers to identify the initial errors that had occurred and plan for improvements to be made to the learning process via virtual training for people with disabilities. Such improvements will ensure the effectiveness of the virtual training.

CONCLUSION

The findings of this study on the effectiveness of a virtual training programme for people with disabilities that consisted of four modules, 'Self-Acceptance', 'The Importance of Training' (person-job fit), 'Love Youself' (core self-evaluation) and 'Career Success', supported previous findings on the importance of person-job fit perception and core self-evaluation on career success of people with disabilities (Wahat, 2010). It can be concluded that it is indeed essential to transfer all these important elements via accessible tools such as virtual training to benefit a large number of people with disabilities in Malaysia. In line with the Malaysia Disability Act 2008, everyone with disabilities in Malaysia, including those residing in rural areas, has the right to accessibility to education and training. Accessibility to virtual training is equally important as it provides skill development and knowledge enhancement opportunities to people with disabilities (Sitzmann, 2012).

It is recommended that significant applicability and impact of virtual training

be assessed based on the improvements made to the content and features of virtual training based on the findings of the study. The existence of a first ever self-change management training system would benefit the transitional and adjustment period of many new persons with disabilities. There is no research-based guiding system to assist as well as to motivate this particular target group in leading a less stressful, productive life. Virtual training should also be customised to the specific disability category such as visual disability or hearing impairment. The former would benefit from virtual training that uses kinetic features or haptic technology, while the latter would benefit from more visual rather than textual content.

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Towards Enhancing Youth Participation in Muslim-Majority Countries: The Case of Youth-Adult Partnership in Malaysia

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ABSTRACT

With the right support from adults and opportunities for participation, young people can be social, political and economic assets for communities. In many Muslim-majority countries, however, youth demographic bulges, lack of educational opportunities and political instability have left large numbers of youth under-involved, with insufficient opportunities for meaningful participation. This state of affairs undermines the potential of young people to thrive and contribute to their societies, resulting in an untapped resource for their respective countries. A growing body of research indicates that meaningful youth involvement in community organisations, through participation in governance and decision-making, has great benefit for youth and community development. Building on recent quantitative and case study research from Malaysia, the current paper puts forward youth-adult partnership as a potential strategy for enhancing positive, meaningful youth participation in community development efforts for Muslim-majority countries. Findings from two recent quantitative studies indicate that youth-adult partnership has the potential to enhance young people's experiences in community organisations by strengthening their personal agency, sense of empowerment, leadership competence and feelings of connectedness to their communities. Case study results further demonstrate how effective youth-adult partnership can bring about social change and economic development to marginalised communities. The paper concludes with broad suggestions for infusing youth-adult partnership into youth and community organisations to enhance community development efforts in Muslim-majority countries.

INTRODUCTION

Nearly 85% of the world's youth currently reside in developing countries (United Nations Development Programme [UNDP], 2014). This statistic points to a phenomenon known as 'youth bulge', a demographic transition where a country moves from high to low fertility and mortality rates resulting in a large proportion of youth and a rapid rate of growth in the working-age population (Beehner, 2007). Large populations of disengaged, undervalued youth have often been a source of great civil unrest and have historically been associated with revolutions, political activism and war (Hart, Atkins, Markey, & Youniss, 2004). To avoid repeating this history, the present-day youth bulge found in many developing nations is driving new calls for more structured and meaningful participation by young people in activities associated with learning, nation building and civic development (United Nations Development Programme, 2014). Participation in the form of decision-making, planning, mutual consultation and self-directed learning in schools and out-of-school programmes can facilitate the acquisition of critical competencies that youth need to thrive as individuals and citizens (DFID-CSO Youth Working Group, 2010).

Nowhere is the youth bulge of greater concern than in Muslim-majority countries (Assaad, 2011). Although the 'Muslim world' spans over 50 nations from diverse geographic locations, cultures and histories, the majority of predominantly Muslim countries face similar challenges in their efforts to develop. There are many contested reasons for this, most of which are beyond the scope of this paper. One fundamental issue that most Muslim nations continue to grapple with is how to meet the developmental needs of large youth populations given the numerous economic, political and social challenges these countries face. Scholars have emphasised that youth bulges can be a boon for a nation's social and economic well-being if the country is able to harness the collective human capital of its youth through adequate educational and economic opportunities. On the other hand, population bulges can result in social upheaval if young people are not afforded sufficient support and opportunities to participate meaningfully in economic, political and community life.

In many Muslim-majority countries, challenges faced by educational systems and high unemployment converge to limit social and economic opportunity, cited often by youth from those countries as the greatest problem their nations face (Amr & Marshall, 2008). Gross inequality in education systems within most Muslim countries has resulted in the preparation of only a small minority of youth with the adequate skills to meet the demand of labour markets (UNDP, 2016). This has had deleterious effects on overall human development in those countries, contributing to stubbornly high rates of poverty and income inequality (Altwaijri, 2014; Amr & Marshall, 2008). With about half the population across the Muslim world in their twenties or younger, an enormous effort is

needed to create large-scale economic and social opportunities "to keep youth satisfied, inspired and hopeful, instead of disgruntled and resentful, in a fast changing world where it is easier and easier for the disadvantaged segments of the world to feel the lack of opportunity and inequality on a daily basis" (Amr & Marshall, 2008, p. 8). Coupled with population trends and a repressed civil society, under-representation of young people in economic and community life has created conditions ripe for tension, further fanned by a lack of political reform. Politically, socially and economically disenfranchised, young people have found an outlet for their resulting frustration and hopelessness in social protest, rather than constructive community and nation building activities (UNDP, 2016).

The abovementioned socio-demographic reality gave birth to the well-known 'Arab Spring' uprisings that have since made a profound mark on the contemporary Middle East. The 'Arab Spring' was, or has been, predominantly youth-led, and formal and informal youth movements continue to play a major role in the events reshaping the region (Cole, 2014). According to Halaseh, "Traditional protagonists are no longer the only main actors in the regional political arena; rather a paradigm shift is unfolding, whereby young Arabs – the majority of the population – are increasingly realizing an empowered and influential role in all the various aspects of public life" (2012, p. 254).

In countries like Tunisia, for example, youth-led civil society organisations, many

formed via social media, played key roles in the transition to more democratic processes and institutions (Cole, 2014). In other nations that lacked the institutions to accommodate new social actors such as youth, political participation took the shape of strikes, demonstrations, protests and violence (Halaseh, 2012). In both cases, the Arab Spring showed that young people in majority Muslim countries are a formidable force with the potential to play a major role in effecting societal change. They yearn for greater empowerment and constructive roles in society that will allow them to not only meet their economic needs, but participate in the shaping of their countries' collective social and political futures (UNDP, 2016).

Youth Development in Muslim Countries through Community and Civic Participation: Youth-Adult Partnership as Core Strategy

Youth development scholars have pointed out that meaningful youth participation in community institutions, when structured, supported and done well, contributes to social justice, youth development and nation building (Zeldin et al., 2014). Together, these goals reflect principles germane to civil society where members are valued, have useful roles to play, are realising individual potential and are working in cooperation towards common goals. Research has shown that across cultures, youth voice on behalf of self and others is an important precursor to competence, identity formation and social trust in youth (Arnett, 2002; Flanagan, Martinez, &

Cumsille, 2010; Peterson, 2000). This body of research has linked youth participation to outcomes of relevance to developing nations such as social and leadership competence, psychological empowerment and improved relationships with adults and peers within youth communities (Christens & Peterson, 2012; Evans, 2007; Krauss, et al., 2014; Larson & Angus, 2011; Mitra, 2004; Zeldin, 2004; Zimmerman, Ramirez-Valles, & Maton, 1999).

Among the different forms that youth participation can take (see Wong, Zimmerman & Parker, 2010), there is growing consensus among youth researchers and practitioners that meaningful youth participation begins with relationships that are developmental in nature, where young people are encouraged to play a central role in their own learning and development. Young people engage when learning is tied to active participation in discovery and inquiry, when they are challenged to fact find, interpret and make sense of phenomena that are relevant to their lives and of interest to them (Larson & Rusk, 2010; Rogoff, 2003). Developmental relationships are tailored for this. They differ from the 'prescriptive relationships' that characterise the majority of modern youth programmes and school settings. Prescriptive relationships tend to be adult-dictated, depriving youth of the opportunity to give input on decisions that affect their lives. In such relationships, control lies almost entirely with adults so that power rarely shifts to youth, causing these relationships to often decline over time (Li & Julian, 2012). This often results

in young people becoming disinterested and ultimately disconnected from organisations and communities.

Conversely, researchers have recently identified 'youth-adult partnership' as an optimal form of developmental relationship. Youth-adult partnership is characterised by youth and adults collaborating in decision-making activities such as visioning, programme planning, evaluation and continuous programme improvement (Camino, 2000; Camino & Zeldin, 2002; Norman, 2001). Youth-adult partnership can occur in schools between teachers and students, in youth organisations between youth workers and youth and on community boards, NGOs and other civil society entities. Whatever the setting, youth-adult partnership is realised by adults providing supportive guidance and platforms for youth to have a 'voice' in the decision-making process (Zeldin, Krauss, Kim, Collura, & Abdullah, 2016), resulting in a spirit of collective action and accountability. In this way, partnership occurs through mutual decision-making and shared teaching, learning and reflection by youth and adults (Camino, 2000).

Many Muslim-majority countries are struggling to meet the developmental needs of their sizable youth populations. As young Muslims in these countries transition into adulthood, many fail to have meaningful participatory experiences with adults that form the building blocks of thriving communities. Although community itself defines the ethos of many Muslim-majority cultures, youth participation in

formal community and youth organisations remains low. Research from select Muslim countries has reported low levels of youth civic engagement, particularly during the secondary school years (Etra, Prakash, Graham, & Perold, 2008; Malaysian Institute for Research in Youth Development, 2011). The rhetoric from policy-makers that pitch youth as 'partners in development' seldom matches the extent of opportunity afforded to youth to make meaningful contributions to their communities. Most educational and youth development initiatives seem insufficient at best, evidenced by youth pleas for programmes that are more relevant, engaging and substantive.

Study Aim

The current paper drew on secondary data from three recent studies conducted in Muslim-majority Malaysia. The aim was to use a combination of quantitative and qualitative findings to position youth-adult partnership as a promising strategy for enhancing youth experiences of participation in school and community-based youth organisations. I chose to highlight Malaysia given that it is one of the only Muslim-majority countries where empirical and case study data pertaining to youth-adult partnership exists. In so doing, I first set out to establish the importance of agency, empowerment and community connectedness as three critical attributes that youth need in order to play more substantive roles in youth and community programmes. I then drew on the work of Li and Julian (2012) and Bronfenbrenner (1979) to posit

developmental relationships as the active ingredient of effective youth participation. After introducing youth-adult partnership as an optimal form of developmental relationship, I present findings from two recent quantitative studies of Malaysian youth in community and school settings that showed significant links between the practice of youth-adult partnership and important youth development outcomes. I then present qualitative findings from a case study of the Youth and Sports Association of Gaya Island, Sabah, to highlight how youth-adult partnership works in practice to empower marginalised Muslim communities for social action and community development. I conclude the paper with recommendations and considerations for the implementation of youth-adult partnership in community-based organisations.

Muslim Youth as Active Participants in Community: The Critical Attributes of Personal Agency, Psychological Empowerment and Community Connectedness

Although a youth bulge can be a potential boon for a nation, without educational, economic and social structures that intentionally work for youth, bulges can become socially and economically debilitating and even destructive. Large populations of young people left without proper support, opportunities and guidance can quickly turn into violent unrest, protest and revolt, rather than system-sustaining pro-civic activity (Hart et al., 2004). Boredom, frustration, a lack of skills and

optimism about the future and the belief that their lives have no purpose or meaning make up the 'perfect storm' that can lead to youth-led civil unrest. Particularly in religious countries, idle youth such as those found in much of the Muslim world are also prone to virulent strands of religion as an alternative force for social mobility (Beehner, 2007).

Many developing nations acknowledge youth as important contributors to economic and social growth. The UNDP Youth Strategy 2014-2017 report (2014) identified: 1) increased economic empowerment; 2) enhanced youth civic engagement, and participation in decision-making and political processes and institutions; and 3) strengthened youth engagement in resilience building as its three main thrusts. These goals correlate with a clear need for youth participation in economic development, greater decision-making in civic organisations and initiatives, and for building resilience for sustainable development.

Limited evidence suggests that Muslim-majority developing countries share these concerns (UNDP, 2014). In Malaysia, for example, the attributes of personal agency, psychological empowerment and community connectedness have become cross-cutting priorities, as evidenced in the country's Youth Development Action Plan and most recent National Youth Policy. Although agency and empowerment are sometimes used interchangeably to describe individuals' perceived sense of control, personal agency refers to beliefs about one's abilities in non-social environments and

the ability to set goals and organise one's actions to achieve them (Bandura, 2006; Larson & Angus, 2011). Psychological empowerment, however, denotes a sense of control in the sociopolitical realm or beliefs about one's abilities to influence social and political systems (Ozer & Schotland, 2011). Community connectedness refers to a young person's perceived sense of connection to community members, including peers and non-familial adults. It is believed that a common emphasis on the above three attributes will not only prepare Malaysian youth for productive economic roles, but will also allow youth to participate meaningfully in community development, social justice issues and global citizenship (Ahmad, Rahim, Pawanteh, & Ahmad, 2012; Hamzah, 2005; Krauss et al., 2014; Nga, 2009).

As a developmental outcome, agency provides youth with the motivation and sense of personal efficacy to contribute to the country's economic success and sustainability by relieving the burden of an over-burdened public sector. Countries like Malaysia are also beginning to embrace youth empowerment, with more people becoming aware that youth need to develop a sense of empowerment to have the confidence, courage and capacity to participate in civic change and entrepreneurial efforts that can help their country mature as a more democratic society. Finally, a strong sense of connection to the real communities and people where youth live, including families, non-familial adults and peers, is seen as vital to preserving the collectivist values and

cooperative culture that are central to most Muslim-dominated countries like Malaysia (Ramli, 2005). Community connectedness is also an important feature of multi-racial, multi-religious societies like Malaysia that rely on relationship-building across racial and religious divides. The lack of connectedness to not only one's own but also other communities within the country poses a risk to the country's social fabric.

Several studies have linked youth participation with the development of agency, empowerment and community connectedness (Christens & Peterson, 2012; Evans, 2007; Krauss et al., 2013; Larson & Angus, 2011; Mitra, 2004; Zeldin, 2004; Zimmerman et al., 1999). Youth participation is consistently looked to as a strategy for youth development and effective citizenry. Scholars assert that, across cultures, youth voice on behalf of self and others is an important precursor to competence, identity formation and social trust (Arnett, 2002; Flanagan, Martinez, & Cumsille, 2010; Peterson, 2000). Involving young people contributes to community building by expanding the effectiveness of community institutions, building instrumental and relationship-orientated networks and affording young people opportunities to share their experience and insight, thus giving them meaningful roles and a sense of purpose (Zeldin et al., 2016). In the United States, youth participation in community organising has produced community-level impacts such as new programmes, policy changes and

institution building activities, in addition to intergenerational and multicultural collaboration (Christens & Dolan, 2011).

For Muslim youth to be capable participants in the positive development of their respective nations, developing the attributes of agency, empowerment and community connectedness is critical. Research shows that youth participation is an effective vehicle for achieving these outcomes. So how best to facilitate participation? Decades of scholarship point to developmental relationships as a way to generate meaningful participation within a context of care and educative productivity.

Developmental Relationships

Human relationships are the critical ingredient of learning and human development. According to the National Scientific Council on the Developing Child (2004, p. 1), healthy development "depends on the quality and reliability of a child's relationships with the important people in his or her life, both within and outside the family." A human partner is uniquely qualified to provide experiences that are individualised to a child's unique personality style and that build on his or her own interests, capabilities and initiative, which shape the child's self-awareness and stimulate the growth of his or her heart and mind (National Scientific Council on the Developing Child, 2004). By being an 'active ingredient,' relationships become the means through which critical learning processes occur and through which young

people acquire knowledge about the world, themselves and others.

The importance of relationships in learning and development continues throughout the individual's lifespan. Relationships have been found to be of central importance to early cognitive, social and personality development, as well as to show lasting influence on social skills, emotion regulation, conscience development, trust in others and general psychological well-being (Thompson, 2006). Developmental relationships help young people attain the psychological and social skills they need to achieve successful outcomes in the sphere of education, as well as in life (Search Institute, 2015). Young people can form these relationships with a variety of concerned adults including parents and family members, friends and peers, staff in schools and youth programmes and with caring adults in their neighbourhoods and communities (Search Institute, 2015).

What makes a relationship developmental, setting it apart from other forms of human interaction? Li and Julian (2012) posit that developmental relationships are characterised by "reciprocal human interactions that embody an enduring emotional attachment, progressively more complex patterns of joint activity, and a balance of power that gradually shifts from the developed person in favour of the developing person" (p. 157). As a way to conceptualise developmental relationships into definable categories, Li and Julian base their definition on the work of Bronfenbrenner (1979), who extended the notion of relationships beyond mere emotional attachment. From this work, Li and Julian identified four core elements to development relationships i.e. attachment, progressive complexity, reciprocity and balance of power. Human interactions that follow this definition can be found in even the most fundamental of learning and developmental settings, interwoven as interdependent aspects of a singular experience.

Emotional attachment forms the basis of the learning relationship and provides the necessary trust and confidence in the adult. Young people want to be with adults that they have formed emotional connections with, those that are natural, positive and appropriate for the context. Ongoing frequent and joint activities between the adult and young person allows for further emotional bonding along with adult gauging of progress and competence, resulting in the adult adjusting his or her levels of support according to the young person's progress. Also known as scaffolding and fading, this process allows an adult to remove support gradually as the young person becomes more competent and confident in his or her abilities. As the activity advances, the young person then engages in more complex tasks with greater confidence, thereby reducing the need for adult support. Through this continuous process a gradual shift in the balance of power results, in favour of the young person becoming more autonomous (Li & Julian, 2012). At this point, the young person is more or less an independent actor within his or her environment, capable of

being a competent participant in whatever activities that are being carried out. The process results in substantive learning and independence through a transfer of knowledge and skill that is self-directed, motivational and empowering.

Youth-Adult Partnership as Empowering Developmental Relationship

Developmental relationships rely on caring, nurturing interactions between adults and youth and are educative, in that adults provide authentic opportunities for youth to make independent decisions and act on those decisions and give them the freedom to make and correct their mistakes. In the context of developmental relationships, adults do not dictate youth's decisions and choices, but rather adults facilitate and guide through a process called scaffolding and fading. For example, by allowing time and opportunity for students to make mistakes, a teacher committed to a developmental approach will engage his or her class in diagnosing and correcting the mistakes themselves (Brown, Collins, & Duguid, 1989; Collins, Brown, & Newman, 1990; Li & Julian, 2012). Rather than controlling and dictating the learning process, the adults through mutual relationships of trust facilitate decision-making and discovery by allowing youth to arrive at destinations on their own. The combination of trusting, nurturing emotional bonds and adult support of youth voice in the decision-making process have been conceptualised as the core elements of youth-adult partnership (Zeldin

et al., 2014).

Youth-adult partnership works along the lines of youth voice in decision-making and caring relationships with adults who recognise the value in helping youth exercise their voice (Serido, Borden, & Perkins, 2011; Zeldin, Christens, & Powers, 2013). Youth-adult partnership takes many forms in practice including youth and adults sitting on organisational governance committees, administering community projects together, making joint decisions about school policies, adult support of youth association activities and joint advocacy efforts on behalf of communities. Cross cutting these forms, however, is that youth-adult partnership subsumes many of the experiences that are engaging to young people: authentic decision-making, reciprocity, natural mentors and community connections. When the two components of youth voice and adult support are present, youth and adults collaborate as intergenerational partners, with interactions grounded in the principles of reciprocity, co-learning and shared control (Camino, 2005). Whether in school, community programmes, or other types of organisation, youth-adult partnership emphasises guided and supported youth participation as a way to help youth realise their rights and roles as citizens and promotes personal development through the process of attaining substantive knowledge and practical skills via experiential learning from experienced adult partners (Checkoway, 2011).

In the context of schools, youth-adult partnership is shown to contribute to school

engagement, school attachment and civic engagement, outcomes strongly related to academic achievement (Mitra, 2009). Youth participation in school decision-making increases student voice in schools and offers a way to re-engage students who may be disengaged from the school community (Fielding, 2001; Levin, 2000). Young people can engage with teachers in initiatives either inside or outside of the classroom to do this, such as working together to address student apathy with academic subjects or coming together to agree on ground rules for the school. Participation also can increase youth attachment to schools, which in turn has been shown to correlate with improved academic outcomes (Mitra, 2004). When youth-adult partnership is used to engage young people in community projects, civic development increases, extending young people's beliefs that they can make a difference in their lives and the lives of others (Eccles & Gootman, 2002; Kirshner, Strobel, & Fernandez, 2003; Mitra, 2004). Student voice initiatives also help young people to develop important civic competencies including greater tolerance for and relationships with others, respectfully and effectively questioning authority and engaging in public speaking (Mitra, 2009).

Youth-adult partnership also resonates with generational approaches to understanding contemporary youth. Adults have traditionally formed relationships with youth for the purpose of protecting, counselling and instructing young people (Hine, 1999; Hollingshead, 1949). Over the past 20 years, however, with the integration of youth and community

development perspectives into youth programming, the rationale for establishing strong intergenerational relationships has broadened. Scholars now focus on the importance of relationships as a vehicle through which youth can be active agents in their own development, the development of others and the development of the community (Krauss, Zeldin, & Dahalan, 2015; Zeldin, Larson, Camino, & O'Connor, 2005). Youth programmers, teachers, mentors, coaches, youth workers, religious teachers and community adults can all play these partnering roles with youth. Through their typology of youth-adult relationships, Wong et al. (2010) concluded that youth-adult partnership is optimal because the "shared control between youth and adults provides a social arrangement that may be ideal for both empowering youth and community development" (Zeldin et al., 2013, p. 109).

Youth-Adult Partnership in Malaysia: Evidence from the Field

Recent youth and education policy changes in Malaysia have resulted in significant investments in out-of-school time programmes to combat youth alienation and promote youth development (Krauss et al., 2013). Local and international youth and community programmes play a complementary role to the formal education system in promoting skill and competency acquisition through an array of experiential developmental and leadership opportunities (Hamzah, Tamam, Krauss, Hamsan, & Dahalan, 2011). Like the United States

and other countries, Malaysia has begun to focus on community and institutional engagement to enhance youth participation in schools and communities. Two types of programme are emphasised in meeting these goals: 1) co-curricular programmes operated by the Ministry of Education that are a mandated part of the school curriculum; and 2) community-based programmes and youth associations operated by the Ministry of Youth and Sports that are aimed at promoting leadership and entrepreneurial skills in addition to providing youth with opportunities to explore arts, music, religion and sport (Krauss et al., 2013). These significant investments are central to the overall progression of youth and community development in Malaysia.

Empirical evidence from mostly Western contexts indicates that youth participation in the form of youth-adult partnership, when supported by formal policy and practice structures, can become an important aid to youth and community development by helping youth acquire important developmental outcomes like agency, empowerment and community connectedness. However, to date, little is known about the practice of youth-adult partnership in Muslim-majority countries and its contribution to youth outcomes.

To explore the potential of youth-adult partnership in a Muslim-majority setting, I present findings from three recently conducted studies (Krauss et al., 2014; Krauss, Zeldin & Dahalan, 2015; Zeldin, Krauss, Kim, Collura, & Abdullah, 2016) in Malaysia. The findings

are summarised and presented to illustrate the potential of youth-adult partnership as a strategy for enhancing young people's experiences of participation in school and community-based youth organisations. Quantitative-based findings from two studies show significant associations between youth-adult partnership and several developmental outcomes including agency, empowerment, community connectedness, social trust, leadership competence and school engagement. Qualitative case study findings further point to youth-adult partnership as a rallying point for young people and adults within communities to work together on community action, advocacy and community education efforts. Combined, the findings provide a basis for more serious discussion and deliberation on the way forward for infusing youth-adult partnership into afterschool and community programmes.

Youth-Adult Partnership in Malaysian Afterschool and Community Programs

Findings from two recent quantitative-based studies conducted in Malaysia point to the potential of youth-adult partnership in cultivating youth developmental outcomes. The two studies sought to clarify the unique relationships between the two components of youth-adult partnership (youth voice and adult support) and several youth development outcomes.

In the first study, 299 youths aged 15 to 24 were sampled from six established afterschool and community programs from the greater Kuala Lumpur area to explore

the contribution of youth voice in decision-making and supportive adult relationships on the outcomes of empowerment, agency and community connections. Hierarchical regression results indicated that programme quality (youth voice, supportive adult relationships, safe environment and programme engagement) contributed to agency, empowerment and community connections beyond the contribution of family, school and religion. Additionally, the youth-adult partnership measures contributed substantially more variance than the other measures of programme quality on each outcome (see Krauss et al., 2014 for details). The findings from this inquiry replicated those found in previous interview and observational-orientated studies on the importance of youth program quality and youth-adult partnership in particular as a contributor to youth outcomes.

A second study on youth-adult partnership in secondary, co-curricular afterschool programmes explored a mediational model that hypothesised pathways between the experience of youth-adult partnership (youth voice in decision-making, supportive adult relationships), the mediators programme safety and engagement and the developmental outcomes of youth empowerment (leadership competence, policy control) and community connectedness (community connections, school attachment). The purpose of the study was to better understand the different ways that the two components of youth-adult partnership, youth voice and adult support, contribute to different developmental

outcomes, and how programme quality mediates these relationships. Despite the prevalence of afterschool programmes globally, few prior studies had attempted to examine the pathways through which youth-adult partnership and programme quality predicted youth outcomes within actual programmes (see Zeldin et al., 2016 for details).

The study results shed light on how the two components of youth-adult partnership can operate differently, through different yet complementary pathways. First, youth voice in programme decision-making predicted both indicators of youth empowerment, while programme engagement mediated the associations between youth-adult partnership and empowerment. In contrast, programme safety mediated the associations between youth-adult partnership and community connectedness. From here, two clear patterns emerged; the active processes of youth voice and programme engagement were most strongly associated with the agency-orientated concepts of youth empowerment. In contrast, the more nurturing and relational components of supportive adults and feelings of safety were most strongly associated with community connectedness. The findings shed light on the different ways that youth voice and adult support lead to positive outcomes among youth, namely that youth voice and adult support provide both instrumental as well as socio-emotional contributions to young people's development.

Both of the above study findings are significant given Malaysia's concerns

with youth community disengagement and reported low empowerment scores on national indices (Malaysian Institute for Research in Youth Development, 2011). Furthermore, when compared with similar data from the United States and Portugal, the findings from Malaysia indicate that youth-adult partnership operating within the context of organised youth programmes predicted youth civic development across income groups (Zeldin, Gauley, Krauss, Kornbluh, & Collura, 2017). These cross-national results further support the universality of youth-adult partnership as an important strategy for enhancing community development.

Youth-Adult Partnership and Community Development: A Case Study of the Gaya Island Youth and Sports Association

In attempting to situate youth-adult partnership within an actual community setting in Malaysia, the author and two co-researchers carried out an exploratory qualitative case study with the Gaya Island Youth and Sports Association (BESUGA), based in Gaya Island, Sabah (see Krauss et al., 2015). Gaya Island is home to 10,000 low-income residents of traditional fishing villages that span the coast of the eastern and southern shores of the island. The residents of Gaya Island, being of predominantly Bajau Muslim decent, face systematic marginalisation and neglect due to their presumed status as illegal immigrants. This enduring stigma has left Gaya and its residents with few basic services and infrastructure despite the majority of the population having been citizens of Malaysia who have lived in Sabah for several generations.

We used youth-adult partnership as a theoretical lens to understand how BESUGA became an agent of social change through an inclusive approach to working across three generations of residents (youth, emerging adults and adults) to provide community-based sports and education programmes to the young people and residents of Gaya Island. Of most relevance to the youth-adult partnership framework was how BESUGA spearheaded a campaign with adult residents, leaders and diverse stakeholders to bring water and electricity infrastructure to their island for the first time in its history. By creating an informal coalition of youth and adult entities to promote their cause, BESUGA lobbied their local government representatives to secure water and electricity for the villages of Gaya Island.

In the study, we identified three ways that BESUGA used youth-adult partnership to achieve its objectives and bring change to the community. First was through the provision of community programmes, where the association's leaders worked closely with the adult residents in the villages to provide youth development and community education programmes to youth and adult residents. These included sport tournaments, cultural events, community education programmes (e.g. environmental awareness, education) and classes in sewing, computer use, languages and others. This

function was critical for building community relationships, social capital and enhancing the skills of the population.

Second was the use of youth-adult partnership as an organising tool to bring together a diverse group of stakeholders to lobby the government for water and electricity. In so doing, BESUGA was able to enlist support from local university leaders, the state electric company officials, community leaders and state representatives. Taking advantage of a favourable political climate, the coalition of youth and adults succeeded in convincing the political leaders that Gaya Island was deserving of basic water and electricity infrastructure. The youth and adult coalition made the difference; prior adult-only attempts to convince the local politicians of the need for water and electricity on Gaya had been unsuccessful.

Third was BESUGA's role as a community educator. After approval was given to install electricity and water, BESUGA youth worked with local adults to devise strategies for educating the community about their new services. This required working with the state electric company, the village leaders (ketua kampung) and the adult residents. It also required a youth-led door-to-door effort to walk residents through the new processes of installation, payment and service of the electric and water utilities. The mass effort to educate the community could only be successful through cooperation between the youth and adults.

Through these three initiatives, BESUGA showed how youth-adult partnership can provide a platform for youth to play substantive leadership roles in community development and transformation efforts. The youth association's role gradually expanded over time by gaining the trust of adult community members, who, in turn, increasingly relied on BESUGA to lead development efforts. The youth association's inclusive and respectful approach to working with the adults facilitated an environment of partnership and cooperation that bolstered service provision to the community and advocacy efforts with outsiders. The adult leaders not only supported the efforts of BESUGA, but gave the youth leaders increasing voice and autonomy in making decisions on behalf of the community. By way of this process, the Gaya Island case study is a powerful example of how youth-adult partnership in low-income, Muslim communities can be leveraged for youth and community development as well as social change.

DISCUSSION AND CONCLUSION

Using three recent studies from Malaysia as a starting point, the purpose of this paper was to introduce the potential of youth-adult partnership to address the need for more constructive and meaningful youth participation in Muslim-majority countries. The studies on youth-adult partnership presented in this paper illustrate the potential of youth-adult partnership within community and youth programmes as an

important ingredient in the effort to enhance the participatory experiences of youth in community and national development. Although research in this area is still nascent in Malaysia, the findings mirror previous work in the United States and other countries where youth-adult partnership has been used with success. For example, successful youth-adult partnership has taken the form of young people serving as members of municipal and organisational boards (Kirshner, O'Donoghue, & McLaughlin, 2002; Sinclair, 2004), mobilising their peers and residents to take action on social and environmental justice issues (Chawla, 2002; Checkoway et al., 2003; Edwards, Johnson, McGillicuddy, 2002), taking active roles in community development by participating alongside adult residents in land-use planning processes (Knowles-Yanez, 2005; Tolman et al., 2001; Speak, 2000) and others.

While the quantitative findings have been previously reported in detail (see Krauss et al., 2014; Zeldin et al., 2016), the goal in this paper was to emphasise the critical role that purposeful working relationships between youth and non-familial adults who value youth voice play in community-based and afterschool programmes. Adult teachers, coaches, community leaders and youth workers play important roles in facilitating young people's development of leadership competence and agency, belief that they can make a difference in the sociopolitical sphere and sense of connectedness and belonging to their communities. The findings support

prior theory and research that point to the need for positive relationships with adults to help young people act affirmatively in their environments (Camino, 2005; Kirshner, 2007) and the importance of youth having authentic opportunities for decision-making. Prior research has shown that youth become active participants in their communities when they feel they have both a powerful voice in programme decision-making and supportive relationships with adult staff (Borden & Serido, 2009). This is significant for the vast populations of young people in Muslim-majority countries who feel alienated and cut-off from decision-making structures and processes, in which adults tend to dominate (Spencer & Aldouri, 2016).

Recent research in other culturally conservative Muslim-majority contexts indicate that youth-adult partnership, when infused into existing community structures, can make a difference in enhancing youth agency, empowerment and community connectedness. A recent study of youth-adult partnership in Nigerian school-based management committees (SBMC) explored how this occurs (Umar, Krauss, Abu Samah, & Abdul Hamid, 2017). The findings report that even in low-income, socially and culturally conservative communities in northern Nigeria, youth and adults can work collectively to administer local schools. In these local governance structures, young people as young as 12 years old are given equal voice and decision-making opportunity alongside community elders. In addition to fortifying adult-youth community bonds, the adults reported

having a newfound respect for the views and opinions of young people. Likewise, the youth felt a greater sense of belonging and ownership through their participation on the SBMCs. The authors emphasise the need to build authentic opportunities for youth involvement in existing local decision-making structures rather than creating a plethora of new programmes. Through capacity-building and training, existing community structures can change the way they work to allow young people more meaningful experiences as decision-makers and contributors. This approach provides great opportunity for Muslim-majority countries to create meaningful opportunities for youth participation by infusing youth-adult partnership into already existing school and community-based organisations.

It must be noted that the intention of this paper was not to generalise the findings to other Muslim countries, as each has its own unique social, political, demographic and cultural landscape that may or may not be conducive to youth-adult partnership. That said, youth-led social action supported by adults has been found to be an effective strategy for community development in marginalised communities (Ginwright & James, 2002; Ginwright & Cammarota, 2007). The Gaya Island case study presented in this paper extends this work, showing how youth-adult partnership can facilitate real, tangible social change in a completely unique type of marginalised setting. The evidence thus strengthens the possibility that as a general strategy, youth-adult partnership can be used virtually anywhere as long as

there is organisation and shared commitment by both youth and adults. More research into youth-adult partnership is needed in other Muslim-majority nations, especially those from the Middle East where traditional culture roles between youth and adults differ sharply than in Western countries.

Youth-adult partnership is yet to become an explicit strategy among youth and community development policy circles in Malaysia and most other Muslim-majority countries. However, recent macro-level policy initiatives indicate that there is a heightened awareness around the need for greater youth voice and participation in community life. In countries like Tunisia, for example, the new national Constitution explicitly calls for supporting youth to take on greater decision-making responsibilities by extending their participation in social, economic, cultural and political development (UNDP, 2014). Similarly, Malaysia's new National Youth Policy (2015) calls for formal youth participation within all leadership bodies representing community organisations and local councils by 2018. In these examples, one can see a growing need for strategies, best practices and promising approaches to build the capacity of community organisations to create a culture of intergenerational partnership.

In many Muslim-majority 'Arab Spring' countries, despite initial optimism, the social and political turmoil that began in 2011 has resulted in a regressive situation where efforts to move toward mainstreaming youth voice have become more difficult. In Egypt, for example, this

frustration felt by many youth has led to disengagement, apathy and a decrease in participation in social and political issues and processes, as well as an increased sense of disillusion (Spencer & Aldouri, 2016). These sentiments leave young people vulnerable to joining less legitimate pathways to redress their frustrations, such as through violent extremism and radical group membership. It is therefore essential for policy-makers to address the ensuing disengagement from society by policies that promote legitimate platforms for voice and participation. Capacity-building measures are fundamental in this regard, but no less so than constructive outlets for the skills learnt to be put to use in the broader society (Spencer & Aldouri, 2016).

Directions for Policy and Practice

The unprecedented scope of change and challenge facing many Muslim-majority communities today requires more broadly inclusive decision-making patterns that engage multiple stakeholders. The problems, issues and challenges these societies face are becoming more global and complex. To nurture an effective public voice, people from all walks of life, including youth, should be encouraged and motivated to exercise citizenship, which means taking responsibility for the common good and working together to define shared, win-win solutions for common problems that challenge community life (Mullahey, Susskind, & Checkoway, 1999). Towards this end and as a starting point for making youth participation and empowerment

through youth-adult partnership a reality in Muslim-majority countries, I draw on best practices from both Western and Asian countries to propose the following directions for practice and policy consideration. The recommendations are not listed in any particular order of importance.

- First, youth and adult relationships and interaction must intensify by ensuring greater adult involvement in youth programmes and educational initiatives. This can be integrated into related policies and/or addressed at the level of practice, but in the end, there must first be opportunities created for youth and adults to interact in meaningful ways.

- Adults must learn and understand how they can support youth voice and participation. Youth-adult partnership is grounded in both youth voice and adult support; therefore, getting adults to fully understand the importance of their partnering with youth as mentors, coaches, guides and other, is half the battle. Youth-adult partnership can occur in any place where youth and adults interact and have the opportunity to work together on common issues or activities.

- Youth voice is not just about opportunities to be critical. Youth voice is, first and foremost, about having real opportunities to make decisions and to pursue one's interests and passions. Adults must understand these different forms of youth voice and value them all within organisational settings.

- Youth must understand and appreciate the importance of working with adults, and realise that little can be achieved without them. Both parties must appreciate the idea that nation building requires effort from all sectors of society, young and old, and to create civil society, people have to work together.

- Issues of power have to be addressed at the outset. One of the greatest challenges to youth-adult partnership in practice is power. It requires adults to share it and youth to use it respectfully and responsibly. Different organisations deal with issues of power differently. For Muslim organisations and communities, especially those in countries where few are afforded any power, it can be a great challenge to persuade adults to share power with other adults, let alone youth. The emphasis should be on the well-being of the community at large, both now and for the future. Youth-adult partnership is one strategy to help organisations and communities get there by ensuring that young people are engaged both now and in the future.

- To do youth-adult partnership well, there must be a basic understanding of youth development processes. Although positive youth development (PYD) is well-known globally, there are still many countries that have yet to be exposed to it. Strategies like youth-adult partnership are an outgrowth of the PYD philosophy that when adults provide the right support and opportunities for tapping youth strengths, great things can happen. Therefore, youth and adults alike should understand what supports, opportunities and services young people need to thrive both by themselves and their communities, and how adults can help youth achieve them.

- Community relationships and networks can be mobilised to make up for the lack of resources available in lower-income settings. As evidenced by the youth association in Gaya Island, intergenerational partnerships and networks with community institutions, businesses and organisations can be a powerful support for youth development initiatives.

- One must not leave out the role of developmental relationships within families. Families form the foundation of society. Families can be great models for positive youth development and youth-adult partnership. For adults, practising developmental relationships in the home is a great way to start, and these lessons can be transferred over to organisational settings.

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PERTANIKA
JOURNALS

Workplace Spirituality among Malaysian Employees in Hospitality and Educational Organisations

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ABSTRACT

There is an increasing interest in spirituality at work for the past decade as individuals seek to live out their spiritual values in the workplace. Despite its importance as an individual experience that may be unique in different work settings for different individuals, it has not received adequate attention in organisational studies. This study examines the experience of spirituality (meaningful work, sense of community and alignment of values) among employees in two selected service industries, specifically the hospitality and education industries in Malaysia. Data were collected from 198 employees using a self-administered questionnaire and analysed using descriptive statistics and an independent sample t-test. The overall level of workplace spirituality among employees in the educational organisations was higher than that in the hospitality organisations. We found that there were differences in the experience of work as meaningful, sense of connectedness with others at work and alignment of personal and organisation's values between employees in the educational and hospitality organisations. The results have implications for organisations in developing and planning practices aimed at nurturing spirituality at work.

Keywords: Alignment of values, meaningful work, organisational culture, sense of community, workplace spirituality

INTRODUCTION

In the past decade or so, there has been an increase in interest among researchers concerning workplace spirituality in organisations (Ahmad & Omar, 2015; Ashmos & Duchon, 2000; Duchon & Plowman, 2005; Giacalone & Jurkiewicz,

2003; Milliman, Czaplewski, & Ferguson, 2003; Petchsawanga & Duchon, 2009). Organisations have begun to recognise their innate link with spirituality since organisational characteristics tend to shape an individual's experience of important organisational values and processes (Garcia-Zamor, 2003). Scholars have realised that fostering spirituality at work can enhance the performance of employees (James, Miles, & Mullins, 2011). Weitz, Vardi and Setter (2012) asserted that workplace spirituality improves productivity, including employee decision-making and problem solving capacities. When properly managed, it may serve as an employee's own mechanism for controlling behaviour at the workplace (Ahmad & Omar, 2014; James et al., 2011). Mat Desa and Koh (2011) contended that employees would become more productive and creative when they are allowed to bring their emotional and spiritual attributes to work in addition to their physical and intellectual attributes, which are unique to each individual.

In general, spirituality implicates a search for meaning in life (Debats, 1999). In the workplace, highly spiritual employees tend to find their work more fulfilling compared with their colleagues of lower spirituality, where work problems like low morale and high turnover tend to manifest among them (Petchsawanga & Duchon, 2009). Workplace spirituality has been defined as "the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in a community" (Ashmos & Duchon, 2000, p. 137). Milliman et al. (2003) identified and measured three spirituality dimensions at the individual, group and organisational level, namely meaningfulness of work, sense of community or connectedness and alignment with organisational values, respectively. In most definitions, the main components were meaningfulness, purpose as well as connectedness (Duchon & Plowman, 2005).

Workplace spirituality has been mainly excluded from empirical studies because of perceptual confusion with regard to how it differs from religion. Veach and Chappell (1991) view spirituality as a distinct individual experience that may not be connected to any particular religious tradition and is non-synonymous with religiosity. However, Phipps and Benefiel (2013) suggested the need to clarify the nature of the relationship between spirituality and religion. Six different relationships were identified, namely synonymous, overlapping, spirituality nested in religion, religion nested in spirituality, mutually exclusive and individually determined context. Despite the need to further understand the relationship between these two constructs, various definitions of spirituality exist and its relationship with religion remains fuzzy. Hence, in empirical studies, researchers tend to view spirituality at work as involving individuals who need to nourish their souls and experience a sense of purpose in work and connectedness to others at work (Ashmos & Duchon, 2000; Harrington, Preziosi, & Gooden, 2001; Milliman et

al., 2003). According to Hudson (2014), an employee not only seeks a paycheck, but also meaningful work and strives towards becoming a whole person who is connected to his/her true self, to others at work and to the transcendent. The element of connectedness or togetherness with others at work has also been emphasised in the experience of spirituality by employees (Gupta, Kumar, & Singh, 2013).

Largely neglected in secular organisations not until a decade ago (Van der Walt & De Klerk, 2015), the construct of spirituality is now emerging in organisation and management studies. These studies present the notion that workplace spirituality as a concept could provide a solution to reduce organisational dysfunctions such as alienation, stress at work and poor organisational climate (Yazdani, Kazemi-Najafabadi, & Saeedi, 2010). Moreover, employees in different roles as well as different organisational contexts have different experiences (Patterson, West, Lawthom, & Nickell, 1997). Despite this, its importance as an individual characteristic, uniquely found in different work settings, has not received adequate attention in organisational studies. This study aims to explore the experience of spirituality among employees in two different organisational contexts, hospitality and educational organisations. This study contributes to the body of knowledge on workplace spirituality by demonstrating the importance of broader structures, such as organisations, in efforts to understand employees' experience of spirituality at the workplace.

LITERATURE REVIEW

Workplace Spirituality

There are many definitions of workplace spirituality. For example, Giacalone and Jurkiewicz (2003) in their definition emphasised the experience of transcendence and the importance of a sense of connectedness and values at work that generate feelings of fulfilment and joy. Workplace spirituality involves positive behaviour such as caring, sharing and respecting, and this encourages a sense of belonging, creativity, personal fulfilment and ownership of one's destiny (Adams & Csiernik, 2002). Marques (2005) highlighted connectedness and trust experienced by individuals, brought about by individual goodwill, resulting in a motivational work culture characterised by solidarity and reciprocity. Despite the various workplace spirituality definitions, consensus among researchers on its definition is still wanting. However, Duchon and Plowman (2005), in reviewing the literature, concluded that in most definitions, the main components were meaningfulness, purpose and connectedness. This study focussed on three dimensions of spirituality, namely meaningful work, sense of community and alignment of the individual's values with those of the organisation. These dimensions were chosen as they were in line with most definitions.

Meaningful Work

Meaningful work, as a dimension of workplace spirituality, denotes at the individual level how an employee interacts

with his or her work and it is assumed that each employee has his/her own motivation and desire to be engaged in activities that could make his/her life and the lives of others more meaningful (Milliman et al., 2003). The spirituality view for meaningful work is that work is not only meant to be challenging or interesting, but it involves, for example, the search for meaning and purpose, the pursuit of one's goals, the expression of one's inner life needs and doing social good to others (Ashmos & Duchon, 2000). Duchon and Plowman (2005) noted that besides viewing work as a vocation, it is also a calling through which one creates greater meaning and identity at the workplace, and meaningful work provides energy and a sense of joy. Meaningful work, therefore, involves experiencing work as purposeful and contributing to others.

Sense of Community

The sense of community dimension involves relationships with others or having a deep connection with others, and this occurs at the group level in a work organisation, where employees interact with their colleagues. In other words, an individual feels that he or she is part of the community and identifies him/herself with the common purpose of the group (Duchon & Plowman 2005). Miller (1992) asserted that community at work involves the belief that individuals view themselves as connected to one another and that there is some kind of relationship between their inner self and the inner self of other people. Neal and Bennett (2000) noted that the sense of community

dimension involves the emotional, mental and spiritual relationship among employees in groups in an organisation. This deep sense of relationship among employees includes support, genuine caring and freedom of expression. Hence, employees who experience a sense of community feel deeply connected to the inner self of others at work.

Alignment of Values

The third dimension of workplace spirituality is the experience of a sense of alignment between individuals' personal values and their organisation's goals and mission (Milliman et al., 2003). This dimension involves the interaction of individuals with the larger organisational purpose (Mitroff, Mitroff, & Denton, 1999). It also means that organisations are characterised by strong conscience and concern about the values and wellbeing of their employees, customers and society (Ashmos & Duchon, 2000). To live by one's inner truth involves functioning in an organisation with integrity as well as purpose that benefits others beyond merely making a profit (Hawley, 1993). Alignment between employee and organisational values involves the notion that employees desire to serve an organisation with not only the goal of being a good corporate citizen, but also as an individual who possesses the critical values of a sharp sense of ethics and integrity, while making significant contribution to the wellbeing of all employees and society at large (Milliman et al., 2003). It can therefore be expected that when employees experience a sense of alignment, they feel positive about their

organisation's values and feel connected to their organisation's mission and goals.

Workplace Spirituality and Organisation Culture

Organisational culture refers to a system of shared values, assumptions and beliefs that direct how individuals behave in organisations (Brown, 1998). According to the organisational culture, multiple needs and the meaningfulness of work framework (Cardador & Rupp, 2010), organisational culture could influence employees' experience of "meaningful tasks, meaningful relationships, and opportunities to further meaningful goals and values" (p. 158). The notion underpinning this theoretical framework is that different organisational cultures can be described with respect to the organisations' values, the approach used to manage their employees and their leadership styles. These characteristics serve as means through which an individual can make sense of their role as an employee (Peterson & Smith, 2000). For example, supportive organisational cultures allow employees to experience meaningfulness from their work, and spirituality can be derived from work when leadership styles include practices such as respect for employee diversity and personal values, establishment of good employee relations, encouragement of employee participation in decision-making and procedural justice.

Correspondingly, emerging studies show not only do different organisational contexts enable differing workplace spirituality experiences (Tiwari, 2014), they also engage in differing degrees of spiritual practices (Ashforth & Pratt, 2010). A notable study on workplace spirituality in hospitality organisations used the dimensions of intrinsic satisfaction, involvement in work, organisation-based self-esteem and organisational commitment (Crawford, Hubbard, Lonis-Shumate, & O'Neill, 2008).

Based on the organizational culture, multiple needs and meaningfulness of work framework (Cardador & Rupp, 2010) and previous literature, it is expected that the experience of workplace spirituality will vary among different organisational contexts, and hence the following hypotheses are formulated:

H1: The experience of meaningful work will be significantly different between employees in the educational and hospitality organisations.

H2: The experience of sense of community will be significantly different between employees in the educational and hospitality organisations.

H3: The experience of alignment of values will be significantly different between employees in the educational and hospitality organisations.

H4: The overall experience workplace spirituality will be significantly different between employees in the educational and hospitality organisations.

METHODS

Sample and Procedure

The study sample consisted of white-collar (e.g. lecturer, administrative officer, manager, account and purchasing executive, clerk), blue-collar (e.g. technician, security supervisor) and pink-collar (e.g. chef, waiter/waitress, housekeeper, receptionist) employees in Greater Kuala Lumpur, Malaysia from organisations in two different industries, namely hospitality (96 employees) and education (102 employees), which are an integral part of the services sector. Six four- or five-star hotels and three private institutions of higher education were involved in this study. In Malaysia, there is a large and growing higher educational services market, more so in the private than in the public sector (Khalid, 2014). The hospitality industry is experiencing vigorous growth in hotel openings with the steady flow of tourists and business travelers, and the popularity of hotels as venues for meetings, conferences and exhibitions continues to soar (Malaysia Property Incorporated, 2009). For the sample in this study, we included only employees with at least three years of work experience, a period which we consider as sufficient for them to experience some form of spirituality at work. Data were gathered using a self-administered questionnaire. The number of organisations and questionnaires distributed in this study depended on the willingness of the organisations to participate and their willingness to assist us in distributing the questionnaires to their employees. The number of questionnaires per organisation varied from 10 to 50. As such, probability sampling was not possible. Using the convenience sampling method, we distributed a total of 246 questionnaires to employees in the nine organisations through our contact persons and obtained 198 (80%) completed questionnaires.

Measurement

Workplace spirituality was measured using the Spirituality at Work (SAW) scale consisting of 21 items by Milliman et al. (2003). The three dimensions of the scale include meaningful work (six items), sense of community (seven items) and alignment of individual and organisational values (eight items). A sample of the items for the meaningful work dimension is, "My work is connected to what I think is important in life," while one for the sense of community dimension is, "I believe employees genuinely care about each other" and with the alignment of values dimension is, "My organisation is concerned about health of employees." The participants were requested to indicate the level of their agreement with statements using a seven-point scale which ranged from 1=strongly disagree to 7=strongly agree.

Analysis of Data

The reliability of each measuring scale was determined by calculating the Cronbach's alpha coefficient. The coefficients for each dimension and for the overall workplace spirituality were acceptable or more than 0.7 (Nunally, 1978) as shown in Table 1.

Mean and standard deviation values were calculated to describe the sample and study variables. An independent sample t-test was conducted to examine the differences between the workplace spirituality means for employees in the hospitality and educational organisations.

Table 1
Reliability of variables

Variable	Number of Items	Cronbach's alpha
Meaningful work	6	0.94
Sense of community	7	0.91
Alignment of values	8	0.95
Workplace spirituality	21	0.98

RESULTS AND DISCUSSION

Demographic Characteristics of the Respondents

The demographic characteristics of the respondents are shown in Table 2. Out of a total 198 employees who participated in this study, 51.5% worked in education and 48.5% worked in hospitality organisations. The participants consisted of 59.1% males and 40.9% females and 68.7% of the respondents were younger employees below 40 years of age. In terms of ethnic distribution, almost half (45.5%) of the employees were Malays, while about a quarter (23.7%) were Chinese and another quarter (22.2%), Indians. The majority (88.9%) had higher education qualifications. A large proportion (83.3%) of the employees were white-collar workers, while a smaller proportion (16.7%) were blue- and pink-collar workers.

Table 2
Demographic characteristics of respondents (n=198)

Variable	Frequency	Percentage
Gender		
Male	81	40.9
Female	117	59.1
Age		
<30	51	25.8
30-39	85	42.9
40-49	40	20.2
≥50	22	11.1
Ethnicity		
Malay	90	45.5
Chinese	47	23.7
Indian	44	22.2
Others	17	8.6
Educational attainment		
High school	22	11.1
Diploma	25	12.6
Bachelor's	40	20.2
Master's	74	37.4
PhD.	37	18.7
Job category		
White collar	165	83.3
Blue collar	11	5.6
Pink collar	22	11.1
Type of organisation		
Education	102	51.5
Hospitality	96	48.5

Workplace Spirituality

Meaningful work, which serves as the basic key element or inner motivation and desire of employees to engage in tasks that provide greater meaning to work, had the highest mean, followed by the sense of community (Table 3). The alignment of values dimension, which reflects the experience of a sense of alignment between employees' personal values and their

organisation's mission and purpose, had the lowest mean. The results indicated that the employees were involved in tasks that could provide substantial meaning to their own lives and to the lives of others, and they felt deeply connected to the inner self of others at work. Their feelings towards the organisation's values were moderately positive and they do not feel very highly connected to the organisation's mission and goals.

Table 3
Mean and standard deviation of variables

Variable	M	SD
Meaningful work	5.13	1.035
Sense of community	5.11	0.995
Alignment of values	4.90	1.073
Overall workplace spirituality	5.05	0.977

Meaningful Work

The first dimension of workplace spirituality is meaningful work. The mean and standard deviation of the meaningful work items are presented in Table 4. The mean for all the items was above 5 (on a seven-point scale), with the exception of one. The item that

was most highly endorsed is, "I understand what gives my work personal meaning" (*M*=5.22, *SD*=1.103). The least endorsed item is, "I look forward to coming to work" (*M*=4.95, *SD*=1.256). The results indicated that the employees viewed work as a means to connect with one's inner self, lending a sense of purpose in daily tasks (Milliman et al., 2003), yet they felt challenged to fully realise meaningful work.

Sense of Community

The second dimension was sense of community. Overall, the employees seem to experience a relatively high sense of community or extent of interaction with other members of the organisation. The item "In my organisation, working cooperatively with others is valued" (*M*=5.30, *SD*=1.099) was most frequently reported. The lowest mean reported was for the item, "I believe employees genuinely care about each other" (*M*=4.91, *SD*=1.165). The results supported Milliman et al.'s (2003) assertion that employees, encouraged by an interaction-driven organisational climate, will gain a sense of spiritual oneness with others' sense of inner self within the professional scope.

Table 4
Means and standard deviation of items measuring workplace spirituality

Item	M	SD
Meaningful work		
I understand what gives my work personal meaning.	5.22	1.10
My work is connected to what I think is important in life.	5.19	1.11
I experience joy in work.	5.16	1.19
I see a connection between work and social good.	5.13	1.16
My spirit is energised by work.	5.11	1.20
I look forward to coming to work.	4.95	1.26
Overall meaningful work	5.13	1.04

Table 4 *(continue)*

Item	M	SD
Sense of community		
In my organisation, working cooperatively with others is valued.	5.30	1.10
I believe people support each other at work.	5.22	1.12
I feel part of a community at work.	5.22	1.15
I think employees are linked by a common purpose.	5.15	1.15
I feel there is a sense of being a part of a family at work.	4.98	1.14
I feel free to express opinions.	4.95	1.26
I believe employees genuinely care about each other.	4.91	1.17
Overall sense of community	5.11	1.00
Alignment of values		
I feel positive about the values of the organisation.	5.11	1.09
My organisation has moral values.	5.11	1.13
I feel connected with the mission of the organisation.	5.02	1.17
My organisation is concerned about the health of employees.	4.99	1.27
I feel connected to the organisation's goals.	4.96	1.17
My organisation cares about all its employees.	4.78	1.27
My organisation cares about whether my spirit is energised or not.	4.63	1.37
My organisation is concerned about the poor.	4.62	1.36
Overall alignment of values	4.90	1.07
Overall workplace spirituality	5.05	0.98

Alignment of Values

With regard to alignment of values, the results of the study showed that overall, the items had relatively lower means. Two items most frequently reported by employees were, "I feel positive about the values of the organisation" (M=5.11, SD= .091) and "My organisation has moral values" (M=5.11, SD=1.133). The two least endorsed items were "My organisation cares about whether my spirit is energised or not" *(M=4.63, SD=1.371)*, and "My organisation is concerned about the poor" (M=4.62, SD=1.361). The results indicated that employees experienced workplace spirituality by way of sharing similar values with their organisation and were connected with what the organisation was trying to do right (Milliman et al., 2003), yet were challenged by perceptions of lower organisational performance in social responsibility towards employees and its impact on society at large.

Comparison between Hospitality and Educational Organisations

The employees in educational organisations obtained higher mean values in all spirituality dimensions than those in hospitality organisations (Table 5). Between the two organisational types, the results showed significant differences among the

three dimensions of spirituality, meaningful work, sense of community and alignment of values, providing evidence that the education and hospitality organisational contexts, respectively bore different degrees of workplace spirituality, as reported by Ashforth and Pratt (2010), and Tiwari (2014).

Hypothesis 1. The experience of meaningful work was significantly (*p*<0.001) different between employees in the education and hospitality organisations. In the education industry, the needs and expectations of clients or students were well-defined, predetermined and homogenous. Therefore, employee task requirements, in the provision of services, especially in the form of teaching and supervision, were more structured. The employees' role was to deliver quality service according to the educational programmes the clients or students had registered for, and within a programme, the needs were similar. As education is a social good, it is not surprising that academics and other employees were more likely to have more satisfying experiences at work. This sense of meaningful work is magnified when the employees believe that students have benefitted from the programmes they pursue, and thus seeing their role as instrumental in connecting daily tasks to the larger good of society.

However, the role of the hospitality industry, perceived as distinct from that of many other services industries (Shani & Pizam, 2009), shapes the employee's sense of meaningful work differently. In

the delivery of time-sensitive and time-appropriate leisure and business services, hospitality organisations pose a different challenge to their employees. The nature of employee task requirements is to meet, and often, to exceed, the ever increasing demands and expectations of each guest that are both varied and inexhaustible. It is not surprising that these employees tended to have a lower sense of fulfilment from their work and therefore, experienced relatively less joy at work (Shani & Pizam, 2009).

In addition, the hospitality industry's reputation for gruelling hours allowed less room for employees to reflect on what daily tasks meant in their spiritual lives. According to Sim and Bujang (2012), most hospitality employees, both managerial and non-managerial levels, are required to work long and irregular hours because hotels operate 24 hours daily. Hotels usually encourage employees, especially managers, to work longer hours. Many work schedules of hotels are countercyclical to the schedules of most other organisations. The busiest shifts in hotels are when most other employees are not working i.e. during weekends and public holidays. Therefore, the attrition rate is found to be higher among employees of this industry in comparison with other industries (Gupta, 2015; Shani & Pizam, 2009).

De Klerk, Boshoff and Van Wyk (2006) offered another explanation for the differences in meaningful work experience between organisations. According to them, white-collar workers and non-white collar workers view meaningful work experiences

differently; white-collar workers tend to recognise that meaningful work is more important to their lives than do blue-collar workers. This research supported the occurrence of differences in meaningful work experience between the educational and hospitality employees, given that the educational organisations are predominantly populated with more white-collar workers (academics, administrators, clerks) than the hospitality organisations (96.1% vs. 69.8%). The larger proportion of blue- and pink-collar workers (30.2%) are found in the hospitality organisations, whereas the smaller proportion of blue-collar workers (3.9%) are in the educational organisations.

Hypothesis 2. The experience of sense of community was significantly ($p<0.001$) different between employees in the educational and hospitality organisations. Here, we examined whether employees experienced a deep sense of connectedness with colleagues and colleagues' work. We were interested to know whether an employee felt part of the group that he or she worked with, and could identify him/herself with the common purpose of the group. In the education industry, the organisational structure was relatively less hierarchical, especially in the academic departments that permitted employee interaction, thus, generating a greater sense of community compared with the hospitality industry. This is especially so when academics are involved in conducting teamwork research that requires them to work closely with their colleagues in the process of sharing

ideas and knowledge. As for the hospitality organisations, the culture of knowledge sharing is less robust. Researchers found that the tendency for employees in an industry climate of high employee turnover was to hoard, rather than to share knowledge (Hu, Horng, & Sun, (2009). In fact, the development of new teams has stagnated (Chan, Go, & Pine, 1998).

Hypothesis 3. The experience of alignment of values was significantly ($p<0.01$) different between employees in the education and hospitality organisations. Here, we were interested to know whether an employee was working in an organisation whose goals benefitted clients beyond the goal of making a profit. The results indicated that in educational organisations, there seemed to be a greater alignment of employees' and organisational values. The organisational values are reflected in the goal of not only making a profit but making a contribution to the wellbeing of employees, customers and society. The employees in the education organisations seemed to have a more positive attitude toward organisational values than those in the hospitality organisations. Possibly, there was some form of association between cognitive development of academics and higher educational attainment and spiritual development as found by Van der Walt and De Klerk (2015).

Hypothesis 4. The overall experience of workplace spirituality was reported as significantly different between employees in

the educational and hospitality organisations. Table 5 shows that employees from the education organisations (*M*=5.29, *SD*=0.85) recorded a significantly higher mean value in overall workplace spirituality than those from the hospitality organisations (*M*=4.80, *SD*=1.05) (*p*<0.001). The differences in the

experience of spirituality could be due to the different types of organisation culture that define organisational values, management approaches and leadership styles that consequently shape employees' experience in trying to make sense of work (Peterson & Smith, 2000).

Table 5
Results of t-test for workplace spirituality and its dimensions

Spirituality/Dimension	Organisation	Mean	S.D	*t*
Meaningful work	Hospitality	4.86	1.05	-3.70***
	Education	5.38	0.96	
Sense of community	Hospitality	4.81	1.09	-4.22***
	Education	5.39	0.81	
Alignment of values	Hospitality	4.70	1.11	-2.55**
	Education	5.09	1.01	
Overall workplace spirituality	Hospitality	4.80	1.05	-3.67***
	Education	5.29	0.85	

Note: ***p<0.001, **p<0.01

The present study had some limitations. Our results may be vulnerable to problems of response bias since the data were collected using self-report. However, since in this study, workplace spirituality involved individual experience, self-report was an acceptable means for measuring the construct. Additionally, the study used a sample that posed a limitation to its external validity. The sample included employees in only two private service industries, namely the educational and hospitality industries. Given the limited number of employees and organisations, the results of this study may not be generalised to the employee population in these service organisations. It would have been more

desirable to have studies with a larger data set from other private higher educational and hospitality organisations to improve the generalisability of the results. However, the results of this study serve as an initial effort towards understanding employee workplace spirituality in these two service organisations. Although the hotels and the educational institutions from which the sample was drawn were from different industries, namely hospitality and education, and were from industries experiencing vigorous growth currently, one can argue that these organisations were in fact in a similar category of industry, namely the service industry, and more specifically, the human help industry. A comparison made

between more dissimilar industries, such as manufacturing and service, may be more desirable.

CONCLUSION

This study served as an initial step towards further understanding the possible influence of organisational culture on workplace spirituality. The results of this investigation revealed that workplace spirituality may be linked to the organisational context. In order to achieve a better understanding of employees' experience of spirituality in different organisational contexts, further empirical research is recommended. The results implied that organisational context needs to be considered as a possible moderating variable or a variable that needs to be controlled when investigating outcomes of spirituality. Finally, if educational and hospitality organisations are to tap into employees' workplace spirituality experience as a resource for better performance, human resource programmes that enhance spirituality must be designed carefully to provide a proper context and narrative and suitable implementation for a positive outcome.

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SOCIAL SCIENCES & HUMANITIES

Linking Workplace Spirituality and Employee Commitment in Malaysian Public Service Organizations

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ABSTRACT

For more than two decades, antecedents of employee commitment have been studied. However, few scholars have promoted spirituality as an antecedent of commitment, especially among public service employees, and the findings on the relative contribution of different spirituality dimensions to commitment were inconclusive. This study examined the experience of spirituality at work and its linkage with affective commitment among employees from four Malaysian public rural development organisations. Workplace spirituality was examined in terms of meaningfulness of work, sense of community and alignment of employee and organisational values. Questionnaire-based survey data from 274 employees were analysed. The findings indicated that the employees experienced a great sense of meaningfulness of work, sense of community and alignment with organisational values. The meaningfulness of work and alignment of values dimensions of spirituality significantly affected employee affective commitment to the organisations. However, the sense of community did not significantly affect commitment. Workplace spirituality dimensions explained 26.7% of the variance in affective commitment. Implications of the findings and suggestions for future research are discussed.

Keywords: Affective commitment, Malaysia, public service, workplace spirituality

INTRODUCTION

Workplace spirituality refers to "the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in a community" as defined by Ashmos and Duchon (2000). They asserted that to

achieve an understanding of employees holistically, there is a need to nurture employees' spiritual development, besides employees' intelligence quotient (IQ) and emotional quotient (EQ) development. The three dimensions of workplace spirituality at three levels, meaningful work (individual), sense of community (group) and alignment with organisational values (organisation), were empirically identified and measured by Milliman, Czaplewski and Ferguson (2003).

The concept of workplace spirituality has been largely excluded in empirical studies due to the sustained confusion as to how workplace spirituality differs from religion. Individuals who experience spirituality at work have souls that are nourished, and they experience a sense of meaning in the tasks they perform and feel connected to members of their organisation (Ashmos & Duchon, 2000; Milliman et al., 2003). The feeling of connectedness with colleagues at work has also been emphasised by Gupta, Kumar and Singh (2013). Meaningful work is something that an employee seeks besides a paycheck, and the employee attempts to develop as a whole person who is connected to his or her true self and to the workplace community as well as to the transcendent (Hudson, 2014).

However, there are scholars who argue against the belief that spirituality at work is distinctly different from religion. De Jongh (2011) argued that spirituality and religion are interconnected and overlapping since religious traditions primarily serve as the roots of spirituality. King, Reilly and Hebl (2008) believed that omitting religion from studies on workplace spirituality could be problematic and futile as contemporary workplaces are ultimately an extension of employees' lived life where they bring a diversity of spirituality practices and expressions, including religious-based spirituality, to work. Despite the absence of a widely accepted definition (Kinjerski & Skrypnek, 2006), there seems to be a consensus on the multifaceted nature of the spirituality construct, which involves the search for something meaningful that transcends our lives as shown by the notable works of Ashmos and Duchon (2000), and Milliman et al. (2003).

Besides defining and measuring workplace spirituality, interest in empirical studies on workplace spirituality has grown among contemporary researchers. Over the years, there has seemed to be a fundamental shift in organisational studies from a mechanistic paradigm to a spiritual paradigm where contemporary organisations eventually turn their attention to acknowledging and nourishing values such as ethical and moral leadership style, since by embracing workplace spirituality, organisations are able to realise continuous profitability, social responsibility and business sustainability (Wahid & Mustamil, 2017).

The previous notion that spirituality is unimportant to organisational effectiveness and efficiency, and that spirituality and management in organisations are incompatible has been opposed, and gradually they are recognised to be linked together so as to improve work outcomes

(James, Miles, & Mullins, 2011). This might partly be due to the belief that spirituality is more difficult to define and measure.

Researchers and practitioners realise that promoting spirituality at work may help improve organisational outcomes such as employee performance (James et al., 2011), work engagement and organisational citizenship behaviour (Ahmad & Omar, 2015; Petchsawang & McLean, 2017), productivity and contribution to the organisation, decision-making and problem-solving abilities, intuitive and creativity capacities and efficient use of resources, both human and material (Weitz, Vardi, & Setter, 2012). Additionally, organisations that promote spirituality grow faster, increase their efficiencies and have higher return rates than organisations that do not (Jurkiewicz & Giacalone, 2004). If appropriately integrated in management, spirituality can reduce employee turnover (Ghadi, 2017). Conversely, the lack of support for spirituality may result in possible negative effects, including job dissatisfaction and workplace deviant behaviour (Ahmad & Omar, 2014). Apart from these possible negative effects, it must be acknowledged that in some organisations, when employees only bring their physical bodies to work, not their inner self or soul, and the lack of workplace opportunities and support to experience meaningful work, sense of community and personal fulfilment with a sense of joy, a serious threat is posed to employees' emotional attachment or commitment to their organisation (Rego & Cunha, 2008).

However, empirical research on workplace spirituality as an antecedent of organisational commitment is still scarce. To date, such research has been examined mostly in the North American and European contexts (Bell-Ellis, Jones, Longstreth, & Neal, 2015; Milliman et al., 2003; Rego & Cunha, 2008), with a few exceptions in Asian countries such as that done by Campbell and Yen (2014), and Indartono and Wulandari (2014). Further, the need to investigate the spirituality-commitment relationship in different cultures has been emphasised by Vandenberghe (2011), while it has also been pointed out that the strength of the relationship might vary in different cultures (Fischer & Mansell, 2009). A review of literature in the following section of this paper indicated that findings on the relative contribution of different spirituality dimensions to employee commitment were inconclusive. Given the limited literature and the inconclusive findings, this study examined the experience of spirituality at work and its linkage with affective commitment among Malaysian public service employees. Workplace spirituality was examined in terms of meaningfulness of work, sense of community and alignment of employee and organisational values.

This study added literature on workplace spirituality where limited studies on the linkage between spirituality and organisational commitment exist. We present theoretical and empirical evidence on how employee experience of spirituality at work helps to explain their organisational commitment. While there have been

investigations on this linkage among employees in higher education institutions (Bell-Ellis et al., 2015; Campbell & Yen, 2014) and the banking sector (Indartono & Wulandari, 2014), as well as among working students in higher education institutions (Rego & Cunha, 2008), to the best of our knowledge, this is the first spirituality-commitment study conducted among employees in the government's rural development organisations.

Additionally, we used Houston and Cartwright's (2007) findings to support our study. They found that employees in government public service occupations were more spiritual in terms of the experience of interconnectedness, meaningfulness of life, compassion for others and transcendence than other employees. This study intended to address two gaps in research on workplace spirituality and public service organisations; the first was the spirituality-commitment linkage and the second was the differences in employees' spiritual experience in different organisational contexts. If organisations that nurture workplace spirituality such as public service organisations are shown to boost levels of employee commitment, this may honour the claim that spiritual expression at work has its important role in fostering this positive outcome and the disregard of such expression has to be addressed.

LITERATURE REVIEW

Workplace Spirituality

Workplace spirituality has been defined by many scholars. It has been defined as a framework consisting of organisational values that enhances the experience of transcendence among employees through the work process, promoting employees' sense of connectedness to others in the organisation such that they experience joy and a sense of completeness (Giacalone & Jurkiewicz, 2003). According to Csiernik and Adams (2002), workplace spirituality involves valuing, sharing, caring, acknowledging and respecting employees as well as connecting employees' talents and energies in meaningful or fulfilling goal-directed behaviour. It refers to the experience of relatedness and trust among employees, prompted by individual goodwill, ensuing a motivational organisational culture characterised by solidarity and reciprocity and leading to improved organisational performance (Marques, Dhiman, & King, 2005). Despite the many definitions of workplace spirituality, scholars have not come to a consensus on a unified definition. However, we found in our literature review that Duchon and Plowman (2005) concluded that meaningful work, sense of purpose and connectedness are the main components of most definitions.

One of the first scales for measuring workplace spirituality was developed and tested by Ashmos and Duchon (2000). Building on Ashmos and Duchon's (2000) work, Milliman et al. (2003) defined a spiritual workplace as a workplace where an individual is allowed to express his or her inner self through meaningful work within a community context. Milliman et al. (2003) added the third dimension of workplace spirituality, namely alignment

with organisational values in place of inner life. Rego and Cunha (2008) used these three dimensions, meaningfulness of work, sense of community and value alignment, based on three reasons. Firstly, these dimensions were considered important in past studies. Secondly, it is expected that these dimensions were associated with work attitudes and behaviour. Thirdly, the dimensions allow for a parsimonious investigation of workplace spirituality. In this study, we focused on these three dimensions.

Spirituality in Public Service

Literature on spirituality in public service focusses on issues related to the prevalence of spirituality, spiritual perspectives and practices as well as legal issues on spirituality among public service employees. Houston and Cartwright (2007) examined whether workers in government public service organisations are more spiritual than those in other types of occupation. They found government public services were more spiritual in terms of attitude compared with employees from other types of organisation. Belief in the spiritual dimensions of compassion for others and transcendence were more prominent among public service employees, as was with experience of interconnectedness and meaningfulness of life.

The literature has shown the integration of spirituality in several work settings such as healthcare and education and there seems to be some commonalities. The commonalities include the need for access to spiritual resources and spirituality assessment. Wilfred (2006) identified the factors predicting spiritual care perspectives and practices among nurses and healthcare workers, and found that their individual and personal spirituality influenced their spiritual care practices and perspectives. According to Lowery (2005), with the growing interest in spirituality in American higher education, it is absolutely important that administrators and faculty in public colleges and universities are familiar with legal issues and their implications when trying to address spirituality more effectively. Considering the lack of focus on outcomes of workplace spirituality in literature on the public service, this study focussed on the linkage between workplace spirituality and organisational outcome, specifically affective commitment among employees in the government public service.

Model of Workplace Spirituality and Commitment

Fry, Latham, Clinebell and Krahnke (2017) proposed a model that links workplace spirituality to employee commitment. According to this model, workplace spirituality produces a sense of calling and membership or sense of community, which are linked to affective commitment. The sense of calling instilled through leaders who are spiritual provides a sense of meaningfulness of work that fosters employee affective commitment to the organisation. Fry et al. (2017) did a study on recipients of the Baldrige Performance Excellence Program award and found that

spiritual leadership was linked positively and significantly to organisational commitment. Other studies have shown that meaningful work correlates positively with affective commitment (Humphrey, Nahrgang, & Morgeson, 2007; Korek, Felfe, & Zaepernick-Rothe, 2010). Although Fry et al.'s (2017) model has not explicitly included alignment of values between employees and the organisation as an antecedent of commitment, as demonstrated by Milliman et al. (2003), others argue that when employees experience a sense of meaning at work, there exists compatibility between employees' and organisational values in the work environment (Campbell & Yen, 2014; Rego & Cunha, 2008; Vandenberghe, 2011). Such compatibility between the employee and the environment leads to organisational identification, a basis for affective commitment.

With regard to membership or sense of community in this model, it is proposed that there is an association between membership and commitment (Vandenberghe, 2011). As widely recognised, an employee's sense of belonging to an organisation is positively linked with affective commitment (Humphrey et al., 2007; Korek et al., 2010). Fulfilling group members' need for belonging generates identification among group members (Riketta, 2008). Psychological ownership with four dimensions comprising self-efficacy, self-identity, sense of belonging and accountability is positively associated with affective commitment (Avey, Avolio, Crossley, & Luthans, 2009). Theoretically, affective commitment is grounded on group

membership, and people whose affective commitment is high tend to be motivated by the goals set by the group (Johnson & Yang, 2010).

Workplace Spirituality and Affective Commitment

According to Meyer and Allen (1991), organisational commitment includes three components: affective commitment, which represents an involvement in and identification with the organisation; normative commitment, which reflects loyalty resulting from an employee's obligation towards the organisation; and continuance commitment, which represents attachment to the organisation derived from a perceived cost attached to leaving the organisation. An employee is affectively committed to the organisation when he or she becomes involved in the organisation, views the involvement as valuable, and/ or derives identity from such involvement. Among the three forms of commitment, research has shown affective commitment to be the strongest and most reliable predictor of positive organisational outcomes such as performance (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

Milliman et al. (2003), the first to empirically study outcomes of workplace spirituality, examined the association between the three dimensions of spirituality (meaningful work, sense of community and alignment of values) and five work attitudes, including affective organisational commitment among part-time MBA students in business school in the United

States. Almost all of these students worked full-time. Accordingly, meaningful work, sense of community and value alignment explained affective commitment, besides other work attitudes. The three dimensions of spirituality affected commitment differently. The results of their study showed that alignment of values has a stronger effect on commitment than other dimensions of workplace spirituality.

A study by Rego and Cunha (2008) examined the impact of five spirituality dimensions (sense of community, value alignment, sense of contribution, sense of joy at work, opportunities for inner self) on the three forms (affective, normative and continuance) of organisational commitment among Portuguese employees. The results of their study showed that the spirituality dimensions affect each of the commitment dimensions differently. The five dimensions of spirituality explain affective commitment the most compared with normative and continuance commitment, where the explained variances for the two latter forms of commitment are very much lower. Affective commitment is affected by sense of joy, alignment of values and sense of community. Sense of enjoyment, which is part of the meaningful work dimension based on Milliman et al.'s categorisation of spirituality dimensions, contributes the most to the variance in affective commitment (2003).

The relationships between spirituality dimensions and commitment among Malaysian academics have been studied by Campbell and Yen (2014). The three dimensions of workplace spirituality (value alignment, opportunities for inner life and work enjoyment and contribution to society) have a positive impact on affective commitment. Value alignment, sense of enjoyment and contribution to society explain affective commitment more than opportunity for inner life. A similar study among Indonesian employees in the banking sector by Indartono and Wulandari (2014) revealed that overall workplace spirituality significantly contributed to organisational commitment, although this study did not examine the contribution of each spirituality dimension to each component of commitment.

A study conducted in the United States investigated the impact of four spirituality dimensions on organisational commitment, namely sense of community, engaging work, spiritual connection and mystical experience, among academics from two universities (Bell-Ellis et al., 2015). After removing the mystical experience dimension from the regression analysis due to multicollinearity, the sense of community and engaging work dimensions contributed more than the spiritual connection dimension to the variance in commitment.

Based on the literature review, with the exception of Bell-Ellis et al. (2015), the rest of the researchers studied workplace spirituality in terms of at least two, if not all, of the three dimensions proposed by Milliman et al. (2003). Additionally, there seems to be inconclusive findings on the relative contribution of different spirituality dimensions to affective commitment.

Hence, there is a need to further examine the spirituality-commitment linkage and in this study, drawing from Vandenberghe's model (2011) and other empirical literature, we propose the following hypothesis: There is a significant positive relationship between the dimensions of workplace spirituality and affective commitment.

METHODS

Sample and Procedure

We determined the sample size using Cohen's (1988) formula. For a study involving multiple regression analysis with three independent variables, a power value of 0.8 and an α-value of 0.05, the required minimum sample size is 200. The participants in this study comprised employees involved in poverty alleviation programmes from four public rural development organisations in Malaysia. Only employees with a minimum of a three-year work experience were studied since we considered this span of time as being sufficient for an employee to experience some form of workplace spirituality. Proportionate sampling was used, where from a population of 1133 employees, a sample of 283 employees were selected (25%) from each of the four organisations. With permission from the general manager of each organisation, self-administered questionnaires were distributed and we obtained 274 usable questionnaires.

Measurement

Workplace spirituality. Twenty-one items were adopted from the Spirituality at Work scale by Milliman et al. (2003). The scale consisted of three dimensions: meaningful work (six items), value alignment (eight items) and employee sense of community (seven items). A sample of the items for measuring the dimensions of meaningful work is, "My work is connected to what I think is important in life," while for sense of community, a sample is, "I believe employees genuinely care about each other" and for alignment of values, "I feel positive about the values of the organisation." Using a seven-point rating scale from 1 – strongly disagree to 7 – strongly agree, employees were requested to indicate their level of agreement with the statements.

Affective commitment. Affective commitment was measured using Allen and Meyer's (1997) six-item scale. Among the three dimensions of organisational commitment, we studied affective commitment since research has shown that it is the strongest and most reliable predictor of positive work outcomes (Allen, Shore, & Griffeth, 2003). For example, Fazio Gong, Sims and Yurova (2017), and Allen, Evans and White (2011) as well as Morin et al. (2011) have shown significant relationships between affective commitment and employee turnover and citizenship behaviour, respectively. The

scale has response options from 1 – strongly disagree to 7 – strongly agree. This scale measures the extent to which an individual is emotionally attached to the organisation. A sample item is, "I would be very happy to spend the rest of my career with this organisation."

Analysis of data. The Cronbach's alpha reliability coefficients of the scales used to measure the variables were calculated. The coefficients for the three dimensions of workplace spirituality and affective commitment were acceptable (more than 0.7) (Table 1). To describe the study sample and variables, frequencies, percentages, means and standard deviation were computed. We conducted a zero-order correlation analysis to examine the relationships among the variables and multiple regression analysis to

determine the contribution of the predictor variables to affective commitment.

Table 1
Reliability of variables

Variable	Number of items	Cronbach's alpha
Meaningful work	6	0.94
Sense of community	7	0.92
Alignment of values	8	0.94
Affective commitment	6	0.75

RESULTS

The employees' demographic characteristics are shown in Table 2. Out of 274 employees in this study, 38.7% were males and 61.3% were females. In terms of age, a substantial proportion (60.2%) were younger employees, aged below 40 years, and the mean age was 38.66 (SD=10.87). Approximately half (50.3%) had higher education qualifications.

Table 2
Demographic characteristics of respondents (n=274)

Variable	Frequency	Percentage	Mean	SD
Gender				
Male	106	38.7		
Female	168	61.3		
Age			38.66	10.87
20-30	81	29.6		
31-40	84	30.6		
41-50	44	16.1		
≥51	65	23.7		
Education				
Higher School Certificate	84	30.7		
High School Certificate/Vocational School Certificate	52	19.0		
Diploma	66	24.1		
Bachelor's	70	25.5		
Master's	2	0.7		

Table 3 presents the mean, standard deviation and inter-correlation among the variables. Overall, the employees experiences high levels of spirituality at their workplace. The highest mean score was for meaningful work. The mean scores for sense of community and value alignment were slightly lower and about the same. All the three dimensions of spirituality correlated significantly with affective commitment, with the lowest correlation coefficient at 0.391 (p<0.01). The correlation coefficients for the spirituality dimensions were acceptable (<0.9) (Hair, Black, Babin, & Anderson, 2010). Additionally, the collinearity statistics indicated that the tolerance values of all the predictor variables were less than 1, and the variance inflated factor was less than 10. Hence, there was no evidence of collinearity effects.

The regression analysis results are presented in Table 4 and show how the three spirituality dimensions explain affective organisational commitment. Meaningful work and alignment of values contributed significantly to affective commitment. However, sense of community did not significantly contribute to commitment. Overall, the three spirituality dimensions contributed 26.7% of the variance for affective commitment.

Table 3
Mean, standard deviation and correlation

Variable	*M*	*SD*	1	2	3	4
Meaningful work	6.00	0.74	-			
Sense of community	5.74	0.77	0.82**	-		
Alignment of values	5.70	0.80	0.79**	0.84**	-	
Affective commitment	5.70	0.980	0.50**	0.39**	0.49**	-

Note: ** p<0.01

Table 4
Regression analysis for variables predicting affective commitment

Variable	B	Std. Error	Beta	*t*
Constant	1.75	0.44		4.00***
Meaningful work	0.62	0.13	0.47	4.68***
Sense of community	-0.28	0.15	-0.22	-1.93
Alignment of values	0.33	0.13	0.27	2.54**

Note: ** p<0.01; *** p<0.001
R^2=0.27; Adjusted R^2=0.26; $F_{3,481}$=30.44, p<0.001

DISCUSSION

Based on the means of the three dimensions of spirituality, the results indicated that the employees experienced high levels of meaningful work, sense of community and value alignment. For meaningful work and sense of community, the results were in line with those obtained by Houston and Cartwright (2007), whose study revealed that employees in public service organisations regarded themselves as spiritual. Moreover, the experience of interconnectedness, or sense of community, was greater for employees in the public service than for non-public service employees. According to Houston and Cartwright (2007), public service implicitly attracts individuals with the inclination of fulfilling the needs of others, fulfilling their own needs through service to others and developing themselves through meaningful work.

The correlation analysis revealed that meaningful work was significantly associated with affective commitment. A synthesis of common features of meaningful work based on a review of empirical and theoretical work by Ghadi, Fernando and Caputi (2015) revealed that meaningful work resulted when an employee understood perfectly task expectations and how the employee's role contributed to the goals of the organisation. The literature review shows that meaningful work motivates an employee through fulfilment of purpose in life, increasing employees' emotional attachment to the organisation. Our findings on meaningful work were in line with those of Campbell and Yen (2014), Indartono and

Wulandari (2014), Milliman et al. (2003) and Rego and Cunha (2008).

In this study, alignment of values was significantly correlated to affective commitment. The results suggested that the organisations in this study provide an environment that takes employees into consideration and they are responsive to their employees' sense of values, and such an environment enhances employees' affective commitment or emotional attachment to their organisations. Our results supported those of Rego and Cunha (2008) as well as Indartono and Wulandari (2014).

The results also indicated that sense of community was significantly correlated to affective commitment. Employees who interacted and identified themselves with the group they worked with and viewed their inner self as connected to the inner self of others or had a deep sense of connectedness to others tended to be emotionally attached to the organisation. In other words, a deep sense of connectedness among employees, which involves care, support, respect, recognition and freedom to express oneself, accentuates their affective commitment. Our correlation results were in line with those of Campbell and Yen (2014), Fry et al. (2017), Milliman et al. (2003) and Rego and Cunha (2008).

According to studies conducted by Milliman et al. (2003) and Rego and Cunha (2008), the three dimensions of spirituality affected commitment differently. In terms of the strength of the relationships, they found that alignment of values had a stronger effect on commitment than other

dimensions of workplace spirituality. However, in our study, out of the two dimensions that contributed significantly to affective commitment, meaningful work contributed more than alignment of values. As in Rego and Cunha's study (2008), affective commitment was affected by sense of joy, alignment of values and sense of community. Sense of enjoyment, which is part of the meaningful work dimension based on Milliman et al.'s (2003) categorisation of spirituality dimensions, contributed the most to the variance in affective commitment. This results seemed to be consistent with our result.

As expected, the two spirituality dimensions, meaningful work and alignment of values, contributed significantly to affective commitment. Employees' experience of meaningful work could explain more deeply why individuals are more emotionally attached to their organisation than the experience of value alignment. However, sense of community does not significantly contribute to commitment. It seems that the two other dimensions, meaningful work and value alignment, are more influential in explaining affective commitment than sense of community.

Our results, with respect to the link between meaningful work and sense of community, were consistent with theoretical and empirical evidence. The model of workplace spirituality and commitment by Vandenberghe (2011) as well as previous empirical findings discussed earlier in this paper (Campbell & Yen, 2014; Milliman et

al., 2003; Rego & Cunha, 2008) suggested that when employees find meaning at work or experience a sense of enjoyment and contribution to society, as well as interact and identify themselves with the work group, they become more affectively committed to their organisation. Concurrently, our study suggested that neglecting certain aspects of spirituality, namely meaningful work and sense of community at work, can lead to lower employee affective commitment.

Contrary to the notion that bureaucracy in the government service has negative implications on employees' souls (Weber, 1958), there was evidence that the employees in this study were spiritual and their spirituality inspired commitment to public service. Efforts to develop and nurture an ethic of public service grounded on the foundation of spirituality are well-suited with the nature of public service employees. The human resource division of these organisations should encourage managers to redesign jobs such that employees can experience meaningful work and find the job more fulfilling. Berg, Dutton and Wrzesniewski (2013) emphasised the importance of crafting jobs in such a way that employees find meaning and identity at work. Additionally, they asserted that job crafting leads to positive organisational outcomes. Besides job redesign, there is a need to improve spirituality climates in order to promote affective commitment. In organisations where employees' spiritual needs are satisfied by the experience of enjoyment and the feeling of being valued

and respected at work, it is probable that employees will be more emotionally attached to their organisations.

There were a few limitations to this study. First, the collection of data through self-report and common method variance, which may lead to statistical relationships that are inflated, could have been limitations. Future studies may use a method that allows data for the independent and dependent variables to be collected from two different sources. Second, the study sample was limited to Malaysian employees in government public service organisations; hence, we may not be able to generalise the results to employees in the private sector or in other industries. Future researchers may collect data from both government and private service organisations so that comparisons of spirituality experience as well as the spirituality-commitment link in different settings can be better understood.

CONCLUSION

The study contributed by narrowing the gap in the public administration literature, which has few studies on workplace spirituality in the public service. Recognising the scarcity of literature linking spirituality and commitment in the public service, this paper helps us better understand the potential positive influence of personal spirituality experience at work on commitment that can result when organisations support employees' needs in terms of spirituality. It is therefore pertinent for organisations to cultivate a spiritual climate to improve employees' affective commitment to their organisation. Without further investigation into the spirituality-commitment link, a more comprehensive understanding of employee commitment will remain unachieved.

The results imply that the climate within which employees perform work is important in enhancing commitment. It is therefore pertinent for human resource professionals in organisations to cultivate a spiritually rich climate by providing employees with a sense of the organisation's purpose and values, fostering alignment between individual goals and the organisation's vision, promoting a sense of community among members and providing opportunities for personal fulfilment as well as expressing appreciation for employees' contribution.

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(Manuscript Preparation & Submission Guide)

Revised: June 2016

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MANUSCRIPT PREPARATION

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George Swan[1] and Nayan Kanwal[2]

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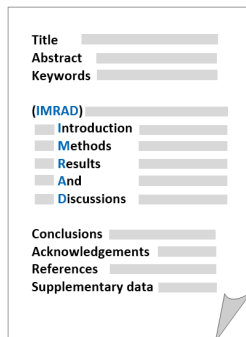
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