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Contents

Invited Paper

Editorial[i]: Culture, Heritage and Tourism in Southeast Asia

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ABSTRACT

This editorial brings together several issues on which I have been working during the past two decades. Studies of tourism development in Southeast Asia were still in their infancy in the early 1990s when I became involved in a multidisciplinary programme of research to investigate various dimensions of tourism in Malaysia, Indonesia, Thailand and Singapore. But the importance which governments in the region from the 1980s onwards gave to the promotion of the tourism industry in their national plans was a major factor in the expansion of academic research in this field of studies. Tourism studies have acquired scholarly respectability and my recent interests have since moved into an examination of the relationships between culture, identity, heritage and tourism in Southeast Asia, with a particular focus on the comparison of UNESCO World Heritage Sites in the region.

Keywords: Culture, heritage, identity, tourism, Southeast Asia

CULTURE AND SOUTHEAST ASIA

What I want to emphasise, as John Clammer has done eloquently before me (2009, p.9-11), is that Southeast Asia is characterised, though it is not clearly and unequivocally defined by cultural diversity and openness. It has a long history of cultural connections with other parts of the world, and it demonstrates the importance of physical migrations and cultural flows into, across and out of the region, which have generated cross-cultural encounters and social intercourse. These interactions have in turn resulted in cultural hybridisation, synthesis and mixed communities, in the phenomenon of pluralism or multiculturalism within national boundaries, and in the co-existence of culturally different majority and minority populations. A major arena within which culture and cultural change operates across the region is that of tourism and the cross-cultural, cross-national and cross-ethnic encounters which it engenders.

The processes of cultural differentiation and interaction have made Southeast Asia one of the most culturally complex and fascinating regions in the world. Indeed, there are those who have argued that it is 'the ubiquity of publicly displayed cultural forms' (Bowen, 1995, p.1047-1048) and the fact that Southeast Asia is 'arguably the best place to look for culture' (Steedly, 1999, p.432-433) which serve to define it as a region. The centrality of culture has in turn prompted social scientists of a particular theoretical persuasion, to pursue these cultural expressions relentlessly and develop a particular way of perceiving and analysing culture in the region (Bowen, 2000; and *see* King, 2001, 2005). On this last point, Mary Steedly suggests that it is the work of a particular assembly of American social scientists, pre-eminent among them being Clifford Geertz, which 'have thoroughly associated this part of the world, and Indonesia in particular, with a meaning-based,

interpretive concept of culture' (1999, p.432). Yet, the situation in Southeast Asia has become, if anything, infinitely more complex since Geertz turned his early forensic attention to Javanese community rituals (slametan) and Balinese cockfights (1973). More recently, processes of cultural change in the region have become intertwined with and indeed are generated by modern forms of globalisation, the expansion of consumer culture under late capitalism, the rapidly growing influence of the global media and trans-national communication systems, and very importantly international tourism. Zygmunt Baumann, for example, has pointed to a shift from the importance of political economy to the centrality of culture in post-modern society so that power, influence and control operate in more subtle ways through advertising, public relations and the creation of needs and longings by those who generate and control flows of information and knowledge (1987, 1998).

As regional specialists of Southeast Asia, there is an increasing and vital need for us to understand the character of cultural change and encounters in the region and the responses of the local people to this bewildering range of forces, pressures and influences. I would argue, therefore, that the comparative, region-wide study of culture is central to our enterprise as social scientists and within that the importance of understanding identity and its construction and transformation. It is with these considerations in mind that I also argue that we need to devote much more attention than hitherto to the multidimensional and cultural context of tourism and heritage and the ways in which the rapid and dramatic expansion of tourism in Southeast Asia is both changing cultural forms and being shaped by local cultures. Indeed, when we examine tourism development in the region, we have to immediately address the issue of culture and the fact that cultural tourism is a major focus of interest for both international and domestic tourists. This interest has in turn been strengthened with the more recent introduction of the concept of heritage and the importance of UNESCO World Heritage Sites in the tourism and heritage industry in Southeast Asia.

THE CONCEPT OF CULTURE

It goes without saying that 'culture' is one of the most crucial, though overworked, and indeed 'complicated', 'complex', 'controversial' and 'divergent' concepts in the social sciences and, given its status as a focal point of interest, it has quite naturally been the subject of the most intense debates and disagreements. Of course, it does not help that it is a term which is also used in a multitude of different ways in popular discourse and that it occurs with alarming and confusing regularity in discussions within and across a range of academic disciplines. In these debates culture is (or more specifically elements of it are) produced or constructed, deconstructed, invented, reinvented, reproduced, modified, discarded, lost, contemplated, inherited, disseminated, adopted, assimilated, absorbed, deployed, manipulated, elaborated, displayed, commoditised, exchanged, and transformed. Chris Jenks in his book Culture in the Routledge 'Key Ideas' series presents us with a health warning when he says 'the idea of culture embraces a range of topics, processes, differences and even paradoxes such that only a confident and wise person would begin to pontificate about it and perhaps only a fool would attempt to write a book about it' (1993, p.1).

Culture is therefore a concept; it is, as Kahn proposes, an 'intellectual construct' (1992, p. 161). For me, the following considerations are important. Culture is taught, learned, shared and transmitted as a part of collective life. It comprises the ideational, conceptual, conscious dimension of human life and the ideas, accumulated skills and expertise embodied in material objects (art and artefacts) and carried and given expression most vitally in language. It encompasses the symbolic, meaningful, evaluative, interpretative, motivated, cognitive and classificatory dimensions of humanity (Geertz, 1973). It refers in its more popular connotations to 'ways of life' and 'ways of behaving'; it is therefore pervasive. It has to be understood in terms of form, content and process and although there are cultural regularities and continuities which are easily detected, there are

also quite obviously alterations, modifications and transformations. In some ways, though not as neatly bounded as was once originally supposed, it is patterned and has a certain systematic quality so that someone who has not been socialised into a particular culture, can, when he or she has discovered its ethical judgements, values, standards, beliefs and views of the world, and the bases of human interaction, organisation and behaviour, make sense of it even without necessarily approving of its underlying principles.

THE CONCEPT OF HERITAGE

Much of what I have said about culture can also be considered in contemplating 'heritage' as a concept. Though passed on from one generation to another, heritage is not handed down unchanged. Like culture, of which it is a part, heritage is subject to selection, construction, negotiation and contestation in the context of more general processes of local and national identity formation (Hitchcock & King, 2003a, 2003b). Like culture, heritage is a concept which is difficult to define. In a narrow and simple sense, heritage is 'a legacy; a set of traditions, values, or treasured material things' (Universal Dictionary, 1987, p. 721). Smith, taking the meaning somewhat further and emphasising human agency and the active engagement with heritage, proposes that it is distinct from but related to 'the past' and to 'history', and comprises 'the contemporary use of the past, including both its interpretation and re-interpretation' (2003, p.82). In introducing the notion of interpretation, which suggests that heritage is created, given meaning and imbued with significance, we move into a much broader conceptualisation of heritage which pertains to concepts of identity and nationalism (Peleggi, 1996, p. 432; Winter, 2007, p.5-8). In this latter sense, heritage, presented and re-presented as something of cultural origin which relates to the past and which is in some way given special value or significance as 'treasure' or 'legacy', is constructed and appropriated by the state and its agents as an object worthy of political,

economic and 'touristic' attention, although usually only certain items are selected for this purpose and others are ignored or discarded. However, the deployment by the state of heritage resources, particularly those designated as of global significance, for the realisation of certain politico-ideological purposes does not usually go unchallenged and visions of national revival, identity, history, sovereignty, modernity and progress often compete with international conservation and scientific agendas, commercial and developmental interests, international tourist views of the exotic and the spectacular, and local community cultural and economic engagement with the designated sites (Winter, 2007, p.139-149).

In post-colonial developing states, this process of identity construction is an even more urgent task and the need, in Anderson's terms (1991, p.178-185), to 'imagine' the nation often leads to the selection and deployment of archaeological finds, cultural traditions and heritage sites to present images of national resilience, unity, and innovation, often in the context of an 'imagined' golden or glorious age of endeavour and achievement. The 'essence' or 'genius' of the nation is usually traced back to a glorious past and to benevolent and enlightened government when everything that is now cherished as demarcating and defining the nation was created and set in motion.

In summary then the concept of heritage refers to tangible and concrete elements of the past (buildings, monuments, artefacts, sites and constructed landscapes), as well as those aspects of culture expressed in behaviour, action and performance (usually referred to as 'intangible cultural heritage'), which are interpreted, valued and judged to be worthy of our attention, interest and protection. In addition to the state, other domestic agents who are involved in the creation of meanings and understandings in relation to heritage and the past comprise local tourists and those communities which live in or in close proximity to heritage sites and those who secure their livelihood from working there.

Yet heritage is also contested and transformed not only by domestic agents but

also by global actors, including representatives of international organisations such as UNESCO. It has therefore become a highly politicised project to do with identity and conflicts over its character and trajectory. UNESCO's World Heritage Centre in Paris and its associated Committee designates World Heritage Sites as of either 'cultural' or 'natural' or 'mixed' (both cultural and natural) importance, and more particularly, as sites of 'outstanding universal value' (http://whc.unesco.org/en/). The *Convention Concerning the Protection of the World's Cultural and Natural Heritage*, which was introduced to protect global heritage, was adopted by UNESCO in 1972, as well as the 'criteria for selection' of sites to be included on the World Heritage List. Until 2004, sites were selected using six cultural and four natural criteria, but since then, they have been brought together in revised guidelines to comprise a composite list of ten criteria displayed on the Centre's web-pages under the title 'The Criteria for Selection'. As one would expect, the list is sprinkled with superlatives: for example, the first is 'to represent a masterpiece of human creative genius', another 'to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared', yet another 'to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history', and another 'to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change'.

TOURISM IN SOUTHEAST ASIA

In the early 1990s in our edited book entitled *Tourism in South-East Asia* (Hitchcock, King and Parnwell, 1993), we argued that the future research agenda for tourism studies must include, among other things, the urgent need to understand the dynamics of tourism development in the region from inter- and multi-disciplinary perspectives, expand the range of case-material and engage in more ambitious comparative studies (across countries, sub-regions, tourist sites, communities, ethnic groups, social classes, gender and agents). There were also several key emerging themes in the early 1990s, including the re-thinking of the concepts of culture, identity, tradition and authenticity, given the importance of cultural and ethnic tourism in Asia; the ways in which local communities and their "traditions" were constructed and represented; the character of newly emerging "tourisms" including visits to heritage sites; and the interrelationships between tourism and other processes of change.

Of course, there have been many important contributions to the study of tourism in Southeast Asia since the 1990s, but in my view, a theoretically exciting edited collection, which has become a standard reference in the field, is Michel Picard's and Robert Wood's *Tourism, Ethnicity and the State in Asian and Pacific Societies* (1997). Picard and Wood concentrate on a set of interrelated themes which have been a major preoccupation in tourism studies during the past 15 years. These comprise the politics of identity construction and transformation, modes of cultural and ethnic representation, the role of the state and development policies in cultural and ethnic processes, and the responses of local communities to tourism and national level practices. Picard's path-breaking study of the 'touristification' of the Balinese culture also lends substantial ethnographic weight to these concerns (1996), along with two recent outstanding studies of cultural politics, identity construction, heritage and tourism: Kathleen Adams' detailed and penetrating work on 'art as politics' and changing identity in Tana Toraja, Indonesia (2006), and Tim Winter's masterly and pioneering analysis of Cambodian (Khmer) identity and tourism in relation to the World Heritage Site of Angkor (2007). Another dimension to this work is Winter's recent co-edited book, '*Asia on Tour',* which is the first substantial compendium on domestic tourism in Asia to examine the ways in which an expanding

Asian tourism is changing the ways in which we conceive of and analyse the cultural particulars, including heritage sites, of tourism development (Winter, Teo & Chang, 2008).

UNESCO WORLD HERITAGE SITES

To bring all these concerns together and to continue to develop the research agenda a multi-disciplinary team in which I am involved has recently launched a wide-ranging programme of research, supported, among other sponsors, by The British Academy and the Research Committee of the Association of Southeast Asian Studies in the United Kingdom on *UNESCO World Heritage Sites in Southeast Asia: Cross-cultural and Managerial Perspectives*. It is examining 20 out of the 31 inscribed UNESCO sites, both cultural and natural, across Vietnam, Laos, Cambodia, Thailand, Malaysia, Indonesia and the Philippines. Field work has already been undertaken on the three UNESCO sites in Malaysia: Melaka/George Town, Mulu and Kinabalu. The programme also emerges from two recently co-edited books in which I have been involved on *Tourism in Southeast Asia: Challenges and New Directions* (Hitchcock, King, & Parnwell, 2009) and *Heritage Tourism in Southeast Asia* (Hitchcock, King, & Parnwell, 2010).

Among other matters, the current research focuses on the interactions, tensions and conflicts generated at these sites between different stakeholders and users which comprise local communities, national and local governments, international bodies, domestic and overseas tourists, and civil society institutions. Obviously, the significance and involvement of these different bodies will vary from case to case. In addressing the issues which arise in the management of the sites, the main concern is to determine how conflicting pressures are making themselves felt on these sites, how those who carry responsibility for their management are addressing them and how the different users interact with and perceive these sites. What is a common locus of potential tension is, on the one hand, the granting of a globally acknowledged heritage status to a particular site with all that this entails in its preservation, conservation, and what is perceived to be its authenticity in historical terms, and, on the other hand, the attraction that the site has, once inscribed on the World Heritage List; first, for tourists and those in the tourism business; secondly, governments and their concern with national identity and prestige and the promotion of economic growth and development; and thirdly, the local communities which live in and around the site and often depend on it or come to depend on it for their livelihoods.

Therefore, there is often ongoing tension between the need to protect and conserve a historically and culturally important site (and in UNESCO terms, its authentic or original characteristics) which has been bequeathed to the world by earlier generations and provide it with its 'universal human value', and the pressures exerted by the vagaries of changing human political, social and economic interests, values and use, and the changing demands of tourism, leisure, recreation and consumption. Finally, these sites provide 'a new genre of community, both imagined and real' comprising 'a new social space, new values and borders' (Miura, 2010, p.103). Although the importance of World Heritage Sites carries their significance and influence beyond their physical borders in that they are part of national and international flows of people, capital, ideas and values, they can also be seen as defined, bounded and localised spaces within which there are encounters, exchanges and conflicts. In short, they provide ideal locations within which the study of culture, heritage, identity and tourism come together and can be analysed and understood.

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AUTHOR'S BIOGRAPHY

Victor King has been teaching and undertaking research in the sociology and anthropology of Southeast Asia since the early 1970s when he completed his Master's degree at the School of Oriental and African Studies, London, in anthropology, geography and Indonesian Studies, and then undertook field research in Kalimantan, Indonesia for his doctoral degree in social anthropology at the University of Hull. Most of his career was spent in the Centre for South-East Asian Studies and the Department of Sociology and Social Anthropology at the University of Hull. He

Emeritus Professor Victor T. King

was appointed to a Senior Lectureship there in 1988 and immediately thereafter to the re-established Chair in Southeast Asian Studies (from 1988 to 2005). At various times, he served in Hull as Director of the Centre for Southeast Asian Studies, Dean of the School of Social and Political Sciences, Director of the University's Graduate School and Pro-Vice-Chancellor. He joined the University of Leeds in 2005 as Professor of Southeast Asian Studies and became Executive Director of the White Rose East Asia Centre (WREAC) in 2006. He was awarded the title of Emeritus Professor in 2010.

Review Article

Exemption of Annual Audit for Small Companies: A Review

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ABSTRACT

In Malaysia, all companies are required to have their accounts audited. However, the application of this mandatory requirement on small companies is currently under review, and the issue is whether audit firms could survive should voluntary audit be implemented. Salleh *et al*. (2008) surveyed the perception of small audit firms on this issue. Most of the respondents perceived that the benefits derived from statutory audit outweighed its costs, and thus, mandatory audit should be retained. Nonetheless, the views of other stakeholders of statutory audits are also pertinent. This paper reviews the previous research on the issue of voluntary audit in Malaysia and other countries, some of which surveyed the perceptions of the directors and management of small companies. These studies revealed that companies which perceived that they would benefit from the audit would continue to have their accounts audited. Thus, clients of audit firms which produced quality audit work might continue to have their accounts audited, and such audit firms, immaterial of their sizes, could survive even if audits for small companies were made voluntary.

Keywords: Audit benefits, audit exemptions, small companies

INTRODUCTION

On 17 December 2003, the Companies Commission of Malaysia established the Corporate Law Reform Committee "to undertake a fundamental review of the current legislative policies on corporate law in order to propose amendments that are necessary for corporate and business activities to function in a cost effective, consistent, transparent and competitive business environment, in line with international standards of good corporate" (Suruhanjaya Syarikat Malaysia, 2010). Among the studies undertaken was a review on the requirement of mandatory audit for all companies. In early 2009, the Corporate Law Reform Committee issued a recommendation to retain mandatory audit for all companies, but power be given to the regulator to exempt small companies from this requirement (SSM, 2009). If audit was deregulated, audit firms which concentrated on audit work for small companies would be affected.

The article by Salleh, Che Rose, Kumar and Jaafar on "Auditors' Perceptions on Obliteration of Mandatory Annual Audit: An Empirical Study" in 2008 is timely, for it explored the perceptions of auditors on the requirement of mandatory audit on small companies and their readiness in the event Malaysia decides to follow the footsteps of other common law countries to exempt such companies. The paper by Salleh *et al.* (2008) is the first known published article that examined the perceptions of auditors on this

issue in Malaysia. However, as noted by Salleh *et al.*, the article is not without its limitations.

In this paper, the writer examines the issue of deregulation of audit for small companies by reviewing previous studies conducted both in Malaysia and other countries. As the exemption of the mandatory audit for small companies is imminent, it is vital for the audit profession to ensure small companies and their stakeholders appreciate the value and relevance of an audit. Previous studies have shown that companies which perceive audit to be beneficial are more likely to continue with it. The regulator, too, plays an important role in balancing the interests of the small companies and that of the stakeholders and enacting a win-win formula for all.

The writer shall first begin with a review of Salleh *et al.* (2008), before examining other studies conducted in Malaysia and in other countries. This is followed by the debate which is currently taking place in Malaysia, i.e. whether to deregulate audit for small companies, and suggestions for reforms by the auditors in anticipation of the deregulation.

ESSENCE OF SALLEH *et al.*, (2008)

In Malaysia, section 169 of the Companies Act 1965 requires all companies to have their annual financial accounts audited by an external auditor. It is immaterial that the company is small in economic size or is owner managed, that is, the company is managed by the shareholders themselves, and not by outsiders. The theory of agency costs has been cited as one of the reasons for the obliteration of mandatory audit for small companies in other countries. Where the company is owner managed, "it appears meaningless for an auditor to report to the shareholders that the directors (who are also the shareholders) have produced a true and fair picture of the financial statement of the business ... (Audit) is a great waste of money and resources" (Salleh *et al.*, 2008, p. 62).

The trend in other countries is to deregulate audit. The United Kingdom, Canada, Australia and Singapore no longer mandate all companies to have their financial accounts audited. Malaysia may take a similar path. One important issue is whether the auditors in Malaysia are ready. It was observed in Salleh *et al.* (2008) that 92% of the audit firms surveyed relied on audit as their main source of income. Many might not survive if audit exemptions were to be implemented.

Salleh *et al.* (2008) also examined the perceptions of auditors and their readiness should voluntary audit be implemented in Malaysia. Salleh *et al.* mailed questionnaires to 482 auditors of small firms in Kuala Lumpur. Only 64 completed responses were received. Though the results cannot be generalized, the study is important as it is the first known study in Malaysia on the perceptions of auditors pertaining to the introduction of voluntary audit.

In Salleh *et al.* (2008), the turnover of 86% of the respondents was below RM1,000,000. The majority of the respondents' clients were small companies with paid-up capital of less than RM500,000 and with not more than 50 employees. 34.5% of the respondents indicated that 90% to 99% of their clients were from this category and 83.6% of them agreed that statutory audit was a major contribution to the firms' income. Possibly due to the concentration of audit work, most respondents were not ready to offer other services and might thus face problem in staff reallocation, if voluntary audits were introduced for small companies.

Another interesting finding in Salleh *et al.* (2008) is that the majority of the respondents felt that audit did add value to small companies (69.2%) and that the audit fees imposed were not too costly to the companies (60%). Thus, auditors perceived that the benefits derived from the statutory audit outweighed its costs. Meanwhile, 73.4% of the respondents indicated that mandatory audit for small companies should be retained, and the characteristics of these respondents were; firstly, the firms to which the respondents were attached to were small in size (68.8%); secondly, they derived a major part of their income from audit work (59.4%); and thirdly, they provided a low number of non-audit services (46.9%).

DISCUSSION ON SALLEH *et al.* (2008)

Salleh *et al.* (2008)'s conclusion, i.e. auditors in Malaysia were generally not in favour of audit exemption, is anticipated. To auditors who handle mainly small company audit, it is only logical that they desire mandatory audit to be retained. However, if audit was to be made voluntary, they should then be concerned with the perception and intentions of their clients. Would the clients continue to demand audit after its deregulation? To predict their reaction, the results of some previous surveys on the perceptions of the small companies, as well as the characteristics of the companies which would most likely retain audit despite the exemption, would be pertinent to the auditors.

Findings of Salleh et al. *(2008)*

The responses from the auditors in Salleh *et al* (2008) were consistent with the findings of ICPAS (2000) in Singapore, Chung and Narasimhan (2001) in Hong Kong, and Tabone and Baldachhino (2003) in Malta. The introduction of voluntary audit would have an adverse impact on the revenue of small audit firms which derived a major part of their income from audit work, and it is only natural for the practitioners in these small firms and their counterparts to protect their "rice bowl". Furthermore, as highlighted by Salleh *et al.* (2008, p. 62):

> Malaysia being a member of WTO GATT, it is only a matter of time when services such as consultancy and advisory will also be liberalized. With the liberalization process, audit firms as well as auditors in Malaysia will face greater competition locally and globally…It is also important to ensure the local audit firms' survival among foreign accounting firms and also the non-accounting service providers such as Certified Financial Planner (CFP) and Certified Financial Analyst (CFA).

The onslaught of foreign professional accounting firms and the advent of voluntary audit for small companies may strangle the livelihood of small audit firms, particularly those which concentrate on audit work for small companies. It is submitted that the fear of the practitioners in these firms was reflected in their responses to the study by Salleh *et al.* (2008). To the statement "it is not compulsory for a small company's financial report users to have audited accounts in decision making processes", 67.2% disagreed even though it is trite that auditors have always tried to ward off liability to the third parties. Auditors always insist that they owe a duty to no one but the auditee company (Sikka *et al.*, 2009). Other users of the audited accounts and individual shareholders have no *locus standi* to sue the auditors even where the auditors were negligent in the audit. This was decided in Caparo Industries PLC v Dickman (1990). However, for the purpose of supporting the auditors' argument, that it is necessary to retain audit; the respondents agreed that financial report users do depend on the auditor's verification that the accounts give a true and fair view of the company's financial position.

It is only expected that the audit profession would respond to protect their self interest (Cousins *et al.*, 1999). The reaction is consistent with that displayed in ICPAS (2000) and Khairinuddin (2005). In ICPAS (2000), the Institute of Certified Public Accountants Singapore (ICPAS) carried out a survey by sending questionnaires to its members, selected small companies, and bankers to gauge their views on the issue of audit exemption. In its report, it strongly recommended that the mandatory audit requirement for all companies be retained. However, the report did not provide a detailed analysis of the responses from the respondents. This gave rise to a speculation that the ICPAS, as in other professional bodies, acted to protect the interest of their members (Sikka, 2004).

In 2005, Khairinuddin attempted to survey the members of the Malaysian Institute of Accountants, but it was abandoned due to the

feedback from his pilot study (Khairinuddin, 2005, p. 50):

> Some respondents found the proposed survey threatening and would prefer the survey not to be undertaken. They opined that the small practitioners would definitely object to the implementation as their revenue was mainly derived from audit fees. In fact, 2 of the responses via letter were circulated to the rest of the small practitioners to not respond to any survey conducted on audit exemption as they viewed the outcome as predetermined and prejudicial towards small practitioners. They viewed that the audit exemption regime would eliminate the small audit practitioners.

As a result, Khairinuddin (2005) surveyed only the senior management of small companies. His study is further discussed in the next section.

It is submitted that the debate on the exemption of mandatory audit among small companies would be better appreciated if the views of other interest groups such as the small companies themselves and other users, namely the shareholders, financiers and authorities, are obtained. A review of literature from Malaysia and other countries which went through a similar experience would shed light on the effects of introducing voluntary audit.

Previous Studies in Malaysia

In Malaysia, other than Salleh *et al.* (2008), there has been no other known study conducted on the perception of auditors on audit exemption. As mentioned above, this was not due to wanting to attempt but the hindrances faced (Khairinuddin, 2005). However, there were two surveys conducted on the directors and representatives of small companies in Malaysia to obtain their views on the same topic. These were by Khairinuddin and the study commissioned by the Corporate Law Reform Committee (CLRC), both in 2005. The results of the latter were

reported and made available to the public in January 2007 (CLRC, 2007).

Khairinuddin (2005) surveyed the senior management of small companies. The researcher sent questionnaires to the senior management of 235 randomly selected companies registered with the Small and Medium Industries Development Corporation (SMIDEC). A total of 200 usable responses were received. Khairinuddin (2005) found that 41% of the respondents said that they would continue to have their companies accounts audited even if the audit was made voluntary. Only 23% disagreed. 36% were undecided. Even family owned companies strongly agreed to opt for voluntary audit. This could possibly be due to their need to outsource their accounting work, for the majority had indicated that they engaged external accountants to prepare the annual accounts (64%), as well as to provide audit services (63.5%) and tax services (59.5%).

In the subsequent study commissioned by the CLRC in 2005, questionnaires were mailed to 2300 directors of private limited companies. 407 responses were received. 71% of the respondents indicated that they would continue to have their companies' accounts audited even if the mandatory audit provisions were deleted from the Companies Act 1965. In this connection, it must be mentioned that the CLRC was established to reform the company legislation to make it current and in line with the best global practices (SSM, 2008). The CLRC study also found that 56% of the respondents perceived audit to be beneficial. Overall, the respondents seemed to find the benefits of audit to outweigh its costs (CLRC, 2007).

Thus, the findings of the CLRC (2007) are consistent with that of Khairinuddin (2005), but contrary to the general perception of the auditors surveyed by Salleh *et al.* (2008). It is submitted that the fear that many of the smaller audit firms would not survive if audit exemption was to be implemented may be unfounded, for the majority of respondents surveyed in both studies by Khairinuddin and the CLRC which had indicated that the directors and senior management of small companies would still continue to have their financial accounts audited.

Previous Studies and Development in Other Countries

There are also numerous studies from other countries, which were carried out both before as well as after their respective company legislations were amended to exempt small companies from audit. Countries, which are at the crossroad to whether retain or deregulate mandatory audit such as Malaysia, may draw experience from other countries which have undergone a similar debate. This will enable them to gain a better understanding of the issue.

In the United Kingdom, a review of the statutory audit for small companies was first done in 1985. After the review exercise, the UK Government decided to retain the audit. However, this issue was raised again in 1992. It is noteworthy that the Institute of Chartered Accountants of England and Wales (ICAEW) then recommended the exemption of very small companies (Freedman & Godwin, 1993). This was probably because ICAEW knew that they would not be able to stem the tide for exemption as the costs of audit would be higher due to the implementation of the European Community's directive on auditors' qualification, resulting in the non-justification of benefits derived from the audit vis-à-vis its costs (Tauringana & Clarke, 2000; Freedman & Godwin, 2003). Furthermore, many developed commonwealth countries, such as the United States and Australia, no longer require mandatory audit for all companies regardless of their size.

Despite the protest from the Inland Revenue and bankers, the UK Government in 1994 proceeded to exempt small companies from annual audits. As anticipated by Freedman and Godwin (1993), the implementation of audit exemption led to the debate on the classification of "a small company". In more specific, what type of companies should be exempted from mandatory audit? The Government settled for the tests which were based on the size of the company's balance sheet, turnover and workforce. Throughout the years, the threshold was gradually raised to keep up with the change in economy and monetary value. For example, the maximum turnover was raised from £90,000 when audit exemption was first implemented in 1994 to £6.5 million in 2008 (Collis, 2008).

Tauringana and Clarke (2000), and Collis *et al.* (2004) studied the demand for audit exemption in the UK after the exemption was selectively implemented. They found support in the hypothesis that the size of a company correlated positively with the demand for audit. However, other variables such as the company's gearing ratio, perceived benefits derived from audit and proportion of non-family management were also significant characteristics of companies which opted for voluntary audit. In a subsequent study by Collis (2008) on non-exempted medium-sized companies, she found that the above mentioned variables still applied. Companies with these characteristics had indicated that they would continue to have their accounts audited even if the exemption were extended to them.

In 1994, Canada amended its Business Corporations Act and made audit voluntary for certain companies. Senkow *et al.* (2001) surveyed 896 companies which had been exempted from mandatory audit and found that about three quarters of the respondents continued to have their accounts audited. Companies which found audit beneficial were more likely to retain audit after its deregulation. However, the most significant factor was the existence of an agreement between the company and its lender requiring the company to provide audited accounts to the lender.

Australia deregulated audit requirement in 1971. Carey *et al.* (2000) found a positive correlation between demand for external auditing and the proportion of non-family management, non-family directors and level of debt. However, there was no significant support for the hypothesis that the demand was positively correlated to the size of the company. Of the 186 companies studied, 86 (46%) engaged an external auditor. 100 companies (59%) had an internal auditor, and 73 of which (66%) engaged an external accounting firm to assist in the function. Furthermore, 63 companies (57%) voluntarily engaged both internal and external audit services.

Studies were also conducted on the perception of audit exemption in some other commonwealth countries, namely, Hong Kong, Malta and Singapore. In 2001, Chung and Narasimhan studied the perception of small companies and small audit firms in Hong Kong on the value of small company audit. Both groups perceived audit to provide more benefits than the costs incurred. Thus, they would not advocate for the abolishment of mandatory audit. Until today, Hong Kong has retained statutory audit for all its operating companies.

Tabone and Baldacchino (2003) surveyed both local owner-managers of companies and auditors in Malta on the relevance of mandatory annual statutory audit requirement. The researchers found that both groups of respondents agreed that the owner-managers preferred to abolish the requirement although the auditors would prefer otherwise. What was striking was that both groups agreed that statutory audit was relevant to other stakeholders such as financiers and tax authorities. They were of the opinion that audit improved the reliability of the financial statements. Similarly, the local managers indicated that they expected a higher degree of added value from the auditors' services, such as advices on tax planning, cash-flow planning and internal controls. Like Hong Kong, Malta still practices mandatory audit.

In 2000, the Institute of Certified Public Accountants of Singapore (ICPAS) did a survey on banks, small companies and ICPAS members, and found that 50% of the small companies surveyed did not employ a qualified accountant. Possibly arising from this, the majority of auditors confirmed that they had to correct the accounts prepared by their clients. In the survey, the banks were the proxy for the other stakeholders of small companies and 94% of the respondent bankers agreed that they relied on audited accounts most of the time. Indeed, all banks surveyed insisted that their borrowers should provide their audited accounts even where collaterals were provided. The study also examined the impact of audit exemption on the revenue of auditors. It was anticipated that small audit firms might lose about 60% of the total income, if voluntary audit were implemented for small companies. Based on the results of the survey, the ICPAS recommended retaining the mandatory audit requirement. However, this did not deter the legislation. Audit exemption was introduced in 2003 despite the 'protest' recorded.

THE POSITION IN MALAYSIA

In 2009, the Malaysian Corporate Law Reform Committee (CLRC), in its Final Report, recommended the retention of mandatory audit for all companies, but powers should be given to the Companies Commission of Malaysia to exempt small companies from this requirement. The Committee suggests that the criteria for "small company" should be based on the number of the company's shareholders, annual turnover, balance sheet and number of employees (SSM, 2009). Thus, the possibility of the mandatory audit regime for small companies being overturned cannot be ruled out. What then is the impact of this on audit firms?

The studies by Carey *et al.* (2000), Senkow *et al.* (2001) and Seouw (2001), on the scenario after the audit had been made voluntary in Australia, Canada and the UK respectively, showed that the situation was not as grim as anticipated by some of the respondents in the pilot study conducted by Khairinuddin (2005) and by the respondents in Salleh *et al.* (2008). In Carey *et al.* (2000), the majority of the companies surveyed in Australia voluntarily engaged either external or internal audit, or both types of audit, whereas Senkow *et al.* (2000) found that three quarters of the respondents surveyed continued to have their accounts audited despite the exemption.

In Khairinuddin (2005), only 23% of the respondents indicated that they would not continue with the audit if given the choice. This was supported by CLRC (2007), whereby 29% of the respondents gave a similar indication. Thus, the majority would still continue to have their accounts audited even if they were conferred exemption. Following Collis (2008), this prediction may be relied upon. Collis (2008) did a longitudinal analysis among respondents

who had participated in a previous study (Collis *et al.*, 2004). In the 2004 study, 54% answered that they would opt for voluntary audit even if they were exempted from mandatory audit. When the exemption was extended to them, 52% of the same respondents did continue to have their accounts audited.

Thus, though the revenue of small firms which relied on audit work would be reduced if and when voluntary audit among the small companies were implemented in Malaysia, the revision of policy should not cause firms to wind-up their businesses. Clients who perceived audit to be beneficial would continue to have their accounts audited. As discussed above, previous studies showed that companies which perceived so would most likely continue with audit.

THE WAY FORWARD FOR AUDITORS

Previous studies in other countries (Tauringana & Clarke, 2000; ICPA, 2000; Chung & Narasimhan, 2001; Senkow *et al.*, 2001; Tabone & Baldacchino, 2003; Collis *et al.*, 2004; Collis, 2008) have shown that companies which derived benefits from audit would most likely demand audit. In Malaysia, surveys among the senior management of small companies also support this hypothesis (Khairinuddin, 2005; CLRC, 2007).

In Khairinuddin (2005), the respondents who perceived that they obtained high value from audit, *i.e.* the audit provided more than one benefit to them, had indicated that they would continue with voluntary audit. According to the study, the top three benefits derived from audit were; firstly, it provided a check on accounting records and systems (99%); secondly, audit helped to protect against fraud (85.5%); and thirdly, it improved the credibility of the financial statements (85%). The majority of the respondents in CLRC (2007) also perceived these as the benefits of an audit. In sum, the respondents from the Malaysian studies viewed auditors as independent and competent third parties who could verify the accounts.

As audit for small companies may eventually be waived, it is important for both audit firms and the audit industry to ensure small companies and their stakeholders continue to appreciate its value and relevance. This is no easy task in the light of global accounting frauds that were committed and not revealed in the audited reports. Among several notable audit failures in the recent years are Enron and WorldCom in the United States, Satyam in India and Akai Holdings (a company listed in Hong Kong before it became insolvent). In the case of Akai Holdings, Ernest & Young was the auditor, and on 23 September 2009, the audit firm agreed to settle the law suit for negligence for USD200 million (Rovnic & Yiu, 2009). Furthermore, in the global financial crisis, some banks collapsed almost soon after their auditors issued unqualified audit reports (Sikka *et al.*, 2009).

As a result of these scandals involving auditors, questions have been raised as to the quality of audit performed (Cousins *et al.*, 1999; Sikka *et al.*, 2009). The perceived benefits may be negated. The auditors' perception that the benefits of audit outweighed the costs (Salleh *et al.*, 2008) would be irrelevant if these are not shared by the small companies and their stakeholders. Thus, it is important for auditors to perform good audit.

In order to assure other interest groups that audit is worthy, the audit community should push for reforms in the industry instead of lobbying to cap auditors' liability which gives the wrong signal to other interest groups, *i.e.* that the auditors are not accountable for audit failures (Sikka *et al.*, 2009). Action should be taken to reassure the public that the auditors are socially responsible and provide "value for money" services (Cousin *et al.*, 1999). Achieving this will make external auditing an indispensable link in the financial reporting value chain. Auditors should become credible gatekeepers of financial information (Coffee, 2002).

Another aspect which the community must work on is the independence of auditors (Sikka *et al.*, 2009). Shareholders usually approve the auditor who is nominated by the directors.

Moreover, the auditor's remuneration is usually decided by the directors. The directors' role in the appointment and remuneration of the auditor makes the auditor financially dependent upon them. In order to overcome this conflict of interest, Sikka *et al.* (2009) suggested that auditors be appointed and remunerated by an independent body. This reform should further enhance the representation, value and quality of an audit, and thus, be considered by the legislators.

Further, Devi and Samujh (2010) found that auditors in small firms in Malaysia may offer a wide range of business services to small companies, including business coaching, grant application, strategic planning, internal controls, liquidation or corporate recovery and internal audit. In this aspect, the Malaysian Institute of Accountants could play an important role in providing training and enhancing the skills of auditors in these areas, as well as ensuring the auditors' relevance if and when audit is made voluntary for small companies.

THE WAY FORWARD FOR THE REGULATOR

Khairinuddin (2005) found that small companies which relied on external financing, such as banks, strongly favoured voluntary audit. These companies also indicated that the financiers would require a copy of the audited accounts. In such situation, the financier acts as "a pseudo regulator" (Abdel-Khalik, 1993). Such a company has no choice but to have its accounts audited, failing which the company may suffer the risk of having its loan recalled. As a result of the presence of the "pseudo regulator", making audit voluntary makes no difference to the company.

However, there may be other stakeholders who do not have the economic power to require the company's accounts to be audited in the event the requirement is waived. There may also be disputes between shareholders of a small company, and in such circumstances, audited accounts can be critical (Freedman & Godwin, 2003). Thus, in the event mandatory

audit is deregulated, there should be procedure in place to protect the minority shareholders and other stakeholders of the company. There is a need to strike a balance between the interests of the small company not to have its accounts audited and that of other interest groups, such as the company's shareholders and creditors, and tax authorities. The exemption of a company from audit should not be absolute. Lessons may be drawn from the countries which have obliterated mandatory audit for companies of certain economic size, such as the UK, Australia and Singapore.

In the UK, persons holding at least 10% of the shares in a company, which is exempted from audit, may require the company's accounts to be audited (Section 476 of the Companies Act 2006). In Australia, an exempted company is required to audit its accounts if requested by shareholders holding at least 5% of its voting shares or by the regulator (Section 292 of the Corporations Act 2001). Singapore apparently adopts the Australian model (Sections 205B and 205D of the Singaporean Companies Act, Cap 50).

The writer suggests that if and when Malaysia deregulates audit, the country should also adopt the Australian model which is more stringent compared to the UK model. Not only the threshold for the shareholders' requisition for audit is lower, the Australian model also gives power to the regulator to compel the company's accounts to be audited if the company commits a breach or if public interest dictates it.

CONCLUSION

In deciding whether to deregulate audit, the protection of the small audit firms should not be the primary determining factor. The interest of other stakeholders, such as the companies, shareholders, creditors and authorities, should also be considered. The regulator has the task to formulate the right threshold, which should be reviewed from time to time.

Some previous studies from other countries, which have liberalized audit, revealed that companies which perceived that they would

benefit from the audit would continue to have their accounts audited. Thus, it is timely for auditors to review their role to ensure that audit remains relevant and continues to be a vital link in the financial reporting value chain. Once this is in place, there should be a demand for audit even by companies that are exempted from the requirement. The small audit firms which produce quality audit work should be able to survive.

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Background Differences of Parental Attributes: A Case Study of a Preschool Road Safety Education Programme in Perak

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ABSTRACT

This study was carried out to envisage and examine the plausible relationships of parental road safety knowledge, attitude and practice in relation to preschool children's involvements in a road safety education programme in Perak, Malaysia. Three local preschools were selected for this purpose, in which the children underwent and an educational road safety programme. The respondents consisted of 100 parents of the preschoolers (note that two private and one government preschools were chosen through a purposive sampling method). Ethnicity was found to be significantly different compared to knowledge ($\chi^2 = 16.272$, $p \leq 0.05$) and practice ($\chi^2 = 10.635$, $p \leq 0.05$) scores. Chi-square analyses indicated that there is an association between parental road safety attitude and practice scores ($\chi^2 = 21.444$, $p \leq 0.05$). In addition, the study also revealed that the attitude score varied significantly between the parents, while no significant difference was found between gender in knowledge and practice scores. However, this study also postulated that parental attitude and practice on road safety are moderately related to each other. Furthermore, the findings of the analyses also revealed certain gender inequalities, as the study indicated that female parents might have poorer knowledge and attitude scores. However, they appeared to be capable of showing more care and concern over road safety in relation to their preschool children's safety and well being. Thus, it is hypothesized that road safety education ought to be inculcated among parents, together with their children, *vis'a vis'* to the current campaign on road safety education among young children.

Keywords: Parental road safety attributes, gender, ethnicity, road safety education, preschool children

INTRODUCTION

Pedestrian injuries are the second leading cause of unintentional injury-related death among children between the ages of 5 and 14 (National SAFE KIDS Campaign, 2002a, as cited in Miller, Austin & Rohn, 2004). Based on the various studies conducted by National Highway Traffic Safety Administration [NHTSA] (2006), younger children appeared to be at greater risks, as 25 percent of children killed in traffic crashes were between the ages of 5 and 9 (Ahmad Hariza, *et al.,* 2007; the Ministry of Transport, 2006; Miller, *et al.*, 2004). Moreover, a report released by the American Transportation Research Board (2002) on the relative risks of school travel examined 9 years of injury and fatality data across all travel modes showed 590 child pedestrian injuries and 2,050 bicycle injuries per 100 million miles of travel to school compared to merely 90 injuries per 100 million miles for children riding in passenger cars driven by adults. The same trend was observed for fatalities per 100 million student-miles

travelled to school, with 8.7 and 12.2 deaths per 100 million student-miles for child pedestrians and bicyclists, respectively, compared to 0.3 for child passengers in adult-driven private vehicles (American Transportation Research Board, 2002).

Recent years have seen a significant increase in the traffic accidents among child pedestrians in Malaysia (Ahmad Hariza *et al*., 2007; Mohamad Ibrani, *et al.*, 2009). Child pedestrians, especially in the rural settings, are vulnerable to road accidents. Zeedyk, *et al.* (2001) argued that pedestrian casualty rates for children are more than four times than that for adults. Moreover, it was also observed that in a review of children's road safety issue, 'pedestrian accidents are widely regarded as the most serious of all health risks facing children in developed countries' (Thomson, *et al.*, 1996: p.4).

There is a paucity of studies in the literature from which evidence regarding the effectiveness of educational road safety modules can be ascertained and hence a clear need to increase the effort on developing this evidence base to indicate that children have a larger number of accidents than would be expected from their representation in the population (Pitcairn & Edlmann, 2000). In other words, children must therefore be less competent in traffic than adults. As cited in Pitcairn and Edlmann (2000: p.391-392);

> *"…Piaget's theory (1969, 1970) suggests that children make hazardous decisions because they cannot appreciate the interrelations amongst time, velocity and distance until around 10 years of age. The young child confounds time and velocity with distance, assuming, e.g. that the vehicle which travels the longest distance must be going fastest, regardless of time, or for the longest time, regardless of velocity, thus selectively attending to only one of the variables involved. Using the Piagetian choice paradigm, in which the participant chooses which*

> *of two vehicles travelling alternative paths goes faster, or further, or for a loner time, Siegler and Richards (1979) showed that full mastery of the concepts was not achieved until 20 years of age."*

Meanwhile, Clayton, *et al.* (2005) studied the effect of using the road safety education resource on children's knowledge and understanding about road safety. Using an experimental approach, the 8 to 11 years old children participated in the experimental group were exposed to the educational programme for the duration of five to six weeks. A pre-experimental-post design was applied in the study. According to the authors, a pre-test and two post-tests were conducted, whereby the first post-test was done after week six of the programme, while the second post-test were completed after a period of four months. The results showed that the experimental group obtained significantly higher scores than the control group. Thus, it could be ascertained that educational program on road safety might contribute to the inculcation of knowledge and awareness among young children (Ahmad Hariza *et al*., 2007).

Apart from the issue on children road safety education, some researchers also focused on developing strategies for child pedestrian safety. Among other, a classic review on the study by Thomson (1996) warrants a justifiable attention. The study examined the effectiveness of individual and group training of children's judgment concerning safe crossing locations and routes, both at the roadside and on the table-top traffic model. In exploring the effectiveness of the training, Thomson (1996) also designed two studies, in which the first study involved the individual participants and the participants of the second study were trained in the groups of five. The participants in the individual settings were trained in one of the two ways, either at the roadside or on a table-top traffic model in classroom. For the group setting, however, both types of training were applied. The results from

the two studies on road safety training revealed that the group training effects were more robust than the individual training.

Evidence from a number of studies indicates that parents spend more of their time on keeping children safe (McMillan, 2005). Other studies have shown that parents have responded to the contemporary perception of threats to child safety—from traffic, abduction, violence—by increasing supervision and reducing children's autonomy (Osberg & Stiles, 2000). It is crucial to note that children's safety is high on the agenda in Malaysia, whereby the high increase in child fatalities on road traffic accidents had signalled enough warnings to the parents. These events are fortunately minor cases to overall road traffic accidents, but are horrific enough to keep parents eternally vigilant. More prosaic, but also of great concern to parents, is the educational needs to prevent further threat to children from road traffic. According to McMillan (2005), parental attitudes were seen as a mediating factor to their children's road safety, apart from the fact that the children's self-efficacy was positively correlated with physical activity, while perceived barriers (such as the lack of time and lack of interest) were negatively correlated with activity. In addition, supportive social environments (e.g. parents who encourage and play with their children, transport children to activities, and/or are active role models) were also positively associated with activity, suggesting the influential role parents play in guiding children's behaviour through proper education (Sallis, *et al.*, 2000; Trost *et al.*, 1997; Zakarian *et al.*, 1994; Sallis *et al.*, 1993; Stucky-Ropp & DiLorenzo, 1993; Sallis *et al.*, 1992; Klesges *et al.*, 1990; Tappe, *et al.*, 1989).

Therefore, imperatives of the inculcation on the importance of 'good' road safety practices in the early stage are vital, as these will then become a norm for this generation when they become older (Pitcairn & Edlmann, 2000). Hence, the purpose of the study was to assess the background of the parental attributes (in relation to their road safety knowledge, attitude and practice scores) of the preschoolers involved in a Road Safety Educational Teaching Module

in preschools (a Universiti Putra Malaysia's research project, funded by the Ministry of Higher Education of Malaysia, under the Research University Grant Scheme). Moreover, it is also argued that road safety initiatives have tended to focus on children's pedestrian skills, trying to improve their relevant knowledge, attitude, practice and behaviour (for a review, see Thomson *et al.*, 1996). Thus, this study was premised in a hypothesized statement that parental influences and road safety behaviour might also be effective in improving children's pedestrian and road safety skills. The present study was also designed to assess parent's road safety knowledge, attitude and practice scores across gender, ethnicity and among the attributes of three developmental domains of affective, psychomotor and cognitive (road safety knowledge, attitude and practice scores as per determined by the research measurements).

METHODOLOGY

Research Design

In the present study, the methodology was premised on a multiple-case, replication design (Yin, 1994). As cited in Yin (1994, p.45), 'the evidence from multiple cases is often considered more compelling than a single case study, and the overall study is therefore regarded as being more robust' (Herriott & Firestone, 1983). In a previous study, Ahmad Hariza *et al*. (2006) conducted a baseline research survey in two districts in Kelantan Darul Naim, namely Pasir Mas District (exposure group) and Tanah Merah (control group) to determine whether the 'Road Safety Kit' teaching modules had any effects towards school children's knowledge, attitude and practice towards road safety and to evaluate the effectiveness of the implementation of the road safety modules embedded within the teaching of Bahasa Melayu and English subjects. The data were collected via the 'focus group discussion' (FGD) approach. Prior to the data collection stage, the Experimental Road Safety Educational Kit was distributed to selected preschools in Perak, Malaysia.

At that time, enumerators were given sets of standard Focus Group Discussion (FGD) forms and questionnaires. The children whose parents and schools gave consent were then given (to be surrendered to their respective parents) the structured questionnaire (Set C) and Road Safety-KAPRS (Ahmad Hariza *et al*., 2007), using the semi-structured Focus Group Discussion (FGD) form (Set B) and guiding interview schedules. In each group, the preschool children received one 20 minute session on Road Safety Education per week, for 22 weeks, with catch-up sessions provided for absentees. In the end, each child completed full number of sessions, except for five children who moved away during the study, and were therefore not included in the subsequent analysis. The availability of the multiple experimenters and research enumerators, together with the assistance of the teachers and teacher assistants, allowed for all the focus group discussions of parents to be run simultaneously with one of the groups, in two separate districts away from the distractions of other school activities. Over the six weeks, all the experimenters were counterbalanced over three groups to control for any experimenter effects. Hence, the current study adapted the items on the questionnaire to accommodate the need of assessments for the parents' road safety knowledge, attitude and practice measurements. Each parent was treated as a single-case study as per respondent, and this was replicated for all 105 respondents, which accumulated to 100 case studies, with the dropout rate of 5 respondents (due to the failure of the re-collecting data instruments).

Participants

In this study, the data were collected from 100 parents of preschoolers enrolled at three different preschools to investigate on road safety education (conducted by researchers from Universiti Putra Malaysia) through a survey method. The data were collected using a set of systematically structured close-ended questionnaire, focus-group discussions and interviews.

The participants in this study were chosen through a purposive sampling method. The preschoolers involved in this on-going research project on road safety education (a research project under the sponsorship of the Ministry of Higher Education and the Ministry of Science, Innovation and Technology, Malaysia) were chosen, whereby a survey was conducted on their respective parents (one preschooler represented one parent as per one respondent). For each preschool, a total of 35 respondents were chosen. However, five parents were excluded from this study because of the incomplete questionnaires. Appropriate ethical clearance was also granted via the on-going study on road safety education (in which the current study was a part of the 'spill-over' effect study) and the consent forms were gained and distributed prior to any data collection. In addition, the respondents were also briefed and acknowledged of their rights and assured that no information would be divulged without their prior agreement.

Instruments and Procedures

A set of close-ended questionnaire was developed based on the objectives of the study. The questionnaire was partially adapted from the Knowledge, Attitude and Practice Rating System (KAPRS) by Ahmad Hariza *et al*. (2006) and Ahmad Hariza *et al*. (2007). The questionnaire consisted of four sections, which included parents' socio-demographic background, knowledge on road safety, parental attitude towards road safety and practice. Most of the questions in these questionnaires are closed-ended which required the parents to tick or circle the most appropriate answers.

The recent research demonstrates the importance of Knowledge, Attitude and Practice Rating System (KAPRS) in determining the effectiveness of the implementation of a road safety teaching module (Ahmad Hariza *et al*., 2007; Mohamad Ibrani *et al*., 2009). According to Ahmad Hariza *et al*. (2007), the test-retest reliabilities of the KAPRS suggest an adequate stability of the KAPRS for all the three forms (Teacher, Parent and Student forms). Moreover,

both the ethnic and multi-racial representations in the KAPRS sample (which included 900 self-ratings of children, 102 parents, and 25 teachers) had also provided a psychometrically sound means of measuring the perceived knowledge, attitude and practice scores and pedestrian skills of adults and children (Ahmad Hariza *et al.*, 2007).

RESULTS AND DISCUSSION

Furthermore, the coefficient alpha, the correlational index of internal consistency for all forms ranged from .83 to .94 for the Knowledge scale from .73 to .88 for the Attitude scale, and .95 for the Practice scores. These coefficients were found to be representatives of a high level of homogeneity among items.

Data Analysis

The descriptive analysis was applied to the selected variables to compute the mean, frequency, and standard deviation. Chi-square, χ^2 test, was used to determine the association between parental knowledge, attitude and practice scores on road safety and their demographic status, which included gender, age group and ethnicity. The association between parental knowledge, attitude and practice scores

TABLE 1
Study instruments

Sections	Contents
Part 1	Interviewed parents' socio-demographic background: • Socio-economic background • Age • Race • Types of vehicle respondent have - this section consisted of 12 questions.
Part 2	Knowledge on road safety: • This section consisted of 14 questions regarding the knowledge on road safety. • The answer was in the form of yes – 2; no – 1. • The total scores in the range of 24-28 marks were categorized as having a "'good' knowledge", 19-23 marks were categorized as having a "'moderate' knowledge" and 14-18 marks were categorized as having a "'poor' knowledge".
Part 3	Interviewed parents' attitude towards road safety: • This section consisted of 14 questions regarding the attitude of parent towards road safety. • Likert scaling was used to evaluate the questions, which was shown as follow: strongly agree – 4 marks; agree – 3 marks; disagree – 2 marks; strongly disagree – 1 mark. • Total scores: minimum (14 marks) and maximum (56 marks). • The parental attitude was categorized in to 3 categories: "'good' attitude" (43-56 marks), "'moderate' attitude" (29-42 marks) and "'poor' attitude" (14-28 marks).
Part 4	Interviewed parents' practice on the road: • This section consisted of 12 questions on road practice. • The interviewed parents were required to choose appropriate answers based on from their points of view from the three choices given (always, sometimes and never). • The total scores: minimum (12 marks) and maximum (36 marks). • The parental practice on the road was categorized into 3 categories: "good attitude" (29-36 marks), "moderate attitude" (21-28 marks) and "poor attitude" (12-20 marks).

on road safety was also determined using the chi-square analysis. The significant level for this study was set at $p \leq 0.05$.

When the plausible patterns between the three developmental domains measured (namely, parental knowledge, attitude and practice scores on road safety) were identified, the preceding statistical method were used to explore these associations more formally; however, given the small sample size, these were applied only to the tests where the data were collected from all the parents in the three preschools. In addition, it should also be noted that the results of any statistical methods must be taken tentatively – as pointers rather than certainties – as the sample preschools, parents and preschool children, and not as random.

The Plausible Association of Parents' Demographic Status and Their Knowledge, Attitude and Practice Scores on Road Safety

The mean scores for the knowledge, attitude, practice and the total mean scores for the parents' gender, age group and ethnicity were analysed using the independent sample T-test and the analysis of variance (ANOVA) with the LSD's multiple range tests ($p \leq 0.05$). The tests were also carried out to compare the differences between these variables. The mean scores of knowledge, attitude, practice and total mean scores between the parents' gender are shown in Table 2. Meanwhile, the independent sample t-test showed that the mean scores for knowledge, practice and total scores indicated no discernible gender differences. Interestingly, the attitude scores between male and female parent were significantly different in relation to parental knowledge, attitude and practice scores on road safety.

The most important aspects of this study was probably the assessment of the parental genders on knowledge, attitude and practice scores on road safety, where it was statistically discerned that the male parents scored a ''good'' knowledge score (scaled from 24-28), as compared to the female parents with merely an 'average' knowledge score of 23-46. Based on the current bodies of literature (see reviews by Ahmad Hariza *et al.*, 2007 and Mohamad Ibrani *et al.*, 2009), however, the previous studies have consistently indicated that the female parents have the tendency to be more knowledgeable in relation to road safety concepts. Therefore, it is postulated that the crux of the matter almost certainly resides in the definitions of 'knowledge' (Pitcairn & Edlmann, 2000), and the nature or the relationships between attitude and practice across the genders of the parents (as consistently cited in Saidon & Boyle, 1994; Miller *et al.*, 2004; Lam, 2001; Lam, 2005). Hence, as commonly and classically posited by Yin (1994) in discussing on the outcomes of case studies, it is reiterated that the findings of this study can at best be suggestive rather than in any way definitive. At the same time, the authors do not make any claims that the sample of the current study is representative, nor that the findings are in any way statistically reliable. However, in a number of instances, the findings confirm the arguments made above in the initial proposal of the current study. With that caveat, to sum up this section of discussion, it would seem that it is possible to discern that the statistical analysis

TABLE 2
The mean scores of knowledge, attitude, practice and the total mean scores according to parent's gender

Gender	Knowledge	Attitude	Practice	Total
Male	24.23 (1.83)[a]	46.74 (4.51)[a]	28.31 (4.57)[a]	99.29 (7.36)[a]
Female	23.46 (1.86)[a]	46.69 (5.73)[b]	29.23 (4.70)[a]	99.38 (9.03)[a]

All data are presented as means (SD). The mean value followed by different letters in the same column differs significantly ($p \leq 0.05$); Independent sample T-test.

has shown that the mean knowledge score is not significantly different between the genders. By contrast, the results have indicated that the female parents have a ''good'' knowledge score on road safety education in relation to their preschool children's safety. Similarly, as portrayed in the mean practice score, the male parents possess a ''moderate'' practice, whereas the female parents have attained a ''good'' practice score, with no statistically significant difference between the two genders in terms of the mean practice scores. Nevertheless, it is necessary to emphasise that these findings are suggestive rather than conclusive, and that any firm conclusions of this nature would require a properly founded statistical research.

Instead, the methodological framework of the current study needs to be assessed in the light of the fact, in which, it appears in different forms in different circumstances and different contexts (Ahmad Hariza *et al*., 2007; Mohamad Ibrani *et al*., 2009). Thus, the collection and the analysis of the quantitative data, as well as the use of the survey methods are not ruled out; they are subordinated to the need so as to conceptualise the qualities of a phenomenon and to understand how road safety awareness is socially constructed among the parents of preschool children undertaken in the study. Statistically, it is not surprising that both the male and female parents have ''good'' practice scores, as with a small number of the sample, standard errors are large, and significant effects will

only be found if between group differences are enormous (Yin, 1994; Field, 2000). Moreover, in determining parents' attitude on road safety education, both the female and male parents have ''good'' attitude scores on road safety awareness although the attitude scores between both genders vary significantly. Hence, the need to elucidate the importance of gender and ethnicity in road safety studies has directed the current study to examine the changing gender and ethnic compositions of the context of the road safety trajectories, as road safety education and awareness programmes are formalising concretely in Malaysia's mainstream education, with the implementation of Road Safety Education in the subject of Bahasa Melayu in primary schools (see Ahmad Hariza *et al*., 2007 and Mohamad Ibrani *et al*., 2009 for reviews).

The mean scores of knowledge, attitude, practice and the total scores of the parents showed no significant difference among the age groups (Table 3). However, the post-hoc comparison of the ANOVA test showed that there was a significant difference between the parent age groups of 30-39 and 40-49 in the mean scores of the parents' knowledge on road safety ($p \leq 0.05$). On the contrary to the recent practice on statistical post-hoc power analyses, the post hoc tests in this study were designed to only supplement the obtained significant omnibus F-test, with a factor that consisted of three or more means, whereas additional exploration

TABLE 3
The mean scores of knowledge, attitude, practice and the total mean scores among
parents' age groups

Age group	Knowledge	Attitude	Practice	Total
20-29	23.65 (1.27)[a]	46.88 (4.62)[a]	27.24 (4.91)[a]	97.76 (6.86)[a]
30-39	23.35 (2.17)[a,b]	46.45 (5.94)[a]	29.27 (4.81)[a]	99.07 (9.48)[a]
40-49	24.58 (1.35)[a,c]	47.25 (4.60)[a]	28.83 (4.23)[a]	100.67 (7.51)[a]
50-59	24.50 (0.71)[a]	49.50 (0.71)[a]	31.00 (4.24)[a]	105.00 (2.83)[a]
60-69	24.00 (1.88)[a]	43.00 (0.00)[a]	32.00 (0.00)[a]	99.00 (0.00)[a]

All data are presented as means (SD). The mean value followed by different letters in the same column differs significantly ($p \leq 0.05$); ANOVA test with LSD's multiple comparisons.

of the differences among means is needed to provide specific information on which means are significantly different from each other (as cited in Field, 2000).

The results also showed that parents from the age groups of 20-29, 40-49, 50-59 years and 60-69 had 'good' mean knowledge scores, except for the age group of 30-39 years. Similarly, as for the case of parents' knowledge and gender, parents from the age group of 30-39 years were found to be significantly different from those parents in the age group of 40-49 years. Interestingly, parental attitude on road safety, and parents from all age groups obtained 'good' mean attitude scores. None of them from any age groups had a 'moderate' or a 'poor' mean attitude score on road safety awareness and the need for road safety education, in relation to their preschool children.

For the purpose of this study, of particular interest is the reported outcome of the parental road safety knowledge, attitude and practice scores, in relation to the domains pertaining to the ethnicity and age groups of the parents of the preschool children who have undergone the road safety educational programme. The most striking finding is that all the three ethnics of the sampled parents have 'good' mean total scores on the parental road safety knowledge, attitude and practice scores. Meanwhile, the mean scores of knowledge, attitude, practice and total mean scores for the parents' ethnicity are shown in Table 4. All the three ethnic groups of the parents involved in this study achieved the mean total scores of more than 95 points. However, the evidence on achieving high scores was not unequivocal in the sense that the information on the inter-ethnic road safety awareness was not taken into account in the analysis of the data. The psychometric questions used to measure the knowledge, attitude and practice of road safety did not ascertain whether such high scores represented the whole population of ethnicity or particular groups of parents. Moreover, positive data interaction within the groupings of ethnicity might not reflect the true context of road safety awareness and merely indicated increased interaction of information which might contribute to the increased knowledge, practice and attitude scores on the adapted scales of the KAPRS (Ahmad Hariza *et al*., 2007). Nonetheless, it does provide some valuable insights which may portray an indicative nature of the significance of ethnicity pertaining to educational knowledge inculcation (Mohamad Ibrani *et al*., 2009). Thus, it is within this shared landscape that a similar analysis was undertaken for the inter-ethnic of the preschoolers' parents involved in the road safety programme. The results obtained indicated that the Malay parents had 'good' mean knowledge scores, whereas the Malay and Indian parents attained 'good' mean attitude and practice scores, and the Chinese parents obtained 'moderate' mean knowledge, attitude and practice scores. Moreover, the Indian parents also gained 'moderate' mean knowledge scores. It is important to note that no significant differences were found between the Chinese and Indian parents in term of their mean knowledge scores (p > 0.05). It is also noteworthy to note that the results of the mean scores of attitude, practice and total scores,

TABLE 4
The mean scores of knowledge, attitude, practice and the total mean scores in parents' ethnicity

Ethnicity	Knowledge	Attitude	Practice	Total
Malay	24.49 (1.10)[a]	48.24 (3.26)[a]	30.32 (3.44)[a]	103.05 (4.67)[a]
Chinese	23.32 (1.96)[b]	45.29 (6.15)[b]	27.46 (5.04)[b]	96.07 (9.26)[b]
Indian	23.00 (3.16)[b]	50.00 (2.89)[a]	33.00 (1.41)[a]	106.00 (4.90)[a]

All data are presented as means (Standard Deviation). The mean value followed by different letters in the same column differs significantly (p≤0.05); ANOVA test with LSD's multiple comparisons.

as evidenced in the findings of this study, implicated that these were not significantly different between the Malay and Indian parents on road safety awareness.

The outcome of this study coincides with that of the study by Lam (2005) on Vietnamese speaking parents or caregivers, whereby they were found to have perceived a similar level of road safety awareness and the risk in the road environment by the mainstream Australian parents. Coincidentally, it is interesting to note that they also considered road environment as significantly more hazardous for their children as pedestrians without the company of an adult. Thus, to a certain extent, this similarity warrants an indication that the parents of the preschoolers in Perak, Malaysia have a high sense of road safety awareness.

In line with the focus of this article, however, the singularly most important insight from the framework of the analyses is the fact that the current study is somewhat inconclusive. Hence, it is noteworthy to explore the chi square analysis revealed the absence of association between parental knowledge and attitude scores ($\chi^2 =$ 4.701, p = 0.319) as well as between parental knowledge and practice scores on road safety ($\chi^2 =$ 3.311, p = 0.507). There is a 'moderate' association between parental attitude and practice scores on road safety education ($\chi^2 =$ 21.444, p ≤ 0.05). In addition, the results also indicated that more than 50 percent of the parents obtained 'good' knowledge and attitude scores, as well as attitude and practice scores, while none obtained 'poor' knowledge and attitude/practice scores.

The emergence of the results showed that less than 50 percent of the parents obtained 'good' knowledge and practice scores, while only one of the parents had 'poor' attitude and practice scores. Here, the evidence reveals that the parents of preschoolers involved in the road safety education programme in Perak are seemingly aware of road safety and the safety of their preschool children when using the road. Moreover, a study on social development and traffic safety also showed that there were indirect links between knowledge and behaviours

(Granié, 2005), as compared to some studies which postulated that knowledge of road safety rules was not associated with parental safe road behaviour (Lam, 2001). It is also interesting to note, however, that the parents in the current study seemed to have better attitude and practice as compared to other variables. It is also worth noting that the attitude towards road safety was influenced by risk behaviour, especially the attitude towards rule violations and speeding (Iversen & Rundmo, 2004). Thus, the phenomena of parental perceptions can probably be used to determine parents' safe road modelling behaviour (Lam, 2001). Nonetheless, it is possible to confirm that the children's behaviour towards road safety may not be directly affected by parental supervision (West, Sammons & West, 1993). As indicated in the earlier section, the confirmation of the findings of this study would need more thoroughgoing statistical survey. Otherwise, it is interesting to see if the 'spill-over effect' does have an impact on the overall road safety education policy implementation on young children in Malaysia.

CONCLUSION

Even though some unanswered research questions may exist, the results discussed in the previous section seem to suggest that the adapted questionnaire of Knowledge, Attitude, and Practice Rating Scales (Ahmad Hariza, *et al.*, 2007) has served its ostensible purpose, namely to guide the aim of the current study on examining the level of parental road safety awareness and the involvement in their preschool children's road safety education. Most of the parents have 'good' scores in knowledge (23.85), attitude (46.72) and practice (28.77). In particular, the Malay and Indian parents have shown better knowledge, attitude and practice on children road safety as compared to their Chinese counterparts who obtained a 'moderate' level of road safety involvement. Nonetheless, the parents with 'good' knowledge were also found to have the tendency to have 'good' attitude, while those who have 'good' attitude also have a 'good' practice. Nevertheless, none of them

has 'poor' involvement in road safety education, except for one Chinese parent who scored 'poor' attitude and practice. However, the current study is very aware of the real tension, i.e. the need to generalise but not to bypass crucial differences in ethnic group dynamics in doing so (Mohamad Ibrani *et al*., 2009); in other words, the requirement to simplify, but an awareness that ignoring rather nebulous concepts, such as feelings, mood while driving (or using vehicles) and intentions could render simplification meaningless in any real sense (Iversen & Rundmo, 2004). Thus, the theoretical position on the processes of road safety knowledge, practice and attitude inculcation and the need not to separate the social from the cognitive is partly evident both in the research design and analyses. As a concluding remark, road safety education, via a socio-culturally appropriate approach, should be inculcated among children, together with their parents, in order to fully understand the danger within traffic environment and to practice safety as pedestrians and road users among young children, and adults.

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Interregnum in Colonial Space: Subversion of Power and Dispossession of Metropolitan Home Materials in Gordimer's *July's People*

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ABSTRACT

Nadine Gordimer's recurrent theme has been raising awareness about the unjust and discriminatory policy of Apartheid in South Africa. In one of her later novels, *July's People*, she depicts the impact of an impromptu journey of a white family into their black servant's hinterland. Apartheid atrocities and discriminations of the white government of South Africa cause black insurgency and the displacement of the Smales family. This dislocation into the primitive settlement of July disrupts the former exercise of power hierarchy between the Smales family members and July. The Smales family is also deprived of familiar home equipment and city facilities. Although July shelters them from city riots, he takes advantage of the Smales's predicament and appropriates new power in the new environment. The burden of this study was to examine July's treatment of the Smales family when they are emasculated from their former privileges. This study also attempted to show how this sojourn dispossesses all major characters from their city life styles and powers. Both linguistic and physical subversions of power relations cause a change in the conjugal relationships of the Smales family and confuse July with an in-between identity and attitude towards his master's family and his village community. This study examined the new relationships and life style changes in the light of post-colonial theoretical assumption.

Keywords: Colonial Zone, dispossession, power

INTRODUCTION

Nadine Gordimer was born on 20 November 1923 in Springs, South Africa. She is one of the most prolific South African writers. *The Conservationist* (1974)*, Burger's Daughter* (1979), *July's People* (1981), *The Pickup* (2001), and *Get A Life* (2005) are some of her well-known works. Gordimer published *July's People* in 1981, thirteen years before the official abolishment of the Apartheid. She could aptly anticipate the inevitable collapse of the white government in South Africa. *July's People,*

after its publication, was banned in South Africa, owing to its wide exposure of racial segregations imposed by the white minority government of South Africa during the Apartheid. Like compatriots Alan Paton and J. M. Coetzee, Gordimer has dramatised the history of her country in her fiction to expose more awareness and truth of the unfair political situation of her homeland to the world. This study is based on the post-colonial theoretical approach to investigate how the black revolution dispossesses the white family of their power and urban home facility

and how it reversely empowers their servant, July, to appropriate some portions of their power and modern belongings.

A strong reason for the significance of place in the colonised societies "lies in the disruption caused by 'modernity' itself in the links between time, space and place in European societies" (Ashcroft *et al*., 2001, p. 178). This study shows that not only the concepts of time measurement and urban space facility are significant, but also other modern equipment of a Johannesburg home that has affected Bam's family when they are reluctantly dislocated. I borrow Homi K. Bhabha's concept of "unhomeliness" reflected in his *The Location of Culture* (1994) to explore the impact of black resistance and revolution on the white family. This concept is not attributed to the black people and their exiled setting. On the other hand, it is viewed that the white family's journey is not an exile but a flight under duress caused by black riots and fear of death when the whole underpinning structure of the state is dismantled. Bhabha notes that "this process is relocation of home to another territory where the occupants cross to another culture" (p. 13); however, "to be unhomed is not to be homeless" (Bhabha, 1994, p. 13) or shelterless. It is a condition that provides another house structure in an unknown space but cannot take the place of the former home with its materials and the occupants' ties and affinities.

DISCUSSION

The novel is structured around two sets of relationship in this anarchy of interregnum; between Maureen and Bam, and the Smales with their black servant, July. The grammatical ambiguity of the novel's title revolves around the economic context of material possession and dispossession, as well as the change of power relationship between the white and black people. The title is a play on 'possession' in several senses and leaves readers in a limbo as to who July's people really are. Are they the Smales or the villagers? Everyone has his/her own definition according to the time and position of both July and the white family. The characters'

roles are reversed as the revolution transforms July's master's family into his impotent guests.

Gordimer starts *July's People* with the epigraph from Gramsci's Prison Note-books; "The old is dying and the new cannot be born; in this interregnum, there arises a great diversity of morbid symptoms". The epigraph alludes to the novel's plot in a moral and political intermission, during which "customary relationships have been overthrown and new ones are still embryonic" (Green, 1998, p. 562). In addition to the reversal of the roles, the idea of ownership and ambience of place is reshaped. The journey through the colonial space and the Smales's movement from the centre (Johannesburg) to the periphery (indigenous land) is unlike the traditional colonial expedition and exploration that is associated with the power of commercialism, conquest, adventure or religious conversion. This journey is under the duress of the black revolt and causes subversion of power and dispossession of urban facilities benefited to the white family members. One of the consequences of the revolution and black insurgency in *July's People* is that the white authorities are stripped of their civil power to protect the property, wealth and privileges of white South Africans. The white government resources are endangered by the revolt of black angry mobs armed by Mozambique and other African countries. The White South Africans' policy of Apartheid and the racial inequalities had triggered them to become the target for the revolutionaries.

The black insurgency forces the white family to set up an impromptu flight to a space where black people who are geographically, historically and culturally separated before, now come into contact with each other and establish an ongoing relationship and the Smales's escape to July's native hinterland forces a reconfiguration of the power dynamic between the white family members and their servant, July. In the bush, they have to redefine the power hierarchy they exercised before. Maureen particularly realises that her "previous interactions with the world she inhabits, necessitates a reevaluation that encompasses race, class, and gender" (Lock, 2002, p. 6). As liberals, Maureen and Bam want

to belong to a multiracial society but they hold on jealously to their material possessions and privileges.

The Ambience of Home

To elucidate the tension between two specific modalities of 'being home' and 'not being home', Jeanette Treiber quotes Pratt's narrative about home, i.e. "'being home' refers to the place where one lives within familiar, safe, protected boundaries, 'not being home' is a matter of realising that home was an illusion of coherence and safety based on the exclusion of specific histories of oppression and resistance, the repression of difference even within oneself" (as cited in Treiber, 1983, p. 149). This modality of home is also applicable to Gordimer's *July's People* but the difference is that due to the political circumstances, the white family members are forced to leave home for a safer place. The Smales family, having driven through the bush for three days and nights, have to spend the night in a rondavel in July's village. Upon their arrival, they soon realise that they are an unwelcome burden to that small society as July's wife criticizes "why they do they come here? Why to us?" (Gordimer, 1981, p. 18). While the rondavel is a familiar African dwelling, and while this one is "the prototype from which all the others had come" (Gordimer, 1981, p. 2), yet the space, the interior design, furniture and details of other facilities they possessed 'back there' is not available at the rondavel. Gordimer describes the position of the rondavel in a meticulous detail:

> "…stamped mud and dung floor, above her, cobwebs stringy with dirt dangling from the rough wattle steeple that supported the frayed grey thatch. Stalks of light poked through. A rim of shady light where the mud walls did not meet the eaves; nests glued there, of a brighter-colored mud wasps or bats" (p. 2).

All these features are contrasted to the Smales family's urban home, their familiarity with an expectation of their earlier surroundings. In one dwelling, Maureen observes "the tail of an animal and a rodent skull in the host's hut" (p. 29). She feels she is culturally displaced and is out of her familiar modern contact zone. Therefore, the sojourn they are experiencing disturbs them with an unhomely atmosphere. Sheila Robert describes this uncomfortable one-room structure into which chickens and large insects wander, where there is the rustling of rats and mice at night, and into which rain-water leaks takes on "more disturbing ambience when, within its constricting space, the ordinary, satisfying, white middle-class marriage of the Smaleses' begins to destabilize" (Roberts, 1993, p. 80). Maureen expresses her deep dissatisfaction with their current stay in July's village. She nags Bam who has been emasculated from his both masculine power and the prestige of his city profession. "And there; what was he here, an architect lying on a bed in a mud hut, a man without vehicle" (Gordimer, 1981, p. 98).

Maureen's discontent highlights the uselessness of Bam's old identity in the new environment. Mike Madden also questions the "validity and the strength of his patriarchal authority" in the leadership of his family while they are dislocated in an unfamiliar place (Madden, 2007, p. 22). Bam is also upset with his stay because he is deprived of his third daily category of life 'back there'. "The third category, that organised suburban invention called leisure, did not exist" (Gordimer, 1981, p. 34). As Bam's urban leisure is removed, he tries to settle down into the "routine of survival" in this new and unfamiliar terrain but inadequate and unhygienic baths and toilets prevent the Smales from cleaning their sweats and bad odours and "there were no windows in the mud walls to open wide and let out the sour smell of this man" (Gordimer, 1981, p. 103). She finds the odour between her legs for the first time with the onset of her monthly period. In the absence of her private bathroom equipment, she emulates

the African women and uses old rags during her menstruations. Bam is also terrified at the scene of Royce wiping his back with stone at the dearth of toilet paper. This sojourn deprives them of a hygienic bathroom, equipment and medication that were earlier available to them in their own home.

Limited to a shelter without offering water, electricity and proper sanitation, Maureen is afraid to cook in the pot used by the native black people. She is certainly affected by the unhygienic scene that she observes and insists on Bam that she will cook 'on our own'. Gordimer continues to "expose civilized unease by manipulating the colonial traveller's fear of disease and unhygienic conditions. Maureen camouflages this fear with civilised etiquette July, we must make our own fire and she prefers to maintain control over her family's dietary habits" (Williamson, 1999, p. 101-102). Maureen does not only complain about the lack of her kitchen utensils but she also worries about the strength and structure of the native hut. She questions the safety of the thatches by saying "everything in these villages could be removed at the sweep of a bulldozer or turned to ashes by a single match in the thatch" (Gordimer, 1981, pp. 113-114). It reflects her discomfort with and insecure feeling about the residential place she is forced to shelter in and these are in contrast with the strong structured concrete and secure metropolitan house where she lived and is longing to return to. Ali Erritouni describes that "their new life is a far cry from and is starkly contrasted to the sumptuous life they have led before the revolution undermined the props that supported their privilege" (Erritouni, 2004, p. 112). Bam and Maureen owned "a seven-roomed house and swimming-pool" (Gordimer, 1981, p. 25), could afford to hire live-in servants, went on frequent hunting trips, had "growing savings and investments" and threw extravagant parties. In short, they led a comfortable middle-class life.

The morning they are supposed to visit the chief, they dress in clean but un-ironed clothes and look shabbier than July and Daniel in their attire because Maureen is reluctant to replace her urban home appliance with the old fashioned iron heated on the fire. On their visit to the chief's settlement, Bam's expectations of his home with brick construction and rectangular shape do not come true. To his surprise, he observes a dwelling devoid of basic urban utilities. He doubts about the position and life style of the chief whose place has no church or cross and its school's sports facilities are on an open grassy space instead of a dust patch ground. The wilderness elements of the chief's district and the absence of some basic facilities make him think that the chief is also virtually dispossessed not only from the white modern infrastructure but also from the white cultural beliefs and Christianity.

In their dislocated sojourn, both Bam and Maureen are disoriented from calculating time and the type of unfamiliar home and protection July has provided them. Bam is constantly looking at his watch to check time and date but Maureen's perception of time measurement on the bush is that of a pointless matter to think about it. "On the bed, the man kept glancing at his watch but she knew hers was useless" (Gordimer, 1981, p. 43). The Smales, being deprived of home security, privacy, power, ownership, hygienic utensils, modern facilities and comfort, are left shattered with a nostalgic wish to return home. The family's traumatic experience of both physical and cultural displacement is best fit with Bhabha's concept of unhomeliness, because they are not at 'home' in themselves. They have no sense of belonging to this primitive house of blacks. Through the course of the novel, the nostalgic desire of 'back there' is constantly repeated and intensifies the depth of the longing they have for their privileged space, namely their lost urban home.

On a rare occasion of festivity in July's village, the Smales family enjoys a dinner of roasted warthog that Bam hunted. Returning to the hut, Maureen and Bam who are sexually aroused by the supposedly aphrodisiac strength of meat are deprived of their private bedroom; they then use the bakkie cabin to gratify their sudden sexual urge. When he wakes to see

menstrual blood on his penis, he experiences a momentary but horrifying hallucination that it is the blood of the dead pig. He did have sexual intercourses with her in their private, solace and modernised bedroom, but he did not ever experience her menstrual blood. The routine sexuality they had in the master bedroom, which is now in the village becomes an event of horror. "The quasi-castration image also underlies the extent to which, divested of the attributes of male power (bakkie and weapon, both commandeered by blacks) Bam is progressively desexualized" (Newman, 1988, p. 87). Later, Maureen with her undepilated and bad smell of her menstruation becomes asexual and she is no longer a source of sexual attraction in spite of her nude body and bared breasts.

The difference between the centre (white settler) and the periphery (black land) in the colonial zone is as distinct as its people's culture and their mode of living. Likewise, Gordimer presents July and the other men in his village as both economic and cultural products of the contact zone where they are positioned in between two phases of city technological development; the urban infrastructure and consumerist habitation and the rural primitive settlement. The man who brings a battery-operated amplifier to the village and July's western attire or the collection of his city commodities, like plastic cups and scissors, represent them as the active agents of introducing white metropolitan culture of consumerism and avarice of possessions. In July's narrative about the wonders of the city, Gordimer exposes the gap between the lifestyles of the affluent whites and poor blacks:

> A room to sleep in, another room to eat in, another room to sit in, a room with books ...a room with how many books . . . Hundreds I think. And hot water. . . – the room for bathing-. . . [to] wash your clothes . . . there was a machine in some other room for that-" (Gordimer, 1981, p. 19).

Williamson argues that in the colonial interregnum space, Gordimer presents the black and white figures who confront their opposing socio-cultural systems. Apartheid's strict policy of separation suggests black and white contestation for power, capitalism and habit of consumerism (Williamson, 1999, p. 80). In this in-between culture and contact zone, both the 'coloniser' (white) and 'colonised' (black) are turned into refigured characters when they witness each other's dismantlement of former social status and exercise of power hierarchy. During the interregnum spent in July's village, Maureen's conception of her marriage to Bam and her position as a housewife breaks down; this will be discussed later.

Disruption of Familial Relationship

Despite the fact that Maureen, as a suburban sophisticated wife had been very much in a subordinate position to Bam back in Johannesburg, this relationship too begins to change as "Bam's position of male authority begins to crumble" (Rich, 1984, p. 377). The comfortable atmosphere of the seven-room metropolitan home she had defined with its "master bedroom *en suite*" (Gordimer, 1981, p. 4) is now obsolete. "What the Smales understood as a stable relationship of marriage is shown to be dependent on a middle-class environment and especially on the sense of ownership that props up the marriage" (Folks, 1998, p. 119). Even their desire for conjugal sexual relationship is debilitated as the "lack of privacy killed desire; if there had been any to feel" (Gordimer, 1981, p. 79). In her unwanted sojourn, she sees no womanly role available to her and she can see no substitute role to spend her daily time. Owning to her dissatisfaction with her current position, she fails to generate care and maternal love which she once performed in her city home. Instead, Bam has taken over her role. Her previous roles as suburban wife and mother have been erased and she is no longer worried about her children as they already know how to look after themselves like the black children.

She envies the black village women who have their work and roles in their own place. She feels she has been dislocated to a place that offers no meaningful role to contribute to the welfare of her family or community because "she was not in possession of any part of her life" (Gordimer, 1981, p. 139).

The Reverse of Roles and Relationships between July and the Smales

The Smales have always prided themselves on their egalitarian relationship with July, providing him with a room in their yard and paying him decently, giving him Wednesdays and alternate Sundays free, and allowing him to have his friends visit him or shack up with his mistress Ellen. However, in their helpless and marooned context, the Smales family members seemingly resist the "redistribution of inalienable home materials" they bring with them. As Rosemarie Bodenheimer puts it, "struggling unsuccessfully to maintain the rights of possession, the Smales couple manifests the 'morbid symptoms' of a dying consumerist culture in which identity is created by ownership and relationships are mediated by objects" (Bodenheimer, 1993, p. 109). Victor displays a materialistic emblem of the white figure who yearns to impress the black children with his city belongings. He brings his electric racing-car toy to the place that he is informed there will be no electric power to run it. He is only obsessed with showing his urban toy to the black children and is also worried about the native children possibly damaging his possession. He demands his mother "but tell them they mustn't touch it. I don't want my things messed up and broken" (Gordimer, 1981, p. 14). He also reacts with vehemence to the villagers using water from the tank which his father has installed: "Everybody's taking water! ... I told them they're going to get hell, but they don't understand. Come quick, dad". Undaunted by his parents' dismissal of his complaint, he insists, "It's ours, it's ours" (Gordimer, 1981, pp. 62-3).

The conflict of power starts when July appropriates the bakkie key and drives it to the Indian store to procure food stuff for them but it is not only hard for the Smales to entertain July's claim over the bakkie without seeking their permission but also they see his newly-gained power as a threat that entails their material equalities. "Their reaction to his assertive use of the car betrays the limitations of their liberalism. As long as July was obedient and vulnerable, they felt outraged by the racism of Apartheid, but as soon as his relationship with them entails material equality, they resent him" (Erritouni, 2004, p. 117). In disbelief that July has contested his exclusive right to the bakkie, Bam complains, "I would never have thought he would do something like that. He's always been so correct" (Gordimer, 1981, p. 58). The black man has overstepped the limits; he does not know his place any more. Interregnum and civil disorders have empowered July to acquire new skills of appropriating the bakkie key. Despite Bam's warning, he tends to continue driving the bakkie without any fear of being arrested by the white police who would inspect his driving license or pass. "If they catch you without licence …. He laughed. Who is going to catch me? The white policeman ran away when the black soldiers came at that time" (Gordimer, 1981, p. 59). July not only belittles the authority of Bam but also questions the whole power of the white government in which the fugitive police is representing.

On one occasion, Maureen summons July to her hut to restart the hierarchical structure that characterised their relationship in Johannesburg; "Go and say I want to see him" (Gordimer, 1981, p. 68). However, he appears unhurried and without any sign of his former obedience. Maureen realises that now due to the sudden rupture of time and the normality of white place, July's total dependencies and obligations have turned into an assertive exercise of new roles, as stated in "His refusal to ask for permission to use the car indicates his rejection of the Smales' previous status as white bosses and a reminder to them that the old order is defunct" (Erritouni, 2004, pp. 118-119). With the "explosion of roles" caused by the revolution, he now imposes his demands and wishes. Bam has been

emasculated from his male authority, status and profession that he enjoyed in the city. The dearth of privacy in the hut and the lack of boundaries where everyone can intrude into their private zone have doubled Bam's understanding of his loss of authority as the head of the family and this reaches its climax when his shotgun is stolen. He is uprooted of his power and authority that he was proud of in his former life. Moreover, the absence of urban facilities, social security and infrastructures in July's village, such as lack of a phone to call the police, culminates in a feeling that makes him more hopeless, detached and deprived of his civil rights. Bam, in his desperate mood, assumes that if his shotgun was not stolen, it could function as a surrogate for the police and it could protect his family when they are out of the accustomed place. Bam desperately rummages for his shotgun in every corner of the hut, mistaking the minimum space of the hut with the vast space of his old home. Eventually, July and Daniel are the first culprits to lay the blame of gun theft on. Madden believes that the perceived theft of the truck and later shotgun, is itself a symbol of Bam's masculinity and his status as patriarch and it "destabilises the old balance in his relationship with Maureen, and initiates a small transfer of power to her within the marriage" (Madden, 2007, p. 22). Maureen is upset with her husband's loss of power, male authority over the family and the ambience of home. "The abdication in *July's People* reverses the guest-host relationship between July and Maureen; instead of July being encamped in the Smales' servants' quarters, the Smales now live in July's mother's hut"(Folks, 1998, p. 119).

In this interregnum, Maureen's relationship with July undergoes change and it reveals the inconstant economic bases of their existence. She assumes that her past communications with July in English indicates that their intimate relationships based on courteous service and generous reward meant that they understood each other but now the previous language of servant and master becomes not only ineffective but also empowers July to appropriate new form of language unspoken to them before.

As the novel proceeds, the Smales are virtually disabled to control or monitor their children's activities. Bam assures Maureen that "they have been drinking water wherever they find it, already…it's impossible to stop them" (Gordimer, 1981, p. 14). Royce, the youngest child, wails for his parents to buy Coca Cola but in its absence, he satisfies his thirst with water from the river side. The romantic novel, *I Promessi Sposi* (The Betrothed), that is supposed to strengthen her love to Bam or fill her leisure time is an ironical reminder that the tie of conjugal life and union of Bam Smales and Maureen Hetherington is weakened due to defamiliarisation with city life style and urban home possessions and power.

Battery is a precious commodity for them to get the signal from the radio to learn about the recent news of the city. In order to protect the new battery from the hut humidity, they have to raise the hut floor a level higher. Although Bam is an architect, he has almost lost his creativity to substitute bricks where they are a "cherished commodity; in every hut". He is dispossessed of building materials he had easily accessed in city construction and to degrade his city profession, Maureen suggests asking for a solution from July who has less experience than Bam.

Newman argues that this evolving confrontation among July and the Samles "dramatises Gordimer's concern as to whether people can make a common culture if their material interests conflict dramatically" (Newman, 1988, p. 86). July takes advantage of his master family's demoted position and as he removes his apparently honest and loyal mask, "an explosion of roles" ensues. Maureen confronts July's pilferage of small household articles which she rediscovers in the village and this destroys the good boy image of July she perceived 'back there'. She comes to understand that "as the economic base crumbles, so other abstractions (honesty, dignity, fidelity) disappear" (Newman, 1988, p. 89). To measure the degree of transfer of power, Williamson points out traditional travel narrative in which "the usual role of the native is to be a helper in an

expedition, who usually carries the White-man's luggage. In *July's People,* July is the leader of the expedition" (Williamson, 1999, pp. 93-94). He decides the itinerary and the composition of the expedition. July is not only in charge of the first expedition from Johannesburg to the village, but is also in charge of the second expedition to the chief's village. He not only decides the date and time of the visit to the chief, but also specifies who will be included in the delegation. While Maureen wants only Bam to go and visit the chief, July insists that the entire Smales family must go.

July not only reverses Bam's role as possessor of material goods and family decision-maker but also wrests Bam's masculinity. He also interferes with the Smales' conjugal relationships. Feeling empowered as a home decision maker, he defines Maureen's range of social interaction and prohibits her from the routine spinach gathering with the other women. Now the Smales, uprooted from their older home space and its power, are displaced and disempowered. "Recognising this transfer of power and change in social relationships, little Royce tells Victor to ask July, and not Bam, to buy him the little miniature buggies" (Williamson, 1999, p. 94). Royce begs Victor to ask July; "Why don't you ask July? Vic? (Gordimer, 1981, p. 87).

Gordimer further represents a transfer of power from White to Black in Bam's symbolic emasculation and July's increased power and control. July learns to drive the bakkie and decides who will drive on their visit to the chief. For Bam, the structure of power between July and the chief is redefined when he learns that July has no sole authority in his village and has to meet the demands of the chief. "My place it's here. But all people here, all villages; it's the chief's" (Gordimer, 1981, p. 100). It is very difficult for the chief to believe the "explosion of roles" and the seizure of the white people's authority, property and army equipment by black revolutionists. The chief, observing the white family's powerless state, takes the opportunity to assign Bam a new role as a weapon instructor. He claims, from the past

time, the white authorities had deprived him and his father of buying a gun, but now, Bam is able to compensate by teaching him shooting skills.

Bam is unable to grasp the fact that the social structure and the privileges granted by the Apartheid system are now dismantled, and consequently, the master-servant power dynamic that once existed is presenting towards July's benefit. Although July is relatively enthusiastic to appropriate some portion of the white power and possession, adversely on the other hand, he tries to maintain the master/servant relationship in his village to preserve the image of madam boy 'back there'. The former image of July's power and position as a housekeeper, nurturer and guard is belittled in the eyes of his extended family members when they witness the white family's desperate and helpless condition. July does not advocate the black revolutionaries but "he closely identifies with them. As a product of the white capitalist system, July understands himself in reference to that system" (Williamson, 1999, p. 88). He wants the white power to be restored because the Smales's loss of power and urban home possessions deprive him of his job and the leisure time he had 'back there' before.

Subversion of Language Hierarchy

Another significant challenge that the displaced people experience is the subversion of the language hierarchy that emerges between the master and the servant. In the novel's penultimate chapter, "the linguistic and social conventions that have hidden Maureen and July from seeing each other clearly for the past fifteen years fall away" (Green, 1988, p. 561). Linguistic confrontation and verbal violence occur between them and it turns into a bitter argument as she insists on finding the food for her family by herself. For the first time, July berates her in his own language when she threatens to disclose the tales of his city mistress (Ellen) to Martha. However, this last strategy she uses for July's disempowerment proves fruitless as she understands their total dependency on him. She tells July their former relationship has ended, that he is no longer a servant. He then shocks her

by asking if she is going to pay him this month. She is still preoccupied with the illusion of an urban home and wants to restore the domestic role she had 'back there'. She is not willing to digest her familial dependent status on July as long as they are bereft of their previous mode of leading a comfortable life with modern facilities. Meanwhile, July has been asserting himself more and more as he grows accustomed to being in the unwonted position of having power over Maureen and Bam.

The Novel's Closure

One of the 'morbid symptoms' of interregnum is the ending of the novel. Despite the diversity of the interpretations of the novel's ending and Maureen's run towards the helicopter, it reveals her desperate inability to live with the present hut condition and the possession it offers. Her final act also manifests her inability to give up the nostalgic feeling of 'back there'. Maureen reaches a 'traumatic impasse' when she sees no better future or hope to return to her urban home and is ready to risk her life at the cost of approaching a modern means of escape even when she does not know whether the helicopter crew are saviours or murderers. The helicopter also remains "as a final sign of the ambiguous status of power-objects in the transitional world" (King, 1993, p. 119). Maureen's run toward the helicopter indicates her confidence to embrace the unknown future lying ahead rather than continuing a frustrated life devoid of city possession and its ambience.

CONCLUSION

Gordimer juxtaposes sets of contrastive physical conditions between "the life back there" and the present accommodation, food, sports, hobby, hygiene facilities and economic status. A seven-room house versus a one-room hut, lavish food, morning milk tea and evening fresh fruit versus a meal of porridge and wild spinach, Bam's bird-hunting versus wart-hog hunting for survival, playing with toys versus playing with nothing in the real wilderness, clean and bathed body versus body odours and menstruation; and sense

of power and ownership versus disempowerment and dispossession. The Smales and July's disruption of their accustomed circumstances confuse them with a profound psychological upheaval. Bam is hopeless to restore the former prestige of his city profession; likewise, July's plan for the future and his dream to open a business in the white town is shattered. Home uprootedness culminates in losing command and authority and it enables July to misuse the powerless and dependent state of his erstwhile master. He takes possession of some of the Smales's belongings that are crucial marks of their differences. The power that notes of money gave them in the city to buy goods is no longer representing its value and remains a useless bundle of papers. Although Bam learns that his notes are not effective any more in the chaos of the interregnum, he sticks to his city standards and values and wants to pay July for his help. His zeal of the white civilising mission that leads to the building of a water tank for the welfare of villagers introduces more city goods unavailable to the black natives so far. With all these nasty experiences and unpleasant events caused by their displacement from their white standards, qualities, values and urban lifestyle, the Smales' world is irreparably destroyed and there remains little hope to retrieve their former life of middle class comfort or to rely on the black African's resources, settlement, facilities and infrastructures. Dislocation and dispossession has an internal impact on the personal and familial life of the Smales.

The identity transition of Bam and Maureen, through the course of the novel, reveals that in their new environment, Bam is still obsessed with his values, urban standard and quality of life he maintained in his former society. The unhomeliness wrought by the unwilling flight triggers Bam's cultural and psychological paralysis and it restructures familial, social, and cultural relationships. Bam and Maureen are uprooted both physically and psychologically from the very base of their home. In the end, Maureen in her deep frustration with her environment abandons her family members and sacrifices them for the sake of her own survival.

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Assessment of Consumers' Confidence on Halal Labelled Manufactured Food in Malaysia

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ABSTRACT

Consumers' confidence in Halal labelled food is shaped by numerous factors. These include advertising, information on food ingredients and announcements, various Halal claims, and warnings on non Halal food products which carry a Halal logo. A survey was conducted among 1560 Muslim respondents all over Malaysia via a structured questionnaire to evaluate and assess consumers' degree of confidence in manufactured Halal labelled food products and the Halal logo that comes with them. A descriptive statistic was used to identify the socio-economic/demographic characteristics and confidence of the respondents toward the Halal labelled food. The logit model was used to determine the extent to which selected socio-economic/demographic characteristics and attitudinal factors influenced the respondents' opinions towards and confidence in Halal labelled food products. In general, various socio-economic/demographic and attitudinal characteristics were found to significantly influence the likelihood of the respondents' degree of confidence in the "halalness" of manufactured food products that carry the Halal logo. The older generation, particularly the rural folk, and those with higher education level and higher level of religiosity seemed to be likely less confident with the Halal labelled food products. Meanwhile, attitudinal factors such as without JAKIM Halal logo, food products from non-Muslim countries, unfamiliar brand and no clear list of ingredients make consumers feel less confident with the products. Thus, most Malaysians are still unsure or do not have the full confidence in the Halal labelled food products with regard to its "halalness". Thus, monitoring and enforcement of the Halal laws and regulations have to be carried out on a regular basis to build consumers' confidence towards these products.

Key words: Manufactured food, Halal logo, confidence, Muslim consumers, logit model

INTRODUCTION

In general, consumers' attitude and behaviour towards food are determined by individual and environmental factors, such as marketing, information, situation and food specific properties. Religion is one of the potential individual factors that will shape consumption decisions, especially among the Muslims. Ample evidence has shown that religion influences consumers' attitude and behaviour in general (Pettinger, Holdsworth, & Gerber, 2004), as well as food purchasing decisions, and eating habits in particular (Shatenstein & Ghadirian, 1997; Asp, 1999; Mullen Williams, & Hunt, 2000; Blackwell, Miniard, & Engel, 2001). In many societies, the vegetarian Hindus, among other, are very strict with their food and the orthodox Jews are very particular about their kosher principles. Thus, religion plays one of the most influential roles in food choices (Dindyal, 2003). The impact of religion on food consumption depends on the religion itself and on the extent to which individuals follow the teachings of their respective religion. Islam is a way of life

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which is governed by rules and customs built on the five pillars which every Muslim has to observe; these include *shahadah* or witnessing, *salat* or prayer, *zakah* or charity, *sawm* or fasting, and *hajj* or pilgrimage. In addition to these, Muslims have to oblige to a set of dietary laws intended to advance their well-being. However, not only religious motives determine the Halal consumption, health, hygiene, being friendly to the environment, respect for animals' welfare and social issues (such as religious identity and degree of acculturation) have also reported as determining factors influencing it (Vermeir & Verbeke, 2005; Bonne & Verbeke, 2006).

Credence characteristics of food have become very important to consumers (Grunert, 2005). Halal is a typical credence process attribute, i.e. a quality characteristic that can hardly be evaluated or ascertained by an individual consumer, even upon or after consuming the food (Darby & Karni, 1973). As a product characteristic, Halal refers to the nature, the origin and the processing method of the food, which entail similarities with organic food or food that is produced by taking into consideration animals' welfare or sustainability issues. These characteristics are not visible and cannot be validated by the consumers even after experiencing the product, and thus, yield potential quality uncertainties during the pre-purchasing stage. As a result of the complexity of the Halal food production system, consumers have to rely on several factors in the food chain to provide Halal food products. Moreover, Muslim consumers have no other means of ensuring that the food they eat is truly Halal in term of its "halalness". Hence, conferring trust onto the factors in the Halal food chain, such as farmers and food manufacturers, as well as the trust in advertisements and Halal logos, enables consumers to compensate for the lack of knowledge and information they have about the cultivation and production process of Halal food (Andersen, 1994). In this regard, the roles of information, knowledge and Shariyah approval are undeniably crucial in consumers' Halal food choice.

It is difficult to provide a single definition of trust, and its interpretation is often confused with confidence. In general, trust refers to interpersonal relations, whereas confidence relates to institutional relations (Weber & Carter, 1998), which can be measured by the level or the degree of confidence. The credence characteristics of Halal food are a matter of trust and confidence in sources that provide information on how the product being manufactured or process (Morrow, Hansen, & Person, 2004).

For Muslim consumers, the degree of confidence in Halal food is related to the certainty and uncertainty about the process attributes (i.e. processing and handling leading to the Halal status), as well as the safety in terms of the wholesomeness and "halalness". Previous research has shown a very strong link between slaughtering method and health and safety perception; the Islamic slaughtering method is believed to lead to a complete bleed out of the animal whereby consumers believe less bacterial contamination can occur and hence, resulting in healthier meat (Bonne & Verbeke, 2006). However, the lack of enforcement in monitoring the usage of certified Halal food has caused the public to question the validity of some products that were claimed to be Halal. Several food-related lawsuits against food manufacturers on the "halalness" of their product have caused Muslim consumers to become cautious about what they buy and eat. For example, JAKIM once confiscated two containers of a famous brand of chewing gum worth RM 2.3 million from a warehouse at Hicom Glenmarie in Subang, Selangor, believed to be using a fake Halal logo (Harian Metro, 8th July, 2004). High 5[1] claimed that its bakery products were baked using 100% Halal oil when in fact it was imported from Israel or Germany, whereby its halal status was being doubt (The Malay Mail, 14th September, 2006). Dinding[2] poultry was

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[1] High 5 is a local manufacturer producing bread and other bakery products which carry JAKIM Halal logo.
[2] Dinding is a local poultry farm and manufacturer of poultry products, such as burgers, frankfurters, chicken nuggets, chicken balls, etc., that carry the JAKIM Halal logo.

also sued for not ensuring that its products were slaughtered according to the Islamic principle and thus the products were not considered as Halal, and this suit was settled for RM100 million (New Straits Times, 20 January, 2006). The settlements in court, i.e. the payment of RM100 million and a stern warning or fine, however, do not resolve the issue of Halal and ethics among the food manufacturers or even revert the decisions on food that is non-halal being labelled as halal. Nonetheless, it does affect the level of confidence among the Muslim consumers with regards to the food products in the market place that carry Halal logo. If one reads the book on Halal and Haram food products published by the Consumer Association of Penang (CAP) 2006, one will surely have a negative perception and become more careful in choosing the products they consume by ensuring that they are authentically Halal. Thus, this study investigated the degree of confidence among Malaysian Muslims consumers towards the Halal labelled food products and also determined the factors that were more likely to influence their attitude towards the "halalness" of the food products which carry the Halal logo.

METHODOLOGY

Consumers' behaviour is very complex and it is determined by emotions, motives and attitudes (Alvensleben, 1997). Under the theory of reasons action (TORA) attitudes and belief play a fundamental role in a consumer's behaviour because they determine his/her disposition to respond positively or negatively to an institution, person, event, object or product (Azjen & Fishbein, 1997; Ajzen, 2002). According to the researchers, the link between the altitudinal characteristics and behaviour suggests that consumers are more likely to engage in the behaviour they feel to have control over and prevented from crying out behaviour which they feel they have no control over. Meanwhile, control factors such as the level of confidence and the level of religiosity may facilitate or inhibit the decision in purchasing Halal food products. A

randomized sample of 1560 Muslim respondents was surveyed via structured questionnaires to gauge their level of confidence in the "halalness" of food products that carry the Halal logo. In specific, these respondents were approached and selected randomly while shopping at several supermarkets, such as Carefour, Giants, Tesco, Jusco, Eco-Save and Maydin in the Klang Valley and in the surrounding suburb areas such as Banting, Semenyih, Morib and Kuala Selangor. These suburb areas are formally categorized as rural areas in the state of Selangor and are still considered as the traditional rural Malay areas. The supermarkets were chosen to get the respondents from every walk of life and the availability of the manufactured food products in the supermarkets.

The questionnaire was divided into two sections. In the first section, the respondents' socio-economic/demographic characteristics (e.g., age, education, gender, gross household income, and employment status) were asked. For Muslims, eating food that meets the religious requirements of Islam is considered as an obligation to their religion; therefore, it was argued that their confidence with the Halal labelled food products could be viewed within other contexts such the JAKIM[3] logo, the exporting country of the food products, list of ingredients, product brands and level of religiosity. The second section contained questions on the consumers' confidence in the Halal label. The respondents were asked to rank the importance of the following statements based on their confident intention behaviour: "I am confident with the Halal food products with the JAKIM logo", "Products' brands are sufficient enough for me to indicate the "halalness" of the products.", "I am more confident with the "halalness" of Halal foods from Muslim countries", "The products that list all the ingredients used make me feel at ease of it "halalness" and "I am confident

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[3] To manage and reduce public concerns over Halal certification and logo, the government appointed JAKIM (Department of Islamic Development Malaysia) as the sole agent for the Halal certification in Malaysia.

that by purchasing the local food products, the "halalness" of the food is ensured". The respondents were asked to record their responses on a 5-point Likert scale, ranging from 1 (not confident) to 5 (very confident). Meanwhile, the respondents were asked to indicate their level of religiosity using the self-estimating statement "I consider myself as a………. Muslim" on the 4-point scale, ranging from "very religious" to "not religious". The level of religiosity can be interpreted as a label that people use to describe themselves. Here, the influence of the respondents' religiosity level "as a Muslim" was investigated by differentiating the consumers who highly identified themselves as being religious from the Muslim consumers who labelled their religiosity level as otherwise.

The definitions of the socio-economic/demographic variables, consumers' confidence and descriptive statistics of the sample are presented in Table 2. The binary logit model was applied to estimate the determinants which influenced their degree of confidence in the Halal labelled manufactured food products.

Model Specification

The Logit model was employed for the regression analysis because it represents the complex aspects of the decisions made by individuals and also incorporates important demographic and policy-sensitive explanatory variables. Nonetheless, it does not assume the linearity of relationship between independent and dependent variables, and does not require normally distributed variables (MacFadden 1981, Cramer, 1991).

For this study, the results were interpreted using the odds ratio, which is the exponential coefficient of the logit regression results. The odds ratio is calculated by contrasting each category with the reference category. This also means that the odds ratio shows a multiplicative change in the odds for a unit change in an independent variable. In general, the binary logit model can be specified as:

$$\log\left(\frac{p}{1-p}\right) = \chi\beta \qquad (4)$$

Where, $x\beta$ is the vector of the independent variables and the estimated parameters. ($P/1-P$) is called the odds ratio; thus, the left-hand side of the equation is referred to the log of odds or *logit*. The logistic coefficient is interpreted as the change in the logit that is associated with a one unit change in the independent variable, while holding all the other variables constant. The exponential of the logistic coefficient is the effect on the odds rather than probability. It is interpreted as for a one unit change in the independent variable; the odds are expected to change by a factor of $\exp(\beta)$ when other things are equal (McFadden, 1981).

Since the issue of the study was on the degree or the level of confidence, the dependent variable for this study represents the probability of the consumers' degree of confidence towards the Halal labelled food products. The variable was coded as 1 if the consumers were less confident with the Halal labelled manufactured food products and it would be coded as zero if it was otherwise (i.e. if they are confidence). Meanwhile, the independent variables in the choice model represented the factors that might have an influence on the consumers' choice behaviour. The explanatory variables were age, gender, income, level of education, level of religiosity, the JAKIM Halal logo, the exporting country of the products, list of ingredients and residential area. A summary of the explanatory variables (independent variables) included in the models and their coding systems are presented in Table 1. The specific equation of the logit model can be presented as follows:

$$\text{logit } (Model) = \beta_0 + \beta_1\chi_{area} +$$
$$\beta_2\chi_{Ager} + \beta_3\chi_{Level}^{Education} + \beta_4\chi_{reliogiousity} +$$
$$\beta_6\chi_{JAKIM\log o} + \beta_7\chi_{Ingredients} + \beta_8\chi_{Brand} + \varepsilon_i \quad (5)$$

Where; $\beta_0 =$ constant
$\beta_i - coeficient\ of\ X_i$

It was postulated that the above independent variables would generate the more likely less confidence (variables coded as 1) than their

TABLE 1
Explanatory Variables to Measure Consumers' Confidence on Halal Labelled Food Products

Variables	Design value (Coding system)	
Residential Area	0.	Urban
	1.	Suburb
Age	0.	< 40 year old
	1.	> 40 year old
Level of Religiosity	0.	Lower Level
	1.	Higher Level
Education Level	0.	Secondary school
	1.	Tertiary
JAKIM Halal Logo	0.	Displaying JAKIM logo
	1.	Not displaying JAKIM logo
Product Brand	0.	Well-known brands
	1.	Not well known brands
Exporting Country	0.	Halal products from Muslim countries
	1.	Halal products from non-Muslim countries
List of Ingredients	0.	list of ingredient is very detail
	1.	list of Ingredient not detail

counterpart (variables coded as 0) on the degree of confidence towards the manufactured food products with the Halal logo. Since the effect is linear between the dependent and independent variables, they are not considered as causal effects (Scott & Massoglia, 2003). Thus, the independent variable represented the different attributes affecting the representative consumers' level of confidence on the Halal manufactured food products bearing the Halal logo. Table 1 shows the explanatory variables used in the logistic regression model which included both the demographic and attitudinal factors to assess the consumers' confidence on the Halal labelled food products.

RESULTS AND DISCUSSION

Descriptive Analysis

Table 2 shows the characteristics of the sample with regard to their socio-economic/demographic background. About two-third of the respondents are from urban areas, while one-third are from suburb. More than 50 % of the respondents are males, and the rest are females.

In this survey, 17.3% (270) of those surveyed identified themselves as very religious, 52.9% (826) claimed to be religious, and 27.7% (432) others as somewhat religious. Only 2.1% (32) of the respondents claimed themselves as not being religious. Most of the respondents are married (54.5%) compared to singles (44.0%) and widows (1.18%). The majority of the respondents interviewed were between 26- 40 years of age (54.8%) and most (69.03%) are educated at tertiary level. The occupations of the respondents were divided into five categories. The majority of the respondents have working experiences in various positions, such as working for government sector (32.1%), private sector (40.9%), and are self-employed (8.01%). The reminders were students (8.87%) and the others (7.1%) which included retirees, unemployed and housewives. In terms of their income distribution, the study found that at least 39.0% of the respondents are earning between RM 1501-3000 per month, 15.0% others are receiving RM 1500 and below. A smaller group of the respondents have monthly income above RM6000 (8.0%).

TABLE 2
Respondents' Socio-economic/Demographic Profile

Characteristics	Number	Percentage
Residential area		
Urban	959	61.45
Suburb	601	38.55
Gender		
Female	759	48.66
Male	801	51.34
Level of religiosity		
Very religious	270	17.31
Religious	826	52.95
Somewhat religious	432	27.69
Not religious	32	2.05
Age		
Below 25 year old	234	15.02
26-40 year old	855	54.83
41-60 year old	421	26.98
Above 61 year old	50	3.17
Education Level		
Never been to school	15	0.97
Primary school	109	6.99
Secondary school	359	23.01
Tertiary	1077	69.03
Marital status		
Single	686	43.98
Married	856	54.84
Widow	18	1.18
Occupation		
Government Sector	501	32.10
Private Sector	637	40.86
Self-employed	125	8.01
Unemployed	48	3.06
Student	138	8.87
Others	111	7.1
Monthly income		
Below 1500	234	15.00
1501-3000	615	39.04
3001-6000	591	37.90
Above 6001	120	8.06

Results of the Binary Logit Model

The binary logit analysis or logistics regression was used to estimate the extent to which the selected socio-economic/demographic characteristics and attitudinal variables discussed above were more likely to influence the respondents' degree of confidence in the Halal labelled manufactured food products. As stated earlier, the dependent variable (i.e. being confident with the Halal labelled food products) has two categories, namely, "consumers are less confident with the food products which carry the Halal logo" coded as one, and the "consumers who are *less confident* coded as zero" which were used as a proxy of *more confident* consumers to unobservable dependent variable. The results of the logistics regression model and its odd ratios are shown in Table 3.

To assess how well the model fits the data, the Goodness-of-Fit test statistic was developed and a chi-square test from the observed and expected frequencies was computed. As shown in Table 3, the model has a probability value that is significant at 0 percent level, confirming that the fit of the models is good. The estimated coefficients were tested by using standard errors. A positive sign on the statistically significant parameter estimates of one variable indicates the likelihood of the response increasing, holding other variables constant, and *vice versa*. However, in the logistic regression, the positive sign should not be considered as causal effects. Seven variables were all positive and statistically significant, suggesting that the response categories were indeed ordered properly. Thus, the demographic factors and the consumers' attitudes variables in the ordered model equation are relevant in explaining the consumers' confidence in the Halal logo on the food products. The results indicated that the demographic variables (such as residential area, education level, level of religiosity and age) play important roles in explaining the consumers' degree of confidence intention behaviour with the Halal labelled manufactured food products in Malaysia. Meanwhile, the attitudinal variables indicated that the consumers did pay attention

to the information printed on the packaging of the food products in deciding their degree of confidence on the "halalness" of such products. Based on the statistically significant coefficients, displaying the JAKIM Halal logo on food products is an important determinant for consumers' confidence (Table 3). This finding indicates that on average, the absence of the JAKIM Halal logo on food products results in an increase of 1.66 on the log-odd of less confident consumers relative to more confident consumers. The other method to interpret the results in Table 3 is by looking at the odd ratios in which the associations are relational. Thus, using the odd ratio, without the JAKIM Halal logo on the food products was 5.25 times more likely to cause consumers to be less confident with the food products (henceforth, the odd ratios is used for the logistic regression results as it is easier to comprehend). This proved that the displayed JAKIM Halal logo has a significant role in determining the degree of confidence in certain food products. Similarly, the Halal labelled food products from non-Muslim countries were 1.2 more likely to gain less confidence or trust as compared to the locally produced products. The result indicates that the Halal certified food products from non-Muslim countries do not seem to get trustworthiness from the Malaysian

TABLE 3
Estimates logit model for consumers' degree of confidence in food products that carry the Halal logo

Variables	Estimated Coefficients	Standard Error	Ratio
JAKIM logo displays on food products	1.658***	.429	5.247
Exporting Country of the food products	.162*	.128	1.176
List of Ingredients	.0526	.0297	1.054
Product Brands	.342**	.349	1.408
Residential Area	.761*	.403	2.140
Education Level	.927**	.402	2.527
Level of Religiosity	1.417***	.423	4.125
Age	.0290*	.0055	1.030
C	-.910	.526	.402
P-value for the Goodness of Fit test	0.0000	McFadden R-squared	0.6434

*, ** and *** are significant at 10%, 5% and 1%, respectively.

Muslims because to them, the JAKIM Halal logo is a recognized sign which ensures them the "halalness" of the food products.

The brand of products also positively influences the probability of consumers' confidence in the Halal labelled food. Consumers were found to be 1.4 times less confident in the halal labelled food products that are not well-known brands. This indicates that the company's brand is an important factor in determining the consumers' recognition of the "halalness" of the food products. The respondents were also found to be very concerned about food labelling or information on the ingredients used in manufacturing food products. In particular, the products that do not carry detail information on the ingredients used were 1.05 times more likely to attain less confidence among the consumers. Although the effect is small, it does play an important role in ensuring consumers the "halalness" of the products.

On the aspect of demographic factors, consumers from suburb areas were 2.14 times more likely to be less confident with the Halal labelled manufactured food products as compared to those from the urban areas. Meanwhile, those consumers aged 40 years old and above seemed to be less confident with the Halal labelled food products. The estimated coefficient for the level of religiosity is positive and significant at 99 percent level of confidence, suggesting a higher positive effect as the religious level increases. Thus, the consumers with a high level of religiosity were 4.13 more likely to be less confidence in the Halal labelled food products than the individuals who regarded themselves as less religious. The estimated coefficient for the consumers with tertiary education is positive and statistically significant at 90 percent level of confidence. This result indicated that educated consumers were 2.5 times more likely, than those with lower education level, to become less confident. It is generally believed that educated people are more discriminating in using information and data as compared to less educated consumers. Lastly, consumers from older generation were found to be more cautious in dealing with the

"halalness" of the food products compared to the respondents of younger group, and were 1.03 times more likely to become less confident on the Halal labelled food. This could be due to their experience, whereby they gone through a lot of cases or they have been hearing at lot hearsay about the Halal and "halalness" issues in their life.

CONCLUSION

Considering the confidence level in the food products with Halal logo, the results of the study showed that the consumers are very concerned about Halal food and the logo on food products. In general, the consumers react more positively toward food products with the JAKIM Halal logo, but are less confident with other Halal logos on food products. This finding is also substantiated by the evidence that consumers are more careful in evaluating the "halalness" of the food products by referring to the exporting country of the product brands. It seems that the consumers are a bit sceptical about the food products that are imported from non-Muslim countries such as China, New Zealand, European countries, and even Thailand which has the Islamic Council and Halal logo that comes with the products. The consumers seem to be more comfortable when the products are imported from Muslim countries like Saudi Arabia, Pakistan or Brunei. Another attitudinal factor that might cause Malaysian consumers to become less confident in the Halal labelled food products is an unfamiliar brand name. For instance, although Nestlé is not a local manufacturer (Nestle,is a multinational conglomerate brand), the existence of various Nestlé's products in the country has make some impacts on Malaysian consumers as a local and trusted food manufacturer. Other food brands like Maggie, Dutch Lady, Magnolia, Bratina, to name a few, have become household name food product and are well received by Malaysians.

The findings of this study also indicated that the level of religiosity, education, residential areas and age are significant determinants of the consumers' confidence probability in the Halal labelled food products. In particular, age,

level of religiosity and residential areas seem to have strong associations. Meanwhile, the older generation who normally have higher level of religiosity and are residing in the rural areas seem to be more concerned about the "halalness" of the food products and have lower degree of confidence. This could be due to the fact that there have been cases of "halalness" of food products exposed to the public and there is also no stern action taken when food manufacturers misused the label. Today, if the product is found not Halal or its "halalness" status is being doubted, the department of religious affair will conduct a raid and if the manufacturer is found guilty, it will most likely be given a warning or a fine and charged in court. However, one will be able to find the so-called non-Halal product on the selves at the groceries stores in no time. It is important to highlight that the rectification of one mistake does not make the previous products which have been identified as non-Halal to become Halal, nor does it ensure that the new products produced by the same manufacturer are authentically Halal in its "halalness" sense.

Although religious is a sensitive issue among the general public, it cannot be compromised. Since most of the food manufacturers are multinational conglomerates or owned by non Muslims, the issues of ethic, sensitivity to consumers' needs, trustworthiness, respecting fellow countrymen, understanding one cultures and religion must be taken into consideration by food manufacturers, including Muslim food manufacturers. Most, if not all Muslim consumers, have faith in their Muslim food manufacturers that their products are authentically halal, yet the ingredients used in the food products may come from non-Halal sources. Thus, Muslim food manufacturers need to be reminded about the sources of their food product ingredients and they should be able to trace their origin and confirm their "halalness" status. Meanwhile, the younger generation, those who are less exposed to education and information technology, people who take religion less seriously and the modern urbanite dwellers need to be informed, exposed, educated and made aware of what is Halal and non-halal so as they can make the right decisions when purchasing food products that carry the Halal logo.

In conclusion, Muslim consumers do not have other means to determine whether the manufactured food products are Halal or not, except by referring to the Halal logo that has been entrusted in the packaging of the food products. In particular, the JAKIM Halal logo and certification have created a great impact on the Muslims in this country. Meanwhile, the Halal certified food products with unfamiliar Halal logo seem to be not favoured among Malaysian Muslims. The issue of Halal food has now found a place in our national agenda. The authorities such as JAKIM, the Minister of Domestic Trade and Consumers Affairs, Custom and other Religious Departments, to name a few, have come under strong criticisms for their failure to adequately enforce laws and take actions on the misuse of the Halal logo when the food and products concerned do not conform to Syariah laws. On the contrary, they have tried their best in emphasizing the Halal concept and principles to all food manufacturers. Thus, their ethic and respect to others in their religious belief remain questionable.

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The Attrition Rate of Vocabulary among EFL Learners Across Different Proficiency Levels

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ABSTRACT

This study aimed to investigate the attrition rate of EFL concrete and abstract vocabulary among continuing and non-continuing Iranian female and male English language learners across different proficiency levels. They were students of a University who majored in different fields (between 20 and 25 years old). There was no treatment involved in this study, where the researcher compared two groups using the same variables. Hence, the design of the current study is an ex-post facto design. A 40-item vocabulary test, which varied across two proficiency levels, was used to measure the rate of vocabulary attrition as the instrument of this research. In the two stages, after an interval of three months, the students were requested to take the same tests. The results revealed that there was no significant difference between the EFL attrition rate of the abstract and concrete nouns among the continuing students across different proficiency levels. However, this hypothesis was rejected for the non-continuing learners at intermediate and advanced proficiency levels.

Keywords: Vocabulary attrition, abstract and concrete nouns, continuing and non-continuing students, proficiency level

INTRODUCTION

The study of language attrition has recently emerged as a new field of study. The conception of loss in language skills occurred in a conference at the University of Pennsylvania (UPenn) in 1980. This conference was dedicated to the theoretical basis of research in the field of language attrition and other related conferences which probed the process of language loss as a natural disorder from many other perspectives.

Kopke (2004) stated that "attrition refers to the natural (non-pathological) loss of a language in bilinguals; generally speaking, changes in the linguistic environment and termination of an instructional program may lead to attrition" (p.15).

In terms of language learning, researchers have used the same definition to develop a framework which involved divergent methods of data collection, sampling and instrumentation on language attrition in papers and publications. This taxonomical framework was the one provided by Van Els (1986, as cited in Kopke & Schimd, 2004) with the following categories:

1. L1 loss in L1 environment: Dialect loss

2. L1 loss in L2 environnent: Immigrant

3. L2 loss in L1 environment: Foreign language attrition

4. L2 loss in L2 environment: Language reversion in elderly people

The main phases in the field of language attrition are as the above categories since the framework has divided the field of attrition into four simple and discrete categories. In order to gain a better and clearer picture of the concept of attrition, however, other methodological issues such as the distinction between attrition in adults and children, the effects of age at the amount of attrition, the effects of age at bilingualism, the effects of gender at the amount of L2 attrition and so forth, also need to be taken into consideration.

Stages in Language Attrition

Weltens and Grendel (1993) suggested that in "the first stage of language attrition that it takes longer to retrieve the required information, and the next stage, may be the required information becomes inaccessible" (p.135). In this stage, under some conditions, attriters can retrieve the required information but in other conditions, they cannot. Weltens and Grendel (1993) further claimed that a good example in this regard is the fact that one may be very capable of recognizing certain words but cannot produce them actively. Finally, if the periods of disuse continue, information may become completely and permanently inaccessible. Hence, language recovery should be viewed as a reactivation process. In this regard, Hansen (2001) stated that the first sign of language attrition is not the loss of certain items but rather an increase in the length of time which is needed for their retrieval.

According to Smith (2002, as cited in Kopke, 2007), the stages of language attrition are classified into three stages. Smith remarks that the first stage of attrition can be characterized by the deviation in the performance of attriters, while their competence remains intact. In the second stage, the attriter is in the possession of a new extremely conditioned variety of his/her language.

Cognitive Processes and Causes of Attrition

One of the most widely studied themes in the language attrition process is probably whether the attrition phenomenon of language skills occurs in the reverse order of acquisition and attrition to verify whether second language happens. Smith (2002, as cited in Kopke & Schmid, 2004) pointed out that "language attrition is not the consequence of lack of L1 use alone; but first language is generally replaced by another language and this language is often assumed to influence the process of L1 attrition" (p. 135). Smith (2002, as cited in Kopke & Schmid, 2004) hypothesized that "transfer is one of the most important processes which determine attrition" (p. 156). This hypothesis which is known as cross-linguistic interference has been adopted by many researchers and supported by many studies.

Pavlenko (2002, as cited in Kopke & Schmid, 2004) remarked that the transfer from L2 undeniably plays a role in L1 attrition; on the contrary, Kopke (1999, as cited in Kopke & Schmid, 2004) pointed out that transfer is not the only source of linguistic change in L1 attrition. However, Paradis (1985, as cited in Tomiyama, 2000b) remarked that "language transfer is a fundamental process in loss" (p. 29). As for the cause of attrition, Yamgur (2004) stated that:

> "Depending on the approach to attrition within which researchers work, different theories and hypotheses concerning language loss have been postulated. Taking contact linguistic, sociolinguistic, language change or acquisition perspectives bring about varying hypotheses about the causes of language loss. Due to this inconsistency there are no commonly agreed definitions of language attrition, loss, or shift as yet" (p. 135).

Based on the previous studies on attrition, some hypotheses have supported the account of how and when transfer occurs. The first hypothesis of transfer was proposed by Kerlinger (1986, as cited in Tomiyama, 2000) as that the degree of markedness determines the occurrence of transfer. The second hypothesis was put

forward by Waas (1996, as cited in Tomiyama, 2000b), i.e. "only if L1 and L2 have structures meeting a crucial similarity measure will there be interference" (p. 131). Consequently, in the context of L1 attrition, the similarity between L1 and L2 is a necessary condition for transfer to occur.

Important Variables in Attrition Studies

At the first specialized conference of language loss, Gardener and Macintyre (1993) stated that affective factors influence the amount of language retention and language attrition. In 1999, Nagasawa found that participants whose motivation decreased over the school years used Japanese little outside the class. Meanwhile, those who are motivated would seek for more opportunities to use the language during the period of disuse, and this was the reason why they could retain much more linguistic information (Hansen & Shewell, in press).

Oxford (1982) proposed that studies in the field of EFL/ESL attrition would inform language teachers regarding the long-term effects of their teaching methodology. The findings of research reported that there is a high and positive correlation between personality factors (e.g. attitude, motivation) and language maintenance. Likewise, she further indicated that summer recess does not have a detrimental effect on language maintenance and individuals lose different aspects of second language throughout non-use intervals. Hence, there is no one rule preferable to all language attriters.

In Canada, Gardner, Lalonde and Macpherson (1985, as cited in Hansen & Shewell, in press) carried out a study which displayed a high degree of correlation between less favourable attitude and lower language use with the attrition of speaking and understanding skill, as reported on a can-do scale but not with attrition of reading. Gardner *et al*. (1985) suggested that "the attitudinal motivational factors may exert their greatest influence on attrition primarily during the acquisition period by influencing the level of competence acquired" (p. 531).

In another study by Ebbinghaun (1885), it was indicated that in spite of the proficiency level of students being the best and clear predictor of attrition, their attitude and motivation have been found to indirectly influence their attrition throughout the study. Ebbinghaun (1885, as cited in Weltens & Grendel, 1993) elaborated that there is a positive correlation between proficiency level and amount of attrition; in other words, the more you know the more you will forget.

Kuhberg (1992, as cited in Kopke & Schmid, 2004) stated that the subjects' educational level is also another factor that plays an important role in L2 attrition studies. In addition, educational level can also be the cause of absence of attrition in some studies. Ammerlaan (1996), Bouba *et al*. (2002), Gurel (2004, Kopke & Schmid, 2004) stated that another factor which affects L2 attrition in foreign language environments is the length of stay abroad. Empirical evidence indicated that after a short period of stay in an L2 environment, reversal of language dominance occurs and is manifested by faster picture naming in second language than L1.

Meanwhile, Hutz (2004) remarked that "L1 attrition studies have not reached conclusive evidence about the effect of time on L1 attrition" (p. 193). Montrul (2002, as cited in Kopke & Schmid, 2004) pointed out that this degree of erosion might be to the extent that psycho and neurolinguistic methods could detect no trace of it. Before reaching the critical period, it is easier for a child to learn an L2; at the same time, it is more likely that the child forgets her L1. In accordance with the results of several studies, (e.g. Nicolladis & Grabois, 2002), Pallier *et al*. (2003, as cited in Kopke & Schmid, 2004) suggested that before reaching critical period, L1 could be easily replaced.

Reetz-Kurashige (1999) maintained that factors such as the personal characteristics of returnees, age, length of time abroad, length of time back, the proficiency level at the study onset and high competence at the onset of the study were the most predictive variables for the amount of L2 retention. Additionally, being older groups did not guarantee high retention;

this is on the contrary to the study by Olshtain whereby older groups were found to retain more. Reetz-Kurashige (1999) claimed that "it is not one factor but a combination of factors that predict strong maintenances; near-native speaking English ability was practically a requirement for minimal attrition" (p. 41).

Learning and Relearning Vocabulary

In 1986, Cohen declared that "each exposure to a word has the potential of increasing learner's depth of knowledge about that word" (p. 146). Cohen also claimed that some words come into learners' vocabulary very easily without much attention, whereas some others need conscious effort involving either rote repetitions or organizational techniques.

Each vocabulary, spoken and written forms, has certain characteristics including conceptual and indicating meaning in the context where it can be used and the syntactic restrictions which the language imposes on the word. Cohen (1986) noted that the most obvious type of forgetting vocabulary involves forgetting the conceptual or denotative meaning of a word or its spoken or written form. Furthermore, he believes that there are many aspects of a word that should be learned because many aspects of a word may also undergo attrition.

In 2000, De Bot and Stoessel conducted a study on the difference between learning and relearning of vocabulary. In this research, the German participants relearned those L2 Dutch words which the subjects claimed they had forgotten. The results of their study revealed that the subjects who knew the words before they showed development. Hansen (2001) states that the words which are to be learned for the first time in L1/L2 cannot reach the required activation level as fast as the forgotten words reach through relearning.

METHOD AND MATERIALS

The present research compared two or more groups of the subjects of study on the same variables which were done in past research. As there was no treatment in this study, the design selected for this study is the quantitative research (ex-post facto). The designation of the ex-post facto, i.e. from Latin for "after the fact", was used to determine the natural course of events. The method of ex-post facto research is investigated the cause-and-effect relationships between the independent and dependent variables.

The objectives of the present study were to measure the level of attrition of abstract and concrete vocabulary among continuing and non-continuing students' performances at two proficiency levels in both stages. The independent variables in this study were the between-group and within-group variables. The between-group variables include status in two levels, namely, continuing vs. non-continuing students and the level of proficiency in two levels (intermediate and advanced). Meanwhile, the within-group variables include stages with two levels (stage 1 and stage 2). It is important to note that the comparison was to show whether or not attrition had taken place and the vocabulary items were with two levels, i.e. concrete vs. abstract. The dependent variables, which include students' scores in the vocabulary test, were categorized across modalities and contexts.

This study was conducted in the capital city of Tehran, i.e. in the Islamic Republic of Iran, at the KISH English Language Institute. The subjects in this study comprised of two hundred male and female adult Iranian language learners who had registered for the IPL3 and APL (intermediate and advanced) levels at the KISH English Language Institute in the mixed classes during the spring and summer seasons in 2008.

An accidental sampling of the main major of non-probability sampling involved using the available cases for a study was employed in this research. Hence, the sampling procedure is the EFL learners from different classrooms or to have volunteers to take the tests in one session at both stages.

For both levels, the summer term has thirty sessions during the period of three months. The respondents attended English classes thrice a week. Table 1 below displays the distribution of the subjects.

TABLE 1
The distribution of the respondents

Proficiency	Continuing students		Non-Continuing students	
	Female	Male	Female	Male
Intermediate	23	29	22	26
Advanced	25	38	17	20
N	48	67	39	46
TOTAL	115		85	

The 40-item vocabulary test was carried out to recognize which and how many lexical items have significant effects of attrition on the students. This test was also prepared for those in the intermediate and advanced levels. In addition, the same vocabulary tests were administrated among the continuing and non-continuing groups across different proficiency levels at two stages.

In this study, the test was administered twice with a three month's interval. The instrument was chosen for the standardized achievement tests for reading and writing; on the other hand, the validity of the test was checked thoroughly by the English language teachers who have had some years of teaching experience at KISH English Language Institute. The reliability test was applied to measure the inter-item consistency. In addition, the reliability of this test was 0.769 in the first stage and 0.767 in the second phase.

The data of this study were collected in two separate stages with an interval period of three months. In the first stage, which was towards the end of the spring term (the end of June 2008), all the participants sat for the vocabulary test. After the period of three months, which was in the second stage, the continuing group (those who would be attending classes in the next term, at the end of September 2008) also took the same vocabulary test in the class. In order to find out the amount of attritions, the performance of the participants in the second stage was compared with their earlier performance in the first stage. The present study has its own limitations and is constrained by a number of delimitations, as follows:

At first, the type and number of vocabulary which were examined in this research are limited to abstract and concrete nouns at the intermediate and advanced proficiency levels. Second, only two hundred students participated as the respondents in this study, out of which, 100 of them were in the intermediate level and 100 others were in the advanced level among the continuing and non-continuing adult students. Next, the attritions of the learning strategies and teaching methodology, the degree of motivation, attitude, affective and other individual factors were not controlled in this study. Likewise for non-continuing students, it was not possible to control the extraneous variables, such as references to dictionaries or other forms of assistance.

The data collected were coded and entered into the Statistical Package for the Social Science [SPSS version 16 for Window Vista], and a statistics computer programme was used to process and analyze the data. In the current study, both types of statistics, namely, the descriptive (such as the frequency distribution, percentages, means, and standard deviations) and inferential (one-way ANOVA), were conducted. For this study, a five percent (α=0.05) level was determined as the accepted level of significance for the statistical analysis.

RESULTS

These demographic variables help to describe the profiles of the respondents and it could be observed that the majority of the respondents in both stages (56.5 percent) were males. In this study, two proficiency levels were used, with 50

percent for the whole population. The subjects were divided into two groups at two different stages with a three month's interval. The rate of the continuing students was found to be 57.5 percent, and this was 42.5 percent for the non-continuing students.

All the respondents were Iranian students aged from 20 to 25 years old, were born and living in Iran/Tehran with Persian as their mother tongue. The majority of them were university students from different fields, and most of them were students (86.6%).

The 40-item vocabulary test consisted of two types of nouns. For each level, 20 concrete nouns and 20 abstract nouns were randomly extracted from the vocabulary books or texts which learners used in their classes. The vocabulary tests were prepared for the students in the continuing and non-continuing groups for both the intermediate and advanced levels. The same vocabulary tests were used for both stages.

Based on the data presented in table above, there was no missing value at the two stages in this research. Meanwhile, the means for the abstract and concrete nouns were 18.15 and 18.21 for the continuing group, and these were 18.29 and 18.34, respectively for the non-continuing students.

The Level of Attrition of the Abstract and Concrete Nouns

The first research question was meant to examine the following null hypothesis, i.e. there are no differences between EFL attrition rate for the abstract and concrete nouns among the continuing and non-continuing students at the intermediate level. The second research question was used to evaluate the same variables at the advanced proficiency level. The level of significance was a = 0.05.

The data presented in the above table indicate that the mean for the concrete nouns was improved at the advanced level in the second stage. In addition, the analysis of variance (ANOVA) was also conducted to gather information related to the abstract and concrete nouns for the continuing students at the intermediate and advanced levels.

The results presented in the table above indicated that neither the stages nor the proficiency levels showed any significant effects. In other words, the students who continued their exposure to the English language did not experience significant attrition with the abstract nouns (F = 2.809, p > .05) (F = .586, p > .05).

Once again, the results indicated that the attrition of the concrete nouns did not occur on the continuing students at the intermediate level

TABLE 2
Distribution of the variables at both levels of the test on both groups

| | Continuing | | Non-Continuing | |
	Abstract nouns	Concrete nouns	Abstract nouns	Concrete nouns
Valid	230	230	170	170
Missing	0	0	0	0
Mean	18.15	18.21	18.29	18.34
Median	18	18	19	19
S.D	1.259	1.193	1.357	1.296
Variance	1.585	1.424	1.842	1.680
Minimum	14	15	12	14
Maximum	20	20	20	20

n=200

TABLE 3
Descriptive statistics of the continuing students' performance with the abstract and
concrete nouns at two levels for both stages

Proficiency Level		Abstract Nouns		Concrete Nouns	
		Stage 1	Stage 2	Stage 1	Stage 2
Intermediate	Mean	17.88	18.29	18.10	18.06
	N	52	52	52	52
	Std. Deviation	1.182	1.273	1.176	1.259
	Std. Error of Mean	.164	.177	.163	.175
Advanced	Mean	18.29	18.11	18.17	18.46
	N	63	63	63	63
	Std. Deviation	1.250	1.309	1.225	1.105
	Std. Error of Mean	.157	.165	.154	.139

n=115

TABLE 4
The ANOVA results for the effects of attrition of the abstract nouns for the continuing
students at the intermediate level

Source		Sum of Squares	df	Mean Square	F	Sig.
Stage						
	Between Groups	4.240	1	4.240	2.809	.097
	Within Groups	153.981	102	1.510		

TABLE 5
The ANOVA results for the effects of attrition of the abstract nouns for the continuing
students at the advanced level

Source		Sum of Squares	df	Mean Square	F	Sig.
Stage						
	Between Groups	.960	1	.960	.586	.445
	Within Groups	203.079	124	1.638		

($F = .026$, $p > .05$) and at the advanced level ($F = 1.890$, $p > .05$).

To conclude, no differences were found between the EFL attrition rate of the concrete and abstract nouns among the continuing students across different proficiency levels. In addition, similar descriptive statistics and analysis were also conducted on the abstract and concrete vocabulary. The following tables of analysis display the attrition which has taken place on the non-continuing group in the different stages.

As shown in Table 8, the means for the abstract and concrete nouns were diminished for the non-continuing group in the second stage. The one-way ANOVA was conducted to find out the significant differences between the proficiency levels and the stages of the abstract nouns.

The results presented in Table 9 reveal that there is a significance of 0.041 in the stage for the non-continuing students. As mentioned earlier, the significant level of the whole analysis process is $\alpha=0.05$; therefore, the attrition of the abstract

TABLE 6
The ANOVA results for the effects of attrition for the concrete nouns on the continuing students at the intermediate level

Source		Sum of Squares	df	Mean Square	F	Sig.
Stage						
	Between Groups	.038	1	.038	.026	.872
	Within Groups	151.346	102	1.484		

TABLE 7
The ANOVA results for the effects of the attrition of the concrete nouns on the continuing students at the advanced level

Source		Sum of Squares	df	Mean Square	F	Sig.
Stage						
	Between Groups	2.571	1	2.571	1.890	.172
	Within Groups	168.730	124	1.361		

TABLE 8
A descriptive statistics of the non-continuing students' performance for the abstract and concrete nouns in both stages

Proficiency Level		Abstract		Concrete	
		Stage 1	Stage 2	Stage 1	Stage 2
Intermediate					
	Mean	18.52	18.00	18.42	17.81
	N	48	48	48	48
	Std. Deviation	1.167	1.288	1.108	1.347
	Std. Error of Mean	.168	.186	.160	.194
Advanced					
	Mean	18.65	18.03	18.92	18.32
	N	37	37	37	37
	Std. Deviation	1.585	1.343	1.064	1.435
	Std. Error of Mean	.261	.221	.175	.236

n=85

nouns has taken place on the non-continuing students in the intermediate level (F = 4.310, p < .05).

As shown in Table 10, the results of the analyzed factors revealed that there were significant of the abstract nouns on the non-continuing students at advanced level (F = 4.578, p < .05).

The analysis of variance procedure was used to find out the concrete nouns for the non-continuing students across the different proficiency levels. The results obtained from the ANOVA conducted are presented in the following tables.

Based on the data shown in Table 11, there were significant effects on the concrete nouns at the intermediate levels for the non-continuing students (F = 5.759, p < .05).

Based on the data shown in Table 11, there were significant effects on the concrete nouns at the intermediate levels for the non-continuing students (F = 5.759, p < .05).

TABLE 9
The ANOVA results for the effects of attrition of the abstract nouns for the non-continuing students at the intermediate level

Source		Sum of Squares	df	Mean Square	F	Sig.
Stage						
	Between Groups	6.510	1	6.510	4.310	.041
	Within Groups	141.979	94	1.510		

TABLE 10
The ANOVA results for the effects of attrition of the abstract nouns for the non-continuing students at the advanced level

Source		Sum of Squares	df	Mean Square	F	Sig.
Stage						
	Between Groups	11.365	1	11.365	4.578	.036
	Within Groups	178.757	72	2.483		

TABLE 11
The ANOVA results for the effects of attrition of the concrete nouns for the non-continuing students at the intermediate level

Source		Sum of Squares	df	Mean Square	F	Sig.
Stage						
	Between Groups	8.760	1	8.760	5.759	.018
	Within Groups	142.979	94	1.521		

TABLE 12
The ANOVA results for the effects of attrition of the concrete nouns for the non-continuing students at the advanced level

Source		Sum of Squares	df	Mean Square	F	Sig.
Stage						
	Between Groups	6.541	1	6.541	4.100	.047
	Within Groups	114.865	72	1.595		

Based on the results given Table 12, significant effects were shown for the concrete nouns for the non-continuing students at the advanced proficiency level, as well. Nonetheless, the significant levels across the different proficiency levels are lower than 0.05 ($F = 4.100$, $p < .05$). This shows that in the second stage of the concrete nouns, there is a reduction in the students' performance and their performances lead to the reduction of the significant level. In other words, the EFL attrition has been found on the concrete nouns for the non-continuing group at both the proficiency levels. Consequently, the results demonstrate that there are differences between the attritions of the abstract and concrete nouns among the non-continuing students at the intermediate and advanced levels.

CONCLUSIONS AND IMPLICATIONS

The findings of this research indicated that the continuing students did not undergo significant attrition of the abstract and concrete nouns, whereas the non-continuing students underwent significant attrition of the abstract and concrete nouns across the different proficiency levels. However, the absence of attrition on the continuing students is not against the researcher's expectation. The results of this study contradict with that of De Groot and Keijzer (2000, as cited in Ross, 2002) who proved that the attrition of the abstract nouns did not take place faster than the concrete nouns.

In addition, the results also revealed that the continuing students did not experience attrition with the abstract and concrete nouns. This might be due to the short period of disuse. In spite of the short non-use period, the non-continuing students showed a trend of attrition of the abstract and concrete nouns at two different proficiency levels. The amount of attrition might turn out to be significant in the long run and revealed the trend of attrition for the abstract nouns in the two stages. As compared to the past studies, abstract nouns turned out to be more resistant to attrition.

In the previous studies by Bahrick (1984) and Olshtain (1989), it was shown that the advanced students were more resistant to attrition as compared to learners with low proficiency. In this study, nonetheless, the advanced students were found to have experienced attrition, as well. This might be due to some intervening variables such as the amount of the out-of-class exposure, attitude, motivation, teaching methodology and so forth, which were not taken into consideration in this study.

A study by Baharik (1984) indicated that during the first 5 years of second language disuse, all attriters would experience the same attrition regardless of their proficiency levels. In 1885, Ebbingham noted that the more one knows the more one will tend to forget; so, there is a positive correlation between proficiency level of attriters and the amount of attrition. The results attained in this study also support the findings of the other studies in which advanced-level learners experienced a high attrition compared to those with low-proficiency.

Meanwhile, Tomiyama (1999) asserted that the first and second language attritions set in within six months of disuse. In this research, the 3-month interval of nouns of the language could lead to attrition as well.

According to Cohen (1986), vocabulary which was added most recently was found to be the most vulnerable reason which led to attrition. The findings of this study also support the types of vocabulary which led to attrition among the continuing and non-continuing groups across the different proficiency levels. Nouns are known to be easier to learn than verbs or adverbs; however, the regression hypothesis outlines that these classes of words can be forgotten much sooner than the earlier group mentioned.

More interestingly, the findings of this study have shed some lights on the attrition of the concrete and abstract nouns among the continuing and non-continuing students with different proficiency levels. In some past studies, the effects of class exposure on attrition have not been investigated; hence, this study has contributed in explaining the role of word classes in EFL vocabulary attrition. Additionally, this research has also shown that attrition is not limited to the non-continuing students as even the continuing students have had the possibility to experience attrition, as well.

Hence, English language teachers are required to identify the differences between the abstract and concrete nouns in the English textbooks and to draw their students' attention more on them, apart from providing them with a lot more practices on vocabulary. In addition, English language teachers should make modifications with their teaching methodologies based on the results of this study to put more emphasis on the areas which turn out to be vulnerable to attrition.

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Errors and Variations of TESL Students' Written Description

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ABSTRACT

The focus of this study was to highlight different kinds of errors and variations that emerge in the writings of ESL students. The participants of the study were twelve TESL undergraduate students from the Faculty of Educational Studies at Universiti Putra Malaysia. Students' written descriptions on a picture stimulus were collected and qualitatively analyzed. Then, the emerging errors in their descriptions were categorized into the linguistic and surface structure taxonomies. The findings revealed different grammatical errors in their writings which were basically related to the categories of verb phrases and noun phrases in either simple or compound/complex sentences that resulted in giving misinformation, one of the categories in surface structure. Some variations were also found in the word choice of the students in the three ethnic groups of the study, whereby these choices might be the reflections of their cultural background and world view. The results could help material developers to develop the necessary tasks and exercises and teachers to devise the best teaching strategies for overcoming these kinds of errors in ESL learners' writings.

Key words: Grammatical errors, linguistic taxonomy, noun phrase, surface structure, variation, verb phrase, second language learners

INTRODUCTION

Variation in language, specifically in Second Language Acquisition (SLA), has been the subject of studies for years. Language is a dynamic system and SLA is not a matter of conformity to uniformity (Larsen-Freeman, 1997, 2003). Due to the fact that variation and fluctuations are important characteristics of dynamic systems (Thelen & Smith, 1994; Van Geert & Van Dijk, 2002), highlighting the different levels of variation in the language of second language learners is of prime importance. Many research studies have been conducted on language variation from different linguistic and communicative perspectives. Most of them rely on phonology (Labov, 1991), hierarchy of acquisition (Krashen, 1977), as well as syntax and morphology (Dulay & Burt, 1973; Larsen-Freeman, 1976; Young, 1991; Van Patten, 1996). In this regard, more studies have been carried out on the oral production of learners (e.g. Dulay & Burt, 1974; Tarone & Liu, 1995), and a few studies have been conducted on the variation in the written production of learners (e.g. Larsen-Freeman, 2006). This could be due to the fact that written language is considered as more challenging to be analyzed. It is also believed that the issue of finding a suitable methodology with which to capture the 'fuzziness' (Van Geert

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& Steenbeek, 2005) and dynamism of language development is a challenging one (Larsen-Freeman, 2006).

Some studies have more focus on error analysis and learners' interlanguage (Corder, 1967, 1981; Ho-Peng, 1976; Khazriyati Salehuddin, Kim Hua & Maros, 2006; Richards, 1971; Selinker, 1972). For example, Richards (1971), in the study of learners' second language, found that some intralingual and developmental errors happen in the oral production of students. Similarly, Ho-Peng (1976) found some interlanguage (e.g. "* Ahmad returned last week from Ipoh"), intralingual (e.g. "*Ali didn't saw the man") and developmental errors (e.g. "*You do not yet answer my second question") in the language of Malaysian ESL learners. These kinds of errors could be expected from anyone learning a second language because they are typical of systematic errors in English usage. Picture stimuli were also employed in the studies on error analysis. Dulay and Burt (1974), for instance, used a series of pictures to elicit a range of basic syntactic structures orally. Likewise, Makino (1979) studied the order of morpheme acquisition through written data based on picture stimuli. Makino found that the order of morpheme acquisition is the same as the natural order, but different from the order in textbooks.

Learners' productions are inherently variable and this variability is evident in the errors they make (Ellis & Barkhuizen, 2005; Tarone & Liu, 1995). Recent studies reflect the interest in the analysis of written production of the second language learners (Adams, 2003; Hinkel, 2002; Liu, 1996; Nelson, Bahar & Van Meter, 2004). Most of the studies in this area have separate focus on the oral or written production of the learners. Very few studies have emphasized on both types of production. Larsen-Freeman (2006), for example, studied on the emergence of complexity, fluency and accuracy in the oral and written productions of five Chinese learners of English. Variability in learner's interlanguage may be random in part (free variation) but is largely systematic (Ellis & Barkhuizen, 2005). Hence, there is much more necessity to investigate the written production

of the second language learners to investigate the different kinds of errors and variations in their writings, which will in turn assist teachers in finding the best ways for overcoming the problematic areas in students' writings. In this regard, the present study sought to find out the answer to the following question:

- What are the errors and variations in the written production of Malay, Chinese and Indian TESL students?

METHOD

A qualitative content analysis of the students' writings was conducted based on the error analysis approach. As Ary, Jacobs, Razavieh, and Sorensen (2006) stated, "content or document analysis is a research method applied to written or visual materials for the purpose of identifying specified characteristics of the material" (p. 464). For this, the written productions of the students were analyzed sentence by sentence for the occurrence of any kind of errors and variations.

Participants

The participants of the study were twelve volunteer female undergraduate TESL students in their fourth semester from the Faculty of Educational Studies at Universiti Putra Malaysia (UPM). They were from three ethnicities, including Malay (participants R, P, T and Y), Chinese (participants E, G, H and K), and Indian (participants M, O, A and D). The participants represented the three groups of the study (i.e. Malay = Group A, Chinese = Group B, and Indian = Group C). The division into three ethnic groups was to find the similarities and/or differences in the emergent errors and variations in their writings.

Material

Picture composition task was employed in this study. A picture was selected from an ELT book as a stimulus for writing (see Appendix 1). The participants were asked to describe the picture in one or two paragraphs.

Data Analysis

The writings of the students were analyzed inductively for any emergent errors. For this, the specific errors in the students' writings were identified and also categorized into two taxonomies, as follows:

1. Linguistic taxonomy (Politzer & Ramirez, 1973) which is based on a descriptive grammar of the target language (Quirk, Greenbaum, Leech, & Svartvik, 1985). Such a grammar includes general and specific categories relating to basic sentence structure, verb phrase, verb complementation, noun phrase, prepositional phrase, adjuncts, coordinate and subordinate constructions and sentence connection.

2. Surface structure taxonomy (Dulay, Burt, & Krashen, 1982). This taxonomy is based on four general categories with their sub-categories, such as omission, addition (regularization, double-marking, simple additions), mis(in) formation (regularization, archi-forms, alternating forms), and misordering.

FINDINGS AND DISCUSSION

The written descriptions of Group A had short and simple sentences with present continuous tense. The sentences with asterisks indicate the incorrect sentences and the mistake in each one is underlined:

a. * The picture is show one family.

b. The father is sitting on the sofa.

c. * He is reading newspaper.

d. * The mother is standing besides the father.

e. She is holding a cup of coffee.

f. The daughter is pointing to something.

g. The daughter is pointing at the lamp.

In Sentence (a), there is a grammatical error which is corresponding to the verb phrase 'to be + v + ing' for the present continuous tense. In Sentence (c), a definite or an indefinite article (grammatical morpheme) is missing in the noun phrase, as in 'He is reading a/the newspaper'. In Sentence (d), there is an error in the prepositional phrase, whereby the preposition 'besides' has been used instead of 'beside' with the meaning of 'near' or 'at the side of'. A variation is seen in the use of preposition in Sentence (f) and Sentence (g), as in the prepositional verbs 'pointing to' and 'pointing at'. In this regard, Ho-Peng (1976) indicates that Malaysian ESL learners have problem in the use of prepositions. According to Ho-Peng, the learners either omit the prepositions (e.g., "* The teacher discussed *about* the trip") (omit *about*) or use them wrongly (e.g., "* Zarina has been sick *from* Sunday") (*since*), or put them where they are not needed (pp. 24-25).

Other grammatical errors emerge in Group A's writings:

h. * The family including three person.

i. * There is a father, a mother, a daughter.

In Sentence (h), the plural 's' has been omitted in the word 'person' in the noun phrase 'three person'. The use of conjunction 'and' is needed in Sentence (i) as in '…, and a daughter'. In general, the emergent variations and errors in the written production of Group A are of the following kinds:

Linguistic category and error type:

• General categories : (a) Noun phrase; (b) Verb phrase

• Specific categories: (a) Numbers (substitution of singular for plural); Determiners (omission of the article); Prepositions (misuse of prepositions); Conjunctions (omission of conjunction) – (b) Progressive tense (replacement of 'ing' by the simple verb form).

Surface structure category and error type:

• General categories: (a) Misinformation; (b) Omission

• Specific categories: (a) Regularization

The participants in Group B used both simple and complex sentences. The use of relative pronouns emerged in their descriptions. The following sentences were taken from the written descriptions of the students in this particular group:

a. * The picture shows three people 2 adults and 1 <u>children</u>.

b. * **However**, the girl is pointing at the man **who** <u>sits </u>on the armchair reading the newspaper **while** looking at the lady.

c. The man **who** reads the newspaper looks gloomy and worried.

d. **Therefore**, **to conclude**, I would say this is a family talk in the livingroom.

e. * The man <u>sits in</u> a big armchair.

As shown in the above sentences, the uses of relative pronoun (e.g. 'who') and transition words (e.g. 'however', 'therefore', 'to conclude') are found in their descriptions. In Sentence (a), there is an error in the use of plural noun 'children' in place of singular noun 'child' to show the agreement between the preceding singular number as in '1 child' not '1 children'. This sentence should be accurately written as: 'The picture shows three people, two adults and a child'. In Sentence (b), faulty parallelism is found between the verbs throughout the sentence when the student writes:

• … is pointing at … sits on … reading … looking at …

In Sentence (e), there is an incorrect use of preposition in the prepositional verb 'sits in' for 'sits on'. Therefore, the errors in the written descriptions of Group B can be classified under the following types:

Linguistic category and error type:

• General categories: (a) Noun Phrase; (b) Verb Phrase

• Specific categories: (a) Number (substitution of plural for singular); (b) Progressive tense (omission of 'be'

and replacement of 'ing' by the simple verb form); Prepositions (misuse of preposition).

Surface structure category and error type:

• General categories: Misformation

• Specific categories: Regularization

Group C used longer and compound sentences, with conjunctions 'and' and 'but' appeared in their descriptions. The following sentences were extracted from their writings:

a. *The father might be so tired after working **and** he is taking <u>rest</u>.

b. ***And** <u>her</u> daughter <u>need</u> to tell something to her father **but** he seems not to care about it.

c. *She <u>try</u> to tell **and** wants her father <u>listen </u>to her.

d. **And** the mother in the picture seems try to tell her daughter that the father will talk to her later.

e. *As a mother she <u>carry </u>a lot of responsibilities.

In Sentence (a), an article is required to be used before the word 'rest' as in 'taking a rest'. In Sentence (b), there is an incorrect use of the verb 'need' instead of 'needs' to correspond to the subject-verb agreement for the subject 'her daughter'. In this sentence, the use of possessive adjective 'her' in the noun phrase 'her daughter' is wrongly used for 'his daughter', which does not reflect the correct referent.

Confusion of gender-based pronouns is one of the most prevalent problems in Malaysian L2 learners, and this is simply because the linguistic norm in the Malay language and the mother tongue of these learners are different from that in the English language. For example, the Malay words '*nya*' and '*dia*' are used for both the English possessive adjectives 'his' and 'her', while for the noun phrases 'his daughter' and 'her daughter', one word '*putrinya*' is used. This is an interlanguage error that results from the interference of learners' first language.

Interlanguage errors were also reported in the findings of Ho-Peng (1976) among ESL learners in Malaysia. Ho-Peng referred to the students' errors in word order which resulted from the interference of Bahasa Malaysia, as in "She saw there several people from Penang" instead of "There she saw several people from Penang" (p. 25). This area requires a contrastive analysis of both languages by the teachers in order to highlight the problematic areas to the students and help them overcome interlanguage errors.

In this regard, Khazriyati Salehuddin *et al.* (2006) carried out a contrastive analysis of the use of determiners between the Malay language and English. They examined a corpus of 873 sentences which were collected from 51 essay samples from Malaysian secondary school students who were learners of English as a second language. The occurrences of errors were 175 out of 826 for the uses of determiners. The researchers also found different aspects of incorrect uses of determiners, which are the reflections of the Malay grammar. These errors are related to specific places of location (e.g., "*Sometimes I bring it to __ park to play"), instruments (e.g.,"*My hobbies are cycling, playing __ computer, playing football, and reading novel"), countries as adjectives (e.g., "*I want to be like "Khalid Jamlus", the striker of __ Malaysian football team"), name of subject (e.g., "*I also like __ science subject because this subject discusses …"), agreement to the noun (e.g., "*All this countries lost their property"), possessive forms (e.g.,"*During I leisure hours, I collect the stamps"), and cardinal numbers (e.g.,"* She was born on __ 1st October 1992") (pp. 26-29).

Correspondingly, in Sentence (c) and Sentence (e), there are similar kinds of errors as in Sentence (b) with regard to the subject-verb agreement and the use of plural verb instead of the third person singular. Ho-Peng (1976) indicates that a deviant structure of this kind is the result of overgeneralization which leads to intralingual errors. In this case, the learner tries to reduce his/her linguistic burden (e.g., omission of the third person -s) (Richards, 1971). In Sentence (c), there is another error in the use of two main verbs, whereby the first verb 'wants' is followed by the bare infinitive 'listen', while an infinitive with 'to' is required in this structure. The types of emergent errors in the written descriptions of Group C are as follows:

Linguistic category and error type:

- General categories: (a) Noun Phrase; (b) Verb Phrase; (c) Verb-and-verb construction.

- Specific categories: (a) Determiners (use of wrong possessive); (b) Subject-verb-agreement (disagreement of subject and number); (c) Omission of 'to' in the verb and verb construction.

Surface structure category and error type:

- General categories: (a) Misformation; (b) Omission

- Specific categories: (a) alternating forms; regularization

Variations in the Word Choice

Considering the participants' word choice, different words were employed for the same referents by the groups of the study. For example, two participants in Group A used the word 'sofa' and two participants in Group B used the word 'armchair' for the same referent.

R: The father is sitting on the **sofa**.
Y: The father reads the newspaper on the **sofa.**
E: * The girl is pointing at the man who sits on the **armchair**.
H: *The man sits in a big **armchair**.

The use of the words 'cup' and 'mug'; 'coffee' and 'hot beverage' for the same referents were also found in the descriptions of the three groups:

A: She is holding a **cup** of **coffee**.
B: The lady is holding a **mug** with **hot beverage** in it.
C: She has a **cup** of **coffee** in her hand.

In the same line, Group A and Group C described a family and used some related words including 'family', 'father', 'mother', and 'daughter' regularly in their written descriptions, whereas Group B used the words 'people', 'man', 'lady', and 'girl' to refer to the same referents in the picture. The following sentences were found in the descriptions of the participants in three groups:

Group A

- * The picture is show about one **family**.

- * There is a **father**, a **mother**, a **daughter**.

- The **father** is sitting on the sofa.

- * The **mother** is standing besides the **father**.

- The **daughter** is pointing to something.

Group B

- * The picture shows three **people,** 2 adults and 1 children.

- The **lady** is holding a mug …

- However, the **girl** is pointing at the **man**…

- The **man** who reads …

- I do feel that the **man** has just lost his job.

Group C

- The **father** might be so tired after working…

- * And her **daughter** need to tell something to her **father** but…

- And the **mother** in the picture seems try to tell …

- * As a **mother** she carry a lot of responsibilities.

- The **mother** looks very kind.

Table 1 shows a summary of the errors found in the written descriptions of the students who took part in this study. The correct equivalents of the errors are provided based on the descriptive grammar of the target language (Burt & Kiparsky, 1972; Quirk *et al*., 1985) in the reconstruction column. The table incorporates both the linguistic categories (Politzer & Ramirez, 1973) and surface structure categories (Dulay *et al*., 1982).

TABLE 1
Types of the emergent errors in the students' written descriptions in the three groups

Group	Error	Reconstruction	Linguistic description	Surface structure description
	…three person	… three persons	Noun phrase; Number; Substitution of singular for plural	Misinformation-regularization
	… is show…	… is showing …	Verb phrase; Progressive tense; Replacement of 'ing' by the simple verb form	Misinformation-regularization
A	… reading newspaper	…reading a/ the newspaper	Noun phrase; Determiners; Omission of an article	Omission
	…is standing besides the father.	...is standing beside the father.	Prepositional phrase; Preposition; Misuse of preposition	Misinformation-regularization
	… a father, a mother, a daughter	… a father, a mother, and a daughter	Noun phrase; Conjunctions; Omission of conjunction	Omission

Table 1 (continued)

	… and 1 children	… and a child	Noun phrase; Number; Substitution of plural for singular	Misinformation-regularization
B	…is pointing at the man who sits on …	…is pointing at the man who is sitting on …	Verb phrase; Progressive tense; Omission of 'be' and replacement of 'ing' by the simple verb form; Substitution of the simple present tense for the present progressive tense	Misinformation-regularization
	… sits in …	… sits on…	Verb phrase; Preposition; Misuse of preposition	Misinformation-regularization
	… he is taking rest	… he is taking a rest	Noun phrase; Determiners; Omission of an article	Omission
	… her daughter…	… his daughter…	Noun phrase; Determiners; Use of wrong possessive	Misinformation-Alternating forms
C	… her daughter need…	…her daughter needs…	Verb phrase; Subject-verb-agreement; Disagreement of subject and number (singular)	Misinformation-regularization
	She try …	She tries…	Verb phrase; Subject-verb-agreement; Disagreement of subject and number (singular)	Misinformation-regularization
	…wants her father listen …	…wants her father to listen…	Verb-and-verb construction; Omission of 'to'	omission

Although the surface structure categories indicate almost identical types of errors, the linguistic categories and their subcategories reflect various types of errors among the participants in the three groups of the study. This verifies the variability (Ellis & Barkhuizen, 2005; Tarone & Liu, 1995) and dynamicity of the language, specifically the SLA process (Larsen-Freeman, 2006; Thelen & Smith, 1994; van Geert & van Dijk, 2002). Some errors were found in simple sentences, some in compound or complex sentences. The main types of the errors were in the noun phrases and verb phrases and their sub-categories in the taxonomy.

The students had linguistic problems in the use of number (e.g. substitution of plural for singular or vice versa), determiners (e.g. omission of articles and use of wrong possessive), prepositions (e.g. misuse of prepositions), noun phrases and progressive tense (e.g. replacement of 'ing' by the simple verb form, and omissions of 'be' and 'ing 'and replacing them with simpler form of the verb), subject-verb agreement (e.g. disagreement of subject and number), and verb-and-verb construction (e.g. omission of 'to') in the use of verb phrases. The findings of this study are in agreement with some of the results by Ho-Peng (1976) and Khazriyati Salehuddin *et al.* (2006) from Malaysian ESL learners.

The results of this study revealed that all the participants, regardless of their ethnicity, produced linguistic and surface structure errors.

The participants' first language is Malay and it may be one of the causes of error occurrences in their second language. Meanwhile, the participants' cultural background may also be another cause for the variation in the use of words for the same referents. In this regard, it was found that the Malay and Indian participants used similar words in some cases (e.g. father, mother, daughter, cup, coffee), while the Chinese participants used different words (e.g. man, lady, mug, hot beverage). One possible interpretation for this might be related to their family culture and how they view the situation in totality based on their worldview and the real-world experiences.

CONCLUSION

The findings of the study indicate that second language learners produce different kinds of errors in their writings. The study verifies the idea that a learner's interlanguage is variable (Ellis & Barkhuizen, 2005). Although the participants of this study were all second language learners in their fourth semester, they had different kinds of linguistic errors in their writing. In addition, their choice of words also differed in some situations and for some referents. The findings of the study also reflect the problematic areas in their writings. The students had problems in the surface structure of the sentences, such as misinformation and its subcategories (regularization and alternating forms) and omission. Their errors were mainly linguistic and grammatical in nature. Some variations were found in the choice of words that might be a reflection of their world view. For example, the Malay and Indian participants referred to the family members using specific relevant words (e.g. father, mother, daughter), while the Chinese participants employed more general words (e.g. people, lady, man, girl) for the same referents shown in the picture.

This study was limited to the results from the content analysis of the writings of 12 TESL students on a picture stimulus. The findings are in line with the findings of some previous researchers in the area (e.g. Ho-Peng, 1976;

Khazriyati Salehuddin *et al.*, 2006). This area still requires further research using a larger sample size and more writing stimuli. More studies are also needed to examine the effect of ethnicity on the lexical variations in the writings of ESL students.

The results of this study revealed the areas of the target language the ESL learners might have difficulty to produce correctly. These problematic areas can be best identified and thought through the contrastive analysis of the first and second languages. The findings can help material developers to create the necessary tasks and exercises, as well as teachers to devise the best teaching strategies for overcoming these kinds of errors in the writings of ESL learners.

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APPENDIX 1

Picture stimulus for students' writing

-Look at the following picture and describe whatever you understand from it.Write your description in the provided space below.
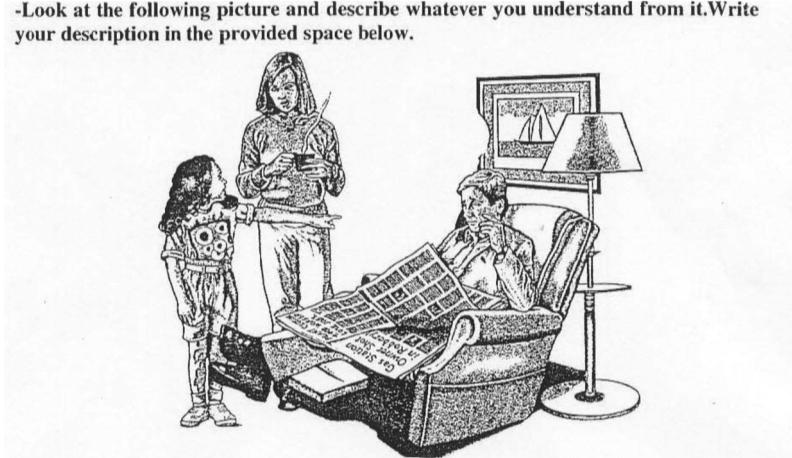
Code Choices and Reasons for Accommodation Among Urban Bidayuh Undergraduates in Intergroup Discourse

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ABSTRACT

The primary aim of this study was to investigate the dominant code of choice among the younger generation of urban Bidayuh undergraduates studying in a local tertiary institution. The Speech Accommodation Theory contends that closer rapport and solidarity can be easily established if the speaker chooses a code that is most preferred by the recipient. The data were collected through questionnaires and audio recordings of 13 casual conversations. The key findings of this study indicated that the heritage Bidayuh dialects were hardly used. Instead, Sarawak Malay is the dominant code of choice among the younger generation of urban Bidayuh undergraduates across dialect group interactions.

Keywords: Code choice, accommodation, Kuching, Bidayuh

INTRODUCTION

It is important to note that switching of codes is a form of accommodation in multilingual societies (David, 2003, p. 3). Ongoing language shift in a community is signalled by code-switching and is a recurring feature among the minority communities in Malaysia. Studies of various ethnic communities in Malaysia such as the Sindhi community (David, 2001), the Javanese (Mohd Yasin, 1996) and the Kelantanese Peranakan Chinese communities (Teo, 2003) have demonstrated inter generational pattern of language shift which is signalled by code-switching.

In a review of theoretical and regional issues with special reference to Borneo (which includes Sarawak), Sercombe (2002, p. 134) and Cullip (2000, p. 2) have identified similar factors which can influence language choice among ethnic minorities in Sarawak. These include the language proficiencies of the participants; the formality of the situation (setting, participants, and topic); the need to project or reject identities and loyalties; the age; sex and level of education of the participants; the presence or absence of 'background' groups in the setting who may indirectly influence the participants.

Sarawak joined Malaysia on 16th September 1963 after over 100 years of being governed by three English autocrats, the Rajah Brooke (1839-1946), and 21 years of British Colonial Administration (1942-1963). Sarawak is the largest of the fourteen states in Malaysia and is located on the island of Borneo. It has a population of 2.3 million (Department of Statistics, 2008), with the majority being the Ibans, followed by Chinese, Malay, Bidayuh, and at least 22 other smaller ethnic groups. In Malaysia, the official language is Bahasa Melayu with English as a strong second language

especially in the urban areas (Gill, 2002). According to Madzhi Johari (1988, p. 1), Sarawak Malay has the most number of speakers compared to any other dialects or languages in Sarawak and is spoken widely without feelings of embarrassment in unofficial domains. It is the lingua franca in interethnic communication among the *Bumiputeras* (sons of soil). Asmah (1987, p. 58) stated that 'Malay has always been the lingua franca in intergroup communication in Malaysia since the colonial days'.

More specifically, accommodating to the setting is seen to have exercised a powerful influence over language choice. Tunku Zainah (1978) reported that the younger generation of *Orang Miriek* (Jati Miriek) chose to speak Sarawak Malay dialect and be identified as Sarawak Malays because they wanted to gain acceptance by other urban Sarawak Malays whom they considered as more superior. She also reported that some of the *Miriek* speakers she met described their language as "useless" and "silly"… (Tunku Zainah, 1978, p. 31).

McLellan (1992: 200) reported that Bidayuh speakers on a radio programme used more Malay (approximately 60%) than Bidayuh dialect. The radio station was seen as a formal setting and a prestigious code was deemed appropriate. According to Rensch *et al*. (2006, p. 21), the young generation of Bidayuhs preferred to use Bahasa Melayu and English at work and at home because they felt that their dialects were less useful as they lacked the industrial and scientific concepts necessary to express complex thoughts and life needs in the scientific and industrial society in their present time. Minos (2000) stated that the Bidayuhs faced a problem whether they should use Bidayuh with other Bidayuhs from other dialect groups in public and risked not being understood or being branded as rude.

Given the complexity and fragility of the linguistic ecology (Muhlhausler, 1998) of Sarawak, it is surprising as Martin (1992) notes in relation to Borneo that very few studies have been done to investigate the language usage patterns of the multilingual people. Asmah (1992, p. 77) stated that research in language choice is important, especially at the present time

when the linguistic communities of Sarawak are undergoing changes in their use of language arising from the Malaysian language policy.

Following the passing of the Interpretation (Amendment) Bill 2002 at the State Legislative Assembly in Kuching, Sarawak on 6 May, 2002, the Bidayuh communities were no longer to be referred to as 'Land Dayak', the terminology given by the Brooke and Colonial administrations in the olden days. Today, the Land Dayaks prefer to be known as Bidayuh. In their dialect, *'Bi'* means 'people' and *'Dayuh'* means 'Land'.

The biggest problem facing the Bidayuh is that there is no common Bidayuh dialect amongst the 29 dialectal groups. The 29 Bidayuh sub-dialects have been classified into four main groups, namely, Bau-Jagoi for Bidayuhs residing in Bau District; Bukar-Sadong for Bidayuhs residing in Serian District; Biatah for Bidayuhs residing in Padawan and Siburan District (also referred to as Kuching Rural District), and Salako Larra for Bidayuhs residing in Lundu District (also referred to as the Bidayuh Belt).

Although these 29 groups have been classified into 4 main dialectal groups based on the districts where their ancestral homes are located, the problem still exists in the sense that the Bidayuhs in these different districts do not understand one another completely. Some words in one dialect mean differently in other dialects. Asmah (1987, p. 148) discovered that are also sub-dialects spoken. Among the Biatah sub-dialects are Penyua, Binah, Bipuruh, Tebia and Bebengo. Common Bau-Jagoi sub-dialects are Bisinghai, Biroh, Krokong and Bijagoi. Sub-groups are also found among the Serian Bukar-Sadong Bidayuhs. The Bidayuhs residing in the upper tributaries of the Sadong River speak a slightly different dialect from those residing in the lower reaches of the River and those Bidayuhs residing closer to the Sarawak/Kalimantan border speak different dialects compared to those living along the Kuching/Serian Road.

With each dialectal group having many variations and different talking styles, sound and

pronunciation, it looks very confusing even to the Bidayuh themselves. In such situations, they would begin to speak in other codes. To justify the need for this study is actually to ascertain to what extent the younger generation of urban multilingual Bidayuhs are using their heritage dialects apart from the Sarawak Malay dialect, English and Bahasa Malaysia.

AIMS

The primary goal of this study was to investigate the dominant code of choice among the younger generation of urban Bidayuh who are undergraduates in a local university in Kuching.

1. What i**s** the most dominant code choice of the urban Bidayuhs in inter dialect group communication?

2. Are there other less dominant codes used?

3. What are the reasons for these code choices?

THEORETICAL FRAMEWORK

Speech Accommodation Theory developed from the work of Giles and Clair (1979) and Gumperz (1982) functions of code-switching formed the main framework of this study.

Speech Accommodation Theory

Speech Accommodation Theory (Giles & Clair, 1979) refers to the phenomenon whereby speakers change the way they are speaking depending on who they are speaking to. The Theory of Accommodation contends that rapport and solidarity are more easily established if a speaker shifts to the preferred language of the recipient or subject. The adherence to norms valued in human relationships and its social importance influence accommodation directly. Speech Accommodation Theory is phrased as the inner group (us) versus the outer group (them). While Giles and Clair (1979) used the Theory of Accommodation which focuses on language accommodation among people of

different ethnicities, this study extends the concept to include the extent of the use of Bidayuh (i.e. the hereditary dialect), Bahasa Melayu (i.e. the national language, and a language used as the medium of instruction), English and vis a vis the use of Sarawak Malay among urban Bidayuhs.

Giles, *et al.* (1991) have used Speech Accommodation Theory to explain the social motivations of using different codes and code-switching. In this study, the concept is extended to explain reasons for accommodation during social interactions. Speech Accommodation Theory (Giles, *et al.,* 1991) explains why people shift their speech in different interactions with others. It centres round three main speech strategies of convergence, divergence and maintenance. Speech Accommodation Theory (Giles, *et.,* 1991) suggests that, in many social interactions, speakers desire their listeners' social approval, and use modification of their speech towards the listeners' code as a tactic to get this approval. This is called *convergence* and they are seeking approval and possible rewards. In other situations, however, speakers may wish to disassociate themselves from listeners, and they do this by accentuating their linguistic differences. This is called speech *divergence. Maintenance*, on the other hand, refers to the absence of delectable speech modifications.

Reasons for Code–switching

Code-switching is defined by Gumperz (1982, p. 59) as 'the juxtaposition within the same speech exchange of passage of speech belonging to two different grammatical systems or subsystems'. Code-switching refers to instances when speakers switch between language and dialects in the course of a conversation.

The four main reasons why people code-switched and these have been discussed by Gumperz (1982) as: firstly, due to the lack of knowledge of one's language or the lack of facility in that language on a particular subject; secondly, code-switching is useful in excluding certain persons present from a portion of the conversation if it is known that these persons

have no knowledge of the language used for switching; thirdly, code-switching is sometimes used as a stylistic device to indicate change in the 'tone' of the conversation at a certain point, and lastly, a person could code-switch in order to impress another person with his ability to speak in many languages or in a language of 'prestige'.

METHODOLOGY

A total of 123 urban Bidayuh undergraduates participated in this study. Of these, 45 were urban 9 Bau-Jagoi (henceforth *B-J),* 43 were urban Bukar–Sadong (henceforth *B-S*) and 35 were urban Biatah (henceforth *BI)* Bidayuh undergraduates.

Data were collected through multiple methods. The study utilised a questionnaire and recordings of naturally occurring conversations. Permission was obtained from the Bidayuh undergraduates before the audio recording. Recordings of 13 natural occurring conversations involving urban Bidayuh undergraduates of the three main dialectal groups were made by the researcher and the respondents.

The questionnaire was designed with reference to earlier studies on language interaction, which included code-choices among members in minority ethnic communities, such as Gal's (1979) study on Hungarian-German bilingualism in the town of Oberwart, David's (1996) study of language shift among the minority Sindhi community in Malaysia, Sankar's (2004) study on language maintenance and shift among Tamil Iyers in Malaysia and Roksana Bebe Abdullah's (2001) work on language choice and shift among the Malays in Singapore.

All the 55 items in the questionnaire for the larger study consisted of multiple-choice items. Questions 1-2 of the questionnaire provided the background information of the respondents, such as gender and dialect group, which were the two main variables of this paper. Also, for this paper, the author made use of the data obtained from five multiple choice questions from the sub-domain of interaction. Two questions dealt with language choice when

using electronic communication channels, such as voice mail, e-mail and SMS (Short Messaging System). Three other questions were designed to determine the language choice of the Dayak Bidayuh undergraduates when telling secrets, conducting group study, greetings and taking leave.

The data obtained from the questionnaire were analysed using frequency counts and percentages. Only the extracts from the 13 naturally occurring conversations, which did not contain matters sensitive to individuals, their families or the university where they were studying, were selected. The transcripts were analysed to determine the dominant language used by the Dayak Bidayuh undergraduates when they were with other urban Bidayuh undergraduates in the university domain. The number of sentences using stand-alone codes and code-switching of various codes were identified, categorised and counted manually. The percentage of each category was then counted in order to determine the dominant and different patterns used; namely, Stand-alone Sarawak Malay; Code-switch using more Sarawak Melayu and less English; Code-switch using more Sarawak Malay and less Bahasa Melayu; Code-switch using more Sarawak Malay and less Bidayuh; Code-switch using more Sarawak Malay and less Sarawak Malay, English and Bidayuh; Stand-alone English; and Stand-alone Bahasa Melayu.

RESULTS AND DISCUSSION

The findings of five contexts of code choice in the questionnaire are given below. The first two contexts are on different modes of communication, namely, sending voice mail, e-mail and SMS. The other three contexts cover the different purposes of communication, namely, code-choice when greeting and taking leave, telling secrets and group study. Tables 1-5 summarise the results from the questionnaires, followed by a summary of the findings on the different modes of communication and the different purposes of communication.

Sending Voice Mail

Voice mail was found to be a popular form of transmitting information when the respondents were too busy to send SMS (Short Messaging System) or e-mails. The most preferred code among the Bidayuh undergraduates when sending voice mail to the Bidayuh undergraduates belonging to other dialect groups was stand-alone Sarawak Malay. The code was selected by 75% of the *B-J* male and 80% of the *B-J* female undergraduates, 70.6% of the *B-S* male and 69.2% of the *B-S* female undergraduates, 56.25% of the *BI* male and 52.63% of the *BI* female undergraduates.

Code-switching using more Sarawak Malay and less of the other codes was reported by 15% of the urban *B-J* male and 16% of the urban *B-J* female undergraduates, 23.5% of the urban *B-S* male and 26.9% of the urban *B-S* female undergraduates, 25% of the urban *BI* male and 26.32% of the urban *BI* female undergraduates when sending voice mail to Bidayuh undergraduates belonging to other dialect groups.

Code-switching using more English and less of the other codes was selected by 10% of the *B-J* male and 4% of the *B-J* female undergraduates, 5.9% of the *B-S* male and 3.9% of the *B-S* female undergraduates, 18.75% of the *BI* male and 21.05% of the *BI* female undergraduates when sending voice mail to Bidayuh undergraduates belonging to other dialect groups (see Table 1).

TABLE 1
Language choice when sending voice mail

Code choice	URBAN			
	MALE		FEMALE	
	Count	%	Count	%
BAU-JAGOI				
Bahasa Melayu	0	0	0	0
Sarawak Malay	15	75	20	80
Mostly BM less B+SM+E	0	0	0	0
Mostly SM less BM+B+E	3	15	4	16
Mostly E less SM+BM+B	2	10	1	4
Total	20	100	25	100

Table 1 (continued)

BUKAR-SADONG	0	0	0	0
Bahasa Melayu				
Sarawak Malay	12	70.6	18	69.2
Mostly BM less B+SM+E	0	0	0	0
Mostly SM less BM+B+E	4	23.5	7	26.9
Mostly E less SM+BM+B	1	5.9	1	3.9
Total	17	100	26	100
BIATAH				
Bahasa Melayu	0	0	0	0
Sarawak Malay	9	56.2	10	52.63
Mostly BM less B+SM+E	0	0	0	0
Mostly SM less BM+B+E	4	25	5	26.32
Mostly E less SM+BM+B	3	18.75	4	21.05
Total	16	100	19	100

Sending E-mail and SMS

When sending e-mail and SMS to Bidayuh undergraduates belonging to other dialect groups, the most preferred pattern among the Bidayuh undergraduates was more Sarawak Malay and less of the other codes. This pattern was selected by 70% of the *B-J* male and 64% of the *B-J* female undergraduates, 47.1% of the *B-S* male and 50% of the *B-S* female undergraduates, as well as 50% of the *BI* male and 42.1% of the *BI* female undergraduates.

Stand-alone Sarawak Malay was selected by 20% of the *B-J* male and 12% of the *B-J* female undergraduates, 41.1% of the *B-S* male and 30.8% of the *B-S* female undergraduates, 37.4% of the *BI* male and 42.1% of the *BI* female undergraduates when sending e-mail and SMS to Bidayuh undergraduates belonging to other dialect groups.

Code-switching using more Bahasa Melayu and less of the other codes was selected by 5% of the *B-J* male and 4% of the *B-J* female undergraduates, 5.9% of the *B-S* male and 7.7% of the *B-S* female undergraduates, 6.3% of the *BI* male and 5.3% of the *BI* female undergraduates when sending e-mail and SMS

to Bidayuh undergraduates belonging to other dialect groups.

Code-switching using more English and less of the other codes was selected by 5% of the *B-J* male and 16% of the *B-J* female undergraduates, 5.9% of the *B-S* male and 11.5% of the *B-S* female undergraduates, 6.3% of the *BI* male and 10.5% of the *BI* female undergraduates when sending e-mail and SMS to Bidayuh undergraduates belonging to other dialect groups (see Table 2).

TABLE 2
Language choice when sending e-mail and SMS

Code choice	URBAN			
	MALE		FEMALE	
	Count	%	Count	%
BAU-JAGOI				
Bahasa Melayu	0	0	0	0
Sarawak Malay	4	20	3	12
English	0	0	1	4
Mostly BM less B+SM+E	1	5	1	4
Mostly SM less BM+B+E	14	70	16	64
Mostly E less SM+BM+B	1	5	4	16
Total	20	100	25	100
BUKAR-SADONG Bahasa Melayu	0	0	0	0
Sarawak Malay	7	41.1	8	30.8
Mostly BM less B+ M+E	1	5.9	2	7.7
Mostly SM less BM+B+E	8	47.1	13	50
Mostly E less SM+BM+B	1	5.9	3	11.5
Total	17	100	26	100
BIATAH				
Bidayuh	0	0	0	0
Sarawak Malay	6	37.4	8	42.1
Mostly BM less B+SM+E	1	6.3	1	5.3
Mostly SM less BM+B+E	8	50	8	42.1
Mostly E less SM+BM+B	1	6.3	2	10.5
Total	16	100	19	100

Summary of the Findings on Language Choice Using Different Modes of Communication

In the context of Speech Accommodation Theory, it clearly indicated that Sarawak Malay was the most dominant code chosen when sending voicemails, e-mails and SMS. When sending voice mail, Sarawak Malay was extensively used both as a stand-alone dialect and as the dominant code when code-switching with other codes. The code was selected by 75% of the *B-J* male and 80% of the *B-J* female undergraduates, 70.6% of the *B-S* male and 69.2% of the *B-S* female undergraduates, 56.25% of the *BI* male and 52.63% of the *BI* female undergraduates. Moreover, when sending e-mails and SMS, a code-switching pattern of more Sarawak Malay and less of the other codes was selected by 70% of the *B-J* male and 64% of the *B-J* female undergraduates, 47.1% of the *B-S* male and 50% of the *B-S* female undergraduates, 50% of the *BI* male and 42.1% of the *BI* female undergraduates. The results of the findings above indicated that there was less influence on gender and sub-dialectal groups to determine code choice when sending voicemails, e-mails and SMS, as there was a greater need to accommodate by using Sarawak Malay due to the variations in the Bidayuh dialects.

However, the researcher wished to acknowledge the possibility of topic or purpose of communication confounding code choice as a methodological limitation in this finding. Nevertheless, the issue of mutual intelligibility, due to the variations in the Bidayuh dialects, was seen an important reason for the Bidayuhs to speak in Sarawak Malay dialect. After all, Sarawak Malay is the lingua franca in interethnic communication in Kuching.

Greeting and Taking Leave

The politeness conventions used by the Bidayuh speakers when realizing the speech act of greetings and taking leave clearly showed that they chose a code mix pattern of more English and less of the other codes. Such pattern was the code selected by 45% of the *B-J* male and 48% of the *B-J* female undergraduates, 52.94%

of the B-S male and 53.85% of the B-S female undergraduates, 50% of the BI male and 42.10% of the BI female undergraduates when greeting and taking leave from Bidayuh undergraduates belonging to other dialect groups.

Meanwhile, code-switching using more Bidayuh and less of the other codes was selected by 30% of the B-J male and 24% of the B-J female undergraduates, 29.42% of the B-S male and 23.07% of the B-J female undergraduates, 31.25% of the BI male and 31.54% of the BI female undergraduates when greeting and taking leave from Bidayuh undergraduates belonging to other dialect groups.

Code-switching using more Bahasa Melayu and less of the other codes was selected by 15% of the B-J male and 16% of the B-J female undergraduates, 11.76% of the B-S male and 11.54% of the B-S female undergraduates, 12.5% of the BI male and 15.78% of the BI female undergraduates when greeting and taking leave from Bidayuh undergraduates belonging to other dialect groups.

Stand-alone Bahasa Melayu was only selected by 10% of the B-J male and 12% of the B-J female undergraduates, 5.88% of the B-S male and 11.54% of the B-S female undergraduates, 6.25% of the BI male and 15.78% of the BI female undergraduates when greeting and taking leave from Bidayuh undergraduates belonging to other dialect groups (see Table 3).

TABLE 3
Language choice when greeting and taking leave

Code choice	URBAN			
	MALE		FEMALE	
	Count	%	Count	%
BAU-JAGOI				
Bahasa Melayu	2	10	3	12
Mostly B less BM+SM+E	6	30	6	24
Mostly BM less B+SM+E	3	15	4	16
Mostly E less SM+BM+B	9	45	12	48
Total	20	100	25	100

Table 3 (continued)

BUKAR-SADONG Bahasa Melayu	1	5.88	3	11.54
Mostly B less BM+ SM+ E	5	29.42	6	23.07
Mostly BM less B+ SM+ E	2	11.76	3	11.54
Mostly E less SM+ BM+ B	9	52.94	14	53.85
Total	17	100	26	100
BIATAH				
Bahasa Melayu	1	6.25	3	15.78
Mostly B less BM+SM+E	5	31.25	6	31.54
Mostly BM less B+SM+E	2	12.5	3	15.78
Mostly E less SM+BM+B	8	50	8	42.10
Total	16	100	19	100

Telling Secrets

The language the Bidayuh undergraduates chose when telling secrets in this sociolinguistic research was done in the context in which they became friends among themselves at the university. The Bidayuh undergraduates preferred code-switching using more Bidayuh with less of the other codes when telling secrets to Bidayuh undergraduates from other dialect groups. The code was selected by 50% of the B-J male and 52% of the B-J female undergraduates, 47.06% of the B-S male and 46.15% of the B-S female undergraduates, 50% of the BI male and 47.37 % of the BI female undergraduates when telling secrets to Bidayuh undergraduates from other dialect groups.

Stand-alone Sarawak Malay was selected by 30% of the B-J male and 28% of the B-J female undergraduates, 29.41% of the B-S male and 30.77% of the B-S female undergraduates, 31.25% of the BI male and 31.58% of the BI female undergraduates when telling secrets to Bidayuh undergraduates from other dialect groups.

Code-switching using more Sarawak Malay and less of the other codes was selected by 20% of the B-J male and 20% of the B-J female undergraduates, 23.53% of the B-S male

and 23.08% of the *B-S* female undergraduates, 18.75% of the *BI* male and 21.05% of the *BI* female undergraduates when telling secrets to the Bidayuh undergraduates from other dialect groups (see Table 4).

TABLE 4
Language choice when telling secrets

Code choice	URBAN			
	MALE		FEMALE	
	Count	%	Count	%
BAU-JAGOI				
Bidayuh	0	0	0	0
Sarawak Malay	6	30	7	28
Mostly B less BM+SM+E	10	50	13	52
Mostly SM less BM+B+E	4	20	5	20
Total	20	100	25	100
BUKAR-SADONG Bidayuh	0	0	0	0
Sarawak Malay	5	29.41	8	30.77
Mostly B less BM+SM+E	8	47.06	12	46.15
Mostly SM less BM+B+E	4	23.53	6	23.08
Total	17	100	26	100
BIATAH				
Bidayuh	0	0	0	0
Sarawak Malay	5	31.25	6	31.58
Mostly B less BM+SM+E	8	50	9	47.37
Mostly SM less BM+B+E	3	18.75	4	21.05
Total	16	100	19	100

Group Study

The Bidayuh undergraduates preferred stand-alone Sarawak Malay when holding study group discussions with their fellow Bidayuh undergraduates. The code was selected by 60% of the *B-J* male and 60% of the *B-J* female undergraduates, 64.71% of the *B-S* male and 61.5% of the *B-S* female undergraduates, 62.5% of the *BI* male and 63% of the *BI* female undergraduates.

Code-switching using more Sarawak Malay and less of the other codes was selected by 30% of the *B-J* male and 28% of the *B-J* female undergraduates, 17.65% of the *B-S* male and 27% of the *B-S* female undergraduates, 18.75% of the *BI* male and 21% of the *BI* female undergraduates when holding study group discussions with Bidayuh undergraduates.

Code-switching using more English and less of the other codes was selected by only 5% of the *B-J* male and 12% of the *B-J* female undergraduates, 11.76% of the *B-S* male and 11.5% of the *B-S* female undergraduates, 18.75% of the *BI* male and 15.8% of the *BI* female undergraduates when holding study group discussions with Bidayuh undergraduates.

Code-switching using more Bahasa Melayu with less of the other codes was only selected by 5% of the *B-J* male and 5.88% of the *B-S* male undergraduates when holding study group discussions with Bidayuh undergraduates (see Table 5).

TABLE 5
Language choice during study group discussion

Code choice	URBAN			
	MALE		FEMALE	
	Count	%	Count	%
BAU-JAGOI				
Bahasa Melayu	0	0	0	0
Sarawak Malay	12	60	15	60
Mostly B less BM+SM+E	0	0	0	0
Mostly BM less B+SM+E	1	5	0	0
Mostly SM less BM+B+E	6	30	7	28
Mostly E less SM+BM+B	1	5	3	12
Total	20	100	25	100
BUKAR-SADONG Bahasa Melayu	0	0	0	0
Sarawak Malay	11	64.71	16	61.5
Mostly B less BM+SM+E	0	0	0	0

Table 5 (continued)

Mostly BM less B+SM+E	1	5.88	0	0
Mostly SM less BM+B+E	3	17.65	7	27.
Mostly E less SM+BM+B	2	11.76	3	11.5
Total	17	100	26	100
BIATAH				
Bahasa Melayu	0	0	0	0
Sarawak Malay	10	62.5	12	63.2
Mostly B less BM+SM+E	0	0	0	0
Mostly BM less B+SM+E	0	0	0	0
Mostly SM less BM+B+E	3	18.7	4	21.
Mostly E less SM+BM+B	3	18.7	3	15.8
Total	16	100	19	100

Summary of the Findings on Language Choice Using Different Purposes of Communication

There were three different codes preferred for different purposes of communication. When greetings and taking leave, English was much preferred as compared to other codes. A code mix pattern of more English and less of the other codes was the code selected by 45% of the *B-J* male and 48% of the *B-J* female undergraduates, 52.94% of the *B-S* male and 53.85% of the *B-S* female undergraduates, 50% of the *BI* male and 42.10% of the *BI* female undergraduates when greeting and taking leave from Bidayuh undergraduates belonging to other dialect groups. The results of the findings above indicated that there was less influence on gender and sub-dialectal groups to determine code choice when greeting and taking leave as *Hi* and *Bye* are commonly used by Malaysians.

Bidayuh dialects were chosen when telling secrets among themselves probably to prevent others from listening to them. A code-switching pattern of using more Bidayuh dialects with less of the other codes was selected by 50% of the *B-J* male and 52% of the *B-J* female undergraduates, 47.06% of the *B-S* male and 46.15% of the *B-S*

female undergraduates, 50% of the *BI* male and 47.37% of the *BI* female undergraduates when telling secrets to Bidayuh undergraduates from other dialect groups. The results of the findings above indicated that there was less influence on gender but the influence of the sub-dialectal group was important to determine code choice when telling secrets.

When studying in groups, the Bidayuh undergraduates selected stand-alone Sarawak Malay dialect as their code to hold discussions, largely due to the variations in the Bidayuh dialects. The code was selected by 60% of the *B-J* male and 60% of the *B-J* female undergraduates, 64.71% of the *B-S* male and 61.5% of the *B-S* female undergraduates, 62.5% of the *BI* male and 63% of the *BI* female undergraduates. The results of the findings above indicated that there was less influence on gender and sub-dialectal groups to determine code choice when studying in groups because it was also important to accommodate to one another.

Stand-alone Sarawak Malay as Matrix Language

Sarawak Malay was the main or matrix language for the urban Bidayuh undergraduates of both genders when coming into language contact with one another. Cross-reference of data obtained quantitatively showed similar findings qualitatively, whereby there were more utterances in the stand-alone Sarawak Malay in the conversations of the urban Bidayuh undergraduates as used by both genders compared to English, Bahasa Melayu and Bidayuh.

The issue of practical convenience and accommodation due to dialectal variations was the main reason for the urban Bidayuh undergraduates to choose Sarawak Malay when sending SMS, voice mail, e-mails and holding group discussions. The urban Bidayuh undergraduates were merely transferring their comfortability zone from outside into the university. Since the urban Bidayuhs were proficient in Sarawak Malay, it was most

EXAMPLE 1
Stand-alone Sarawak Malay

---

a) *Urban Bau-Jagoi male with Urban Bukar-Sadong male*
UJM: Ujuknya sidak ia main. (*They played a lousy game.*)
UBM: Yalah molah aku pedih ati aja nanga. (*Exactly, and it makes me upset.*)

(Transcription 4)

---

b) *Urban Biatah male with Urban Bau-Jagoi female*
UIM: Semua nok kacak, Bawang Putih kacak gilak. *(Everyone is beautiful including Bawang Putih.)*
UJF: Nang kacak, nang semua nok lakon cerita ia. Tapi bapa nya udah kenak bunuh jadi okay, kurang sorang sik kacak. *(All the actors in the movie are good looking. The father is dead and that makes one less good looking character.)*

(Transcription 6)

---

c) *Urban Bukar-Sadong female with Urban Biatah female*
UBF: Nok tok bukan ajaknya mahal tapi sik sedap gilak. *(This is not only costly but also tasteless.)*
UIF: Mi sapi iakah? *(Is it the beef noodles?)*

(Transcription 7)

---

d) *Urban Biatah male with Urban Bau-Jagoi male*
UIM: Aku maok jumpa nya kejap. *(I want to see him for a short while.)*
UJM: Jom lah jumpa ngan nya. *(Go ahead and see him)*

(Transcription 8)

---

e) *Urban Biatah female with Urban Bukar-Sadong female*
UIF: Kat Bau, ada jual mi make daging labi-labi, udah aku makan dolok.
(Can you eat turtle meat? I've tasted noodles cooked with turtle meat in Bau.)
UBF: Sik kalak aku rasa mi ngan labi-labi, tapi labi-labi selalu. Masak kicap agik nyaman. Mak aku pande masak, makan ngan sambal, nyaman, betul sik? *(I've never tasted noodles cooked with turtle meat. However, I've tried turtle meat cooked in soy sauce. My mother can cook that and eating it with paste is very delicious.)*

(Transcription 11)

Key: Times New Roman: Sarawak Malay

comfortable to accommodate using Sarawak Malay when interacting with Bidayuhs speaking other dialects (see Example 1).

English for Opening and Closing Conversation

In the quantitative data, the respondents indicated their preference for English when greeting and taking leave. The transcribed data also showed that it was common to start a conversation in English and to use expressions, such as *hello, good morning* and*, give me a five* (see Example 2)*.*

Similar to the quantitative data of selecting English, the transcriptions analysed indicated that the common expressions used by the urban Bidayuh undergraduates when taking leave were *See you* and *Bye (*see Example 3).

English Code-switches for Habitual Use

The transcribed data also showed that apart from greetings and taking leave, English was also habitually used for certain words, such as *chewing gum*, *sandwich, roadblocks pen, draw, line, road tax*, *serious*, *van, roommate, partner, hostel, bully,* etc. These words were used with Sarawak Malay in the discourse of urban Dayak Bidayuhs (see Example 4).

Bahasa Melayu Code-switches in Group Study

Similar to the quantitative finding presented above, the transcribed data showed that the Bidayuh undergraduates preferred holding their group study using Sarawak Malay but there were instances where Bahasa Melayu code-switches were also found (see Example 5).

EXAMPLE 2
Using English when opening conversation

---

a) Urban Bau-Jagoi male with Urban Biatah female
UJM: *Morning, how are you this morning?* Senyum ajak, kenak ada berita bait? Mun udah senyum kedak ia mesti ada sesuatu.(*… Are you smiling because you have good news? Once you started smiling as such,* there must be something.*)*
UIF: ko maok tau ujung tahun tok kamek maok pergi *holiday*. (*If you should know, we're going for a holiday at the end of this year.*)

(Transcription 2)

---

b) Urban Biatah female with Urban Bau-Jagoi female
UIF: *Hello everybody, I'm already here*. Aku udah sampe tok, ney dak lain. *Where is she?* *(… I've arrived and where are the others? …)*
UJF: Udah ko madah ngan nya, udah ke sik? Mun udah kita nunggu ajak sitok. *(Have you informed him. If so then we can just wait)*

(Transcription 10)

---

c) Urban Bukar-Sadong male with Urban Bau-Jagoi male
UBM: *How are you?*
UJM: *Fine thank you*? (Are you fine yourself?)
UBM: *Great man. Join* minum? (… *join us for a drink.*)
UJM: Nang aku sitok maok minum, haus bah. (*I came here to have a drink.*)

(Transcription 4)

---

d) Urban Biatah male with Urban Bau-Jagoi male
UIM: *Hello give me five*. Bagus tek? Kede baru, pernah ke sik ko pergi kede ia? Apa jual nya sia, nanga ko rami urang pergi sia. *(…Are you fine? Have you been to the new shop? What are they selling there? A lot of people are going there.)*
UJM: Sik pernah, nang kueh ngan makanan. *Kiosk* baru, lama udah sidak jual sia. *(I haven't, but surely cakes and other food. It's a new kiosk and they have been selling food there.)*

(Transcription 13)

Key: Times New Roman–*Sarawak Malay;* Times New Roman Italic underline – *Complete sentences in English*

EXAMPLE 3
Using English to close conversation

---

a) Urban Biatah male with Urban Bau-Jagoi male
UIM: Marah dah *member*. Aku jalan lok, okay aku balit lok. *See you, bye.* *(He's angry. I've to go back first…)*
UJM: Jom kitak pergi *library* lok. *(Let's go to the library first.)*

(Transcription 1)

---

b) Urban Bau-Jagoi female with Urban Bukar-Sadong female
UJF: Nun ada *cashier diri* belakang nun. *(There's a cashier standing behind.)*
UBF: Kamek jalan dolok. Maok ngambik barang kat kede fotostat. *See you in the shop later*. *(I'm going first. I've to take things from the photostating shop.)*

(Transcription 7)

---

c) Urban Biatah female with Urban Bau-Jagoi male
UIF: Mun maok belanja ikut kamek. *(If you want a treat, follow me.)*
UJM: *Next time only, see you soon.*

(Transcription 11)

Key: Times New Roman–*Sarawak Malay;* Times New Roman Italic underline – *Complete sentences in English*

EXAMPLE 4

English code-switches for habitual use

---

a) Urban Bau-Jagoi male with Urban Biatah female
UJM: Kawan aku sebelah makan *sandwich. (My friend sitting next to me is eating sandwich.)*
UIF: Sik ko malu gilak mun makan *chewing gum***.** *(It won't be too embarrassing if you're to eat chewing gum.)*

(Transcription 2)

---

b) Urban Biatah female with Urban Bukar-Sadong female and Urban Bau-Jagoi female
UIF: Kita jadi *roommate* ajak maok ke sik? *(Why don't we become roommates?)*
UBF: Aku dah kenak *booking. Roommate* aku awal udah madah ngan aku, selesa bah. *(I have been booked. My roommate had told me earlier, and it's comfortable to be her roommate)*
UJF: *Roommate* nya sabar ajak bah, sengsara. Betul sik nya udah *booking* ko? *(Her roommate has to be patient. Are you sure that she had booked you?)*

(Transcription 7)

---

c) Urban Bukar-Sadong male with Urban Bau-Jagoi male and urban Biatah male
UBM: Nanga lok, mun ujan pake *van* ajak. *(Just wait and see first, and if rains, I'll take a van)*
UIM: Senang agik pake *van. Road tax* aku udah mati ari marek belum sempat agik aku pergi JPJ. *(It's easier to go by van. My road tax expired yesterday and I haven't gone to renew it.)*

(Transcription 10)

---

d) Urban Bau-Jagoi male with Urban Bukar-Sadong female and urban Biatah female
UJM: Ada ko *pen* orna merah, minjam lok? *(Do you have a red pen which I may borrow?)*
UIF: Apahal ko maok *pen*? *(Why do you need a pen?)*
UJM: Sekejap jak, maok *draw line***.** Aku sik ada *pen* orna ia. Kitak urang eboh main agik aku *serious* tok. *(Just for a while to draw lines. I don't have a pen of that ink. Stop playing and I'm serious about it.)*
UBF: Tok ngambik tok, *draw line* ko sia, eboh bising gilak. *(Take this, draw your lines and don't bother us.)*

(Transcription 12)

Key: English code-switches: Times New Roman Italic

Bidayuh Code-switches in Dominant Sarawak Malay

The urban Bidayuh undergraduates used common Bidayuh words with Sarawak Malay dialect among close Bidayuh friends who could understand at least some words in their dialects. Such a pattern was selected when they were with very close friends (see Example 6).

CONCLUSION

Cross reference of the data obtained from the questionnaires and transcriptions showed that Sarawak Malay was the dominant code used by the urban Bidayuh undergraduates across dialect group discourse in the absence of a common Bidayuh language. The extensive use of Sarawak Malay by the Bau-Jagoi, Bukar-

Sadong and Biatah urban undergraduates in the university setting in Kota Samarahan clearly showed that they were comfortable with Sarawak Malay dialect.

The most common code-switching pattern was English code-switches in dominant Sarawak Malay. The functions of English code-switches in the opening, closing of conversations besides habitual use of certain English words showed that the educated younger generation of urban Dayak Bidayuhs were similar to other educated younger generation of urban communities in Malaysia [see David M.K. (1996) on the Sindhis; Sankar Vijaya (2004) on the Malaysian Iyers]. Bahasa Melayu was merely used as a referent during study group discussions (i.e. for words which have no equivalents in Sarawak Malay dialect). The Bidayuh dialects were the least

EXAMPLE 5

To discuss university related matters

---

a) Urban Bukar-Sadong male with Urban   Bau-Jagoi male
UBM: Aktiviti universiti biasanya pelajar dalam tahun pertama dan kedua yang banyak terlibat. Nok udah lamak ia mula sidak gago dengan tesis sidak ia. Takut aku juak masa ia mun udah mula **tesis**, nang sik ada masa agik. Aku nengar ada urang sampe sik abis. *(*Usually first and second year undergraduates are involved in university activities. *The senior students are more concerned about their … I know that of some them   didn't complete.)*
UJM: Sik maok aku kedak ia, rugi. *(I don't want to be like that.)*

(Transcription 1)

---

b) Urban Biatah male with urban Bau-Jagoi female
UIM: Di Malaysia pun, kita guna Bahasa Melayu walaupun banyak dialek Melayu lain. Aku rasa sikap patut di ubah. Sik senang nak campuradukkan dialek-dialek dan jadikan satu ahasa, mustahi, sik suk nenga nya kelak. (In Malaysia we're using Bahasa Melayu Eventhough we have many other Malay dialects. *I feel attitude should change. It's impossible to create a new language bymixin so many dialects and moreover it will sound funny.)*
UJF: Ada FM101.3 cuba campur dialek-dialek, pelik juak. *(FM101.3 mixes the various dialects.)*

(Transcription 12)

---

c) Urban Bukar-Sadong male with Urban Bau-Jagoi male
UBM: Ada ko dengar berita? Mungkin tahun depan pelajar tahun akhir mesti tinggal di luar. Sik cukup tempat diam. *(Have you heard the news?* Final year students maybe ask to stay out next year. *There's not enough place to stay in the campus.)*
UJM: Apa nak di susah ko ia, diam di rumah ko pun agik bagus.

(Transcription 13)

Key: Complete sentence in Bahasa Melayu - Arial underline**;** Times New Roman*: Sarawak Malay;*

used by the urban Bidayuh undergraduates because they did not understand much of other Bidayuh dialects besides their own. However, Bidayuh was their code-choice when telling secrets, especially to close friends, which were unable to be recorded, and so became a limitation of this study. The respondents were also unwilling to record their voice mails and show their e-mails and SMS because some contained vulgar language. Nevertheless, in the transcribed data, the common Bidayuh code-switches found were understood by the interlocutors and functioned as a marker of their Bidayuh identity.

This paper has highlighted and discussed the language choice patterns of the urban Dayak Bidayuh undergraduates in a university setting in Kota Samarahan, Sarawak. There was no difference between the three dialect groups of undergraduates, namely, Bau-Jagoi, Bukar-Sadong and Biatah. There was also no difference of language choice between the male and female undergraduates when interacting across dialect. The Bidayuh dialects were noted but the pattern of code choice preferred by the Bidayuh undergraduates clearly indicated a preference for Sarawak Malay dialect. In short, the Bidayuh undergraduates used Sarawak Malay extensively to accommodate one another when there was no common Bidayuh language.

So far, there has been no study on code-choice among the educated younger generation of Bidayuhs in Sarawak, especially across dialect group interactions, and this study could add to the limited literature available on the Bidayuh community. There is a need to complement this study which focused on the younger generation of Dayak Bidayuh undergraduates by conducting a research to compare the language used by the three generations of Bidayuhs in the urban areas so as to investigate if there is any difference in the code choice across dialect group interactions within each generation.

EXAMPLE 6
Bidayuh Code-switches in Dominant Sarawak Malay

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a) Urban Bau-Jagoi male with Urban Biatah female
UJM: Genting sik pergi kitak? *(Are you going to Genting?)*
UIF: Nanga lok mun **sama'kuk** ngembak maok ajak. *(It depends on **my father** whether or not he wants to bring us.)*

(Transcrption 2)

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b) Urban Bau-Jagoi female with Urban Biatah female
UJF: Okay, mun **mu-uh**   balit ujung minggu tok madah ngan aku, ngekot ko. *(If **you** go back, this weekend inform me and I'll follow you.)*
UIF: Kelak aku *call* ko mun aku balit. *(I'll call you if I should go back).*

(Transcription 3)

---

c) Urban Biatah female with Urban Bau-Jagoi female
UIF: Sangun jupuo ko, seney ko beli? *(Your **dress is beautiful**, where did you buy it?)*
UJF: *Boyfriend* aku beri. *(My boyfriend gave it to me.)*

(Transcription 5)

---

d) Urban Biatah female with Urban Bukar-Sadong female and Urban Bau-Jagoi female
UIF: Sik tahan aku, nya tidor bising gilak. *(He is very noisy when he sleeps.)*
UBF: Biasa lah ia, mun sik maok dengar dengkur **bu-us** kandang ayam. *(That's common. If you don't want to hear noise, then **sleep** in the chicken coop.)*
UJF: Si-ok so-wok juak tengah malam, pagi awal. *(**Chickens make noise** at night too.)*

(Transcription 7)

---

e) Urban Bukar-Sadong male with Urban Biatah male
UBM: Benar nolong   **andu bejek** aku molah tempoyak, mun ko maok. *(Really, to help my **aunt** t*o *make durian paste.)*
UIM: Sik maok, bagus agik aku kerja KFC ajak. *(I don't want to. I rather work in KFC).*

(Transcription 12)

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f) Urban Bukar-Sadong female with Urban Bau-Jagoi male
UBF: Ko tok suka **ma-an ot, ot** ajak. Selalu juak kitak orang makan ia? *(You like to **eat pork**. Do you always eat that?)*
UJM: Rumah aku selalu. *(Always at home.)*

(Transcription 11)

Key: Bidayuh code-switches; New Times Roman bold;

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The Influence of Legibility on Attachment towards the Shopping Streets of Kuala Lumpur

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ABSTRACT

Research on urban design mainly focuses on legibility of places generated by the physical and visual images, and thus only a few emphasize on its relationship with the psychological sense of place. This study examined legibility and its influence on users' attachment to the shopping places in Kuala Lumpur city centre, Malaysia. The places comprised of the main shopping streets of Jalan Tuanku Abdul Rahman, Jalan Masjid India, Jalan Petaling and Jalan Bukit Bintang. Questionnaire surveys and face-to-face interviews were conducted to identify the respondents' perception of legible elements within the areas. The analysis was supported by evidence gathered from direct observations of the streets' setting and activities. The findings demonstrated that the legibility of the streets is strongly associated with the users' functional attachment, dependence and familiarity with the streets' activities. It is supported by the identifiable activity nodes which make the places vibrant. In contrast, the influence of the physical forms and characteristics on the attachment does not reflect the same level of significance. Improvement of the streetscape and preservation of distinctive features such as old building facade will make places more legible. The findings inform planners and designers of the importance of users' attachment and recognition of meaningful places in managing changes in the physical environment. The ability of places to support diverse activities will reinforce place attachment particularly in the changing context of multi-cultural city of Kuala Lumpur.

Keywords: Legibility, place, attachment, Kuala Lumpur city centre

INTRODUCTION

Legibility is an attribute vital for good and successful places. A legible place is defined by vivid and integrated physical environment that can be identified, organized and navigated by people with ease (Lynch, 1960; PPS, 2001). As a result of the people's identification, association and attachment with the places, place meanings and place identity are developed. The significance of the places to the lives of the users is reflected in the form, pattern and degree of attachment. The ability of the physical spaces to stimulate senses and evoke a sense of attachment is important for gaining the sense of place. It is assumed that if legibility of a place is increased, attachment to that particular place is also deepened.

Place attachment is associated with the development of affective connection between people or individuals and specific places (Hidalgo & Hernandez, 2001; Moore & Graefe, 1994) which is expressed through "interplay of affects and emotions, knowledge and beliefs, and behaviours and actions" (Altman & Low, 1992). Place attachment is also reflected in the functional connection between people and places (Stokol & Shumaker, 1981). This is developed when a place is able to "provide condition to fulfil the functional needs of the people and support their behavioural goals" (Williams *et al*., 1995).

One of the urban design issues of Kuala Lumpur is the lack of legibility and the loss of historical character due to development interventions which are not sympathetic to the existing context (DBKL, 2004). This contributes to the lack of identifiable places (JBPD, 2006) which is reflected in the homogeneity of buildings' scales and appearances. This also affects the legibility of the cities due to the disappearance of legible and familiar objects, buildings, spaces, as well as socio-cultural activities. These transformations have influenced how users experience and feel about places. The weakening of a place's identity could result in the loss of meaning and disrupts emotional attachment to place (Arefi, 1999).

In addition, the physical attributes play an important role in supporting the sense of place. The physical and the social characteristics of Malaysian cities are more complex due to the mixture of cultural (ethnic) rootedness, languages, lifestyles and religion. The users' identification on the salient qualities of place and attachment of the main socio-cultural groups define place legibility.

This paper examines the concept of legibility in the context of the major shopping streets in Kuala Lumpur and its influence on place attachment. It is presumed that the physical elements influence place legibility, and therefore, reinforce place attachment.

Concept of Place, Attachment and Legibility

Places are constituted by the physical form, activity and meaning (Canter, 1977; Montgomery, 1998). Meaning is associated with individual's internal psychological and social processes (Relph, 1976; Steadman, 2003) that generate perception. It is the point where the physical and cultural characteristics of a setting meld with the individual's affective perceptions and functional needs (Bott *et al*., 2003). In urban design research, much has been discussed on the influence of physical elements and activity in making places legible; however, the effects of legibility on people's attachment have not been brought to adequate attention.

Legibility allows users to form a clear and accurate image of a place, while visibility and appearance help to orientate themselves within the cityscape. Thus, legibility affects how people are able to understand the structure of the place and the types of opportunities offered (Bentley *et al*., 1985). Meanwhile, paths, edges, districts, nodes and landmark form how people structure a city image (Lynch, 1960), whereas signage, symbols, streetscape and landscape features function as informative reference to the users. Hence, the physical setting is significant in the construction of place meanings (Steadman, 2003; Relph, 1976). This is reflected in the way the physical features and appearance significantly influence the sense of place by "providing images so that topophilia (the love of a place) has a concrete object of attachment" (Tuan, 1974). In this regards, Lynch (1960) relates the function of a clear image of the urban elements towards emotional function (comfort, sense of orientation and sense of security) and symbolic function (symbols and strong association). In this study, the streets are viewed as 'places' which provide psychological as well as functional meanings to the users' lives. Here, legibility is regarded as a positive element that can contribute to stronger attachment to places.

Meaning and attachment affect the way people are identified with their environment and they are influenced by culture and past experiences (Rapoport, 1977). They also

influence individual's and group's identities. The changing nature of a place and its meanings (Altman & Low, 1992), as a result of globalized culture and built forms, it is imperative that the psychological aspects of the urban experience, such as place attachment be analysed as indicators for place quality.

METHODS

Three shopping places in the city centre of Kuala Lumpur were selected; they comprised of the main shopping streets, namely; Jalan Masjid India (JMI) and Jalan Tuanku Abdul Rahman (JTAR), Jalan Petaling (JP) and Jalan Bukit Bintang (JBB). JMI-TAR has been synonymous to Indian Muslim, Indian and Malay population. A place known as "Chinatown" which comprises Jalan Petaling (JP) is one of the early urban streets inhabiting the Chinese trading community, while Bukit Bintang shopping area is defined by Jalan Bukit Bintang (JBB) which is characterized by modern and international image. Dedicated for urban revitalisation initiatives (DBKL, 2004), the places receive highest concentration of pedestrian, shoppers and visitors with inherent socio-cultural stronghold.

In this study, a questionnaire survey and an in-depth interview were conducted to examine the legibility of the selected places and their influence on the users' attachment. Meanwhile, direct observations provide recorded evidence of how the legible elements support different types of activities. 330 respondents were clustered to represent the main users of the places, namely; shop owners, shopkeepers, vendors, office workers, residents, shoppers and visitors. They were randomly selected from those who were in the streets and open spaces at the time of the survey, while others were in the shopping premises. The sample size drawn for this survey was generated based on the calculation made by De Vaus (1991). It was based on 5.5% sampling error at 95% confidence level and the smallest sub-group should have at least 50-100 cases. The 15-20 minute survey with 40-minute time interval between the surveys sets were concurrently conducted in all places.

In addition, face-to-face interviews using a semi-structured format were conducted with 36 samples (JMI-TAR: 12, JP: 12, JBB: 12), taking into consideration the length of engagement, ethnicity, frequency of visit and familiarity with the places. Hence, structured questions were prepared as a framework for questioning. The researcher took into account the respondents' experiences of particular place and time, together with the feeling and emotion attached to it. Probing questions are necessary to get a clear explanation of specific response that can reveal the actual factors influencing the respondents' attachment. The interviews were tape-recorded and noted following the users' convenience.

Majority of the respondents in the survey were within the age range of 18 to 24 and 25 to 49 years old, with almost 60% of them being female. They have between 10 to 30 years length of engagement, are familiar with the places and were being there mainly for trading, shopping, working and visiting. The respondents who participated in the interviews are in the age range between 27 to 69 years old. Majority of them aged between 40-55 years old and had been working and making a living on a daily basis for a period between 5 to 50 years; hence, they are very familiar with the streets. The respondents represented the main ethnic population occupying the streets, namely; Malays, Indian Muslims, Chinese and Indian.

The scale items used in the survey include the functional attachment (engagement, familiarity, dependence satisfaction and comfort) and the physical characteristics (layout, signage, greenery, views, landscape features and landmarks). Based on some previous research, William and Roggenbuck (1989) developed a series of Likert-scaled statements which was designed to measure theoretical dimensions of place attachment. Others also use similar technique in measuring related construct, such as place identity and place dependence (William *et al.*, 1992; Jorgensen & Steadman, 2001; Hidalgo & Hernandez, 2001). 4 Likert-scale statements were structured with the open-ended items to gather the respondents' identification of the legibility characteristics of the places.

Systematic and periodic observation, photographic (visual) survey using a digital camera and field notes were used to document the physical characteristics and the types of users and activities. The observations were scheduled on weekdays and weekends, as well as during festive seasons (morning, lunchtime, evening and night) to understand the atmosphere of the places.

The findings were based on the triangulation of data from the quantitative and qualitative methods. The results from the questionnaire surveys determining the functional attachment were cross-analysed with the users' perceptions of the physical characteristics of the place. The interview results were then analysed to identify patterns matching (through recurring themes or categories), clustering (grouping responses with similar characteristics and meanings), relating variables (identifying the relationship between two or more variables) and relating the finding to the theoretical framework of the study (Groat, 2002; Miles & Huberman, 1994). The results were also cross-tabulated to compare the variables.

RESULTS AND DISCUSSION

Legibility of the Physical Elements and Attachment

The results of the respondents' identification of legibility of the physical elements shown in Table 1 are slightly above average. The scales of 2.51(JMI-TAR), 2.67(JP) and 2.75 (JBB) from the scale of 4.0 suggest that the places are moderately legible to the respondents. The mean difference is not significant. Even though respondents identified quite strongly with the structure and signage of the streets, the identification of the quality of the physical elements which support legibility did not reflect the same level of significance. This is caused by the lack of greenery, less attractive views and landscape features to be able to be identified as distinctive features of the streets.

It was observed that the JBB has more direct physical and visual accessibility, connectivity and more identifiable physical images, such

as its distinctive landscape elements and street furniture. This finding supports the functional attachment and users' preference for shopping location. It was also observed that the streets' legibility is strongly associated with activity than the physical and visual appearances of the buildings and open spaces.

The results from the interviews indicated that the respondents' identification of recognisable nodes and place markers gave them a sense of direction. The mixture of old and new buildings, historic building façade and the traditional shop houses characterise the more traditional streets of JMI-TAR and JP. However, majority of the respondents identified more positively with the legibility of the contemporary place such as JBB. They perceive this place as being more attractive in terms of views and landscape, having more popular buildings and larger shopping complexes, and are therefore considered more legible. This is reflected in the attractive design of the pedestrian walkway of "Bintang Walk" and popular shopping places and entertainment spots which people use to associate with the place.

It was observed that buildings and open spaces become the nodes and landmarks of the places. Popular buildings, historic structures, new roof structure, street vendors, transport nodes, pedestrian walkways, public facilities, high-rise buildings, shopping malls and distinctive restaurants are the elements that make the place legible. Some of the most usable spaces outside buildings which allow social interactions and communication to take place include building corridors, building entrances, pocket spaces, transport nodes, street vendor area and spaces in between buildings. Nevertheless, these spaces mainly serve as pedestrian linkages rather than spaces to sit, communicate and observe. It was observed that JMI-TAR and JP lack attractive visual qualities which could easily be identified due to the unclear signage and direction, as well as poor quality of the public open spaces. Further improvement of the physical elements, such as detailed design treatment of the pedestrian path, should contribute to the street's legibility.

TABLE 1
The characteristics associated with the legibility of the physical elements in JMI-TAR,
JP and JBB

Components		Statements / characteristics	Mean Value		
			JMI-TAR	JP	JBB
Physical elements	01	Very clear layout-easy to move	2.86	2.74	2.92
	02	Very clear signage and direction	2.75	2.38	2.90
	03	A lot more greenery /beautiful trees	2.24	1.98	2.34
	04	A lot of very exciting views	2.22	2.17	2.64
	05	Unique and exciting landscape features	2.25	2.29	2.59
	06	Very attractive building facades/old buildings	2.40	2.70	2.55
	07	A lot more popular buildings as place markers	2.56	2.60	2.85
	08	A lot more modern shopping complexes	2.74	2.58	3.20
			2.51	2.67	2.75

Source: Field survey

It was noticed that the streets intersections are the most identifiable nodes supporting constant and high pedestrian movement and crossing particularly at peak hours. Small open spaces around the corner of the intersection provide spaces for meeting points and waiting areas. Meanwhile, the ongoing flow of pedestrian across the intersection creates a sense of life to place, making the place visible. Based on the interviews, it was found that even though the users felt that the elements support their knowledge of the streets and a sense of direction, continued attachment is mainly associated with high level of accessibility to familiar activities and legibility of the locations which they are able to participate and fulfil their purposes of being in the place. Hence, familiarity to objects such as buildings and activities provides a higher degree of comfort and ease of use. Moreover, majority of the respondents mentioned that they knew the place very well due to length of engagement and frequent visits. Familiarity is also reflected in the respondents' knowledge of the physical elements and changes in the area, as stated by one of the respondents below:

"Pakcik memang sangat biasa dengan setiap inci tanah di kawasan ini. Nama jalan banyak berubah., bangunan paling lama Colesium, Masjid asalnya separuh kayu, JTAR asalnya Batu Road dan Robinson di Jalan Tun Perak asalnya pusat membeli belah yang terawal disini…" "I am ('Uncle') very familiar with every inch of the area, the names of streets has been changing, the oldest structure are Colesium, the mosque used to be partly made of wood, JTAR was originally Batu Road and Robinson in Jalan Tun Perak was originally the earliest shopping complex here…" (Respondent 3: Shop owner, 25 years of engagement) JTAR

The shoppers also associated their familiarity with the locations of shopping attraction and their particular needs found in the area. The following responses describe this connection:

"I frequently come here, at least once a month for shopping. I can find all the necessities for my family. The best is clothing and textile especially *tudung*." (Respondent 3: Shopper, 10 years of engagement) JMI

The shop owners associated familiarity with the length of engagement with the place, as described in the following statement:

"I am familiar with the place; I know this area very well. I have been here for 25 years, I can tell you the names of the roads here, but this road is the most familiar because I run my business here." (Respondent 3: Shop owner, 25 years of engagement) JP

"I prefer to stay here after retired. I am used to this place and had been working here for 30 years…"(Respondent 9: Resident, 37 years of stay) JBB

It was found that the respondents associated familiarity with the places which they frequently visited and the shops and spaces that they engaged with. It was noted that the respondents also stated the streets as a whole as spots which they were familiar with, while others indicated specific buildings/commercial complex well–known and popular to shoppers and visitors.

The respondents were also asked to identify the elements which had influenced their attachment to the streets. The shopping complexes were strongly identified in users' choice of shopping locations; however, the street vendors, department stores and typical traditional shop houses are popular in attracting users from related ethnic groups along the traditional streets of JP and JMI-TAR.

The scales of 2.72 (JMI-TAR), 2.57 (JP) and 2.67 (JBB) from the scale of 4.0, as summarised in Table 2, suggest that the respondents have a moderate functional attachment towards the shopping streets. Nonetheless, the mean difference is not significant. In the case of JMI-TAR, the scale of 2.72 for JMI-TAR indicates that the attachment to the place is stronger than that of JP (2.57) and JBB (2.67). However, the responses for statement 01 ('this area is the best place for what I would like to do') informs the study that the degree of functional attachment is fairly strong (JMI-TAR: 3.00; JP: 2.69; JBB: 2.88). The respondents also agreed that the shopping streets are the best place for their activities, felt comfortable being there than any other places and satisfied with the improvement of the areas.

On the other hand, the results from the interviews shown in Table 3 indicate that the functional attachment is strong, as expressed by the length of engagement, level of familiarity, degree of dependency, degree of satisfaction and sense of comfort. There is a similarity in all cases (JMI-TAR, JP and JBB), indicating dependency for regular income, business opportunities and involvement during festive events and occasions. Meanwhile, satisfaction was expressed through availability and diversity of goods, public facilities, streetscape improvement and intensity

TABLE 2
Degree of functional attachment to JMI-TAR, JP and JBB

Component		Attachment Items	Mean values		
			JMI-TAR	JP	JBB
FUNCTIONAL ATTACHMENT N=330	01	This area is the best place for what I like to do	3.00	2.69	2.88
	02	I feel comfortable being here than any other place	2.77	2.45	2.75
	03	No other place can compare to this place	2.47	2.44	2.38
	04	I am happy with the improvement done to this place	2.68	2.73	2.91
	05	This place is very important to me	2.68	2.53	2.45
		Mean value	2.72	2.57	2.67
		Response format 1= Strongly disagree 4= Strongly agree			

Source: Field surveys

of shoppers and visitors. The physical and environmental comfort was reflected in the degree of convenience in terms of accessibility, public facilities and protection from weathering condition.

The legibility of these places was enhanced by the transparency of the trading activities at these places through the intense use of the arcade walkways and the streets themselves to display the merchandise. The presence of various shading devices employed, such as the construction of the opaque roofs over certain parts of the JMI and JP, have increased the comfort level as well as its legibility. On the other hand, JBB has many tensile structure pavilions along the street which make the place conducive for shoppers and more visible to the passers-by. Hence, there is a strong relationship observed between the elements which contribute to the sense of comfort and legibility. This supports the users' daily engagement.

The respondents seemed to relate their knowledge and familiarity with the places to the frequency and period of engagement. This is shown in the following responses:

> *"Hari-hari pakcik datang sini dari dulu lagi. Jumpa kawan-kawan sama sama pencen. Kita berbual pasal macam-macam benda,. pasal hidup, kenangan dulu-dulu, pasal tempat ni. Kita dah rapat , kenal semua macam dah jadi satu group…"* I come here everyday . I am meeting my pensioner friends. We talk about a lot of things, about life, memories and about this place, we are very close, knowing each other as one group… " (Respondent 7: Visitor, 8 years of engagement) JMI

> "I shop here because I have been shopping here since 25-30 years ago. I only come sometimes when I have time or when I crave certain food here (bakery, noodles, fruits from China)… It is special because it had been here for so long…" (Respondent 9: Shopper, 30 years of engagement) JP

The functional attachment was expressed in the form of association with the place. This type of attachment was embodied in the physical (functional) characteristics of the places. It was observed that a group of pensioners were frequently gathered in one of the pocket spaces in JMI known as Medan Bunus. They felt attached to the place because the open space is shaded by the existing trees, whereas the popular spots for street entertainment by the blind musicians influence their preference to gather there. The respondents also associated the attachment with leisure activities and the quality of the physical environment for social interaction. In terms of improvement, the respondents strongly agreed that the streets are the best place for their purposes of being there and they are also happy with the improvement of the areas. It is evident that the users' engagement is influenced by the physical quality of the places and their legibility.

The Influence of Buildings and Public Open Spaces on Functional Attachment

JMI-TAR and JP are characterised by the traditional shop houses with arcaded walkways and interspersed modern buildings. Despite portraying the modern city image, the history of JBB as among the older streets in Kuala Lumpur is reflected in a few of the remaining old buildings.

The results from the survey also suggest that the users have identified JP as having very attractive street frontage and building façade, compared to JMI-TAR and JBB. This adds to the legibility of the street, despite the dilapidated building and illegible facades. Nevertheless, the Indian Mosque (Masjid India) which was built in 1863 has been regarded as the most identifiable historic building due to its distinctive architectural features. The area was developed for commercial uses at the beginning of 1930's and it still remains as one of the most favourite streets in the city centre for shoppers.

Table 4 illustrates the comparison between the legibility of the places with the respondents' functional attachment. The significance of the layout of the streets, as the element which

TABLE 3
Functional attachment indicators

Indicators	PLACE			
	JMI-TAR	JP	JBB	Keywords (Freq.)
Engagement	Engagement from morning to night time	Engagement from morning to night time	Engagement from morning to midnight	Frequent (3), social, ownership, association, familiarity, traders office hours, leisure, entertainment food, relax
	Strong social connection and bonding due to activity and cultural group	Attached to the place due to long period of engagement and association	Attached with office hours	
	Strong sense of ownership and bonding due to longer period of engagement	Constant visit particularly during Chinese New Year Very close with other traders and recognise them by sight	Leisure and entertainment Window shopping	
	Committed to the daily routines		Attraction to food and specialised eateries	
		Attached to trading and vending activities	Relaxing in outdoor eating spaces	
Familiarity	Very familiar with the place	Very familiar with the place Able to describe changes of the physical settings in details	Very familiar with the place	Imageability (2), changes, street vendors (2), changes, shop owners regular customer, frequent (2), events
	Able to describe the area very well, highly imageable	Very familiar and constantly engaged with frequently visited shops	Very familiar with the regular customer	
	Able to describe changes of the physical settings in details	Know most of the other traders and vendors	Frequent shopping and visiting during special / familiar events	
	Know most of the other vendors	Close relationship with the adjacent shop owners	Familiar with night scene of Bintang walk	

Table 3 (continued)

Dependence	Dependence on the main centre of attraction (shopping complexes)	Has greater control over space due to length of engagement	Attached to the place because it is easy to gain money and provide better life	Shopping complex, suitability, control (2), people, business-income (7)
	The main source of income	Attached to the place due to the business opportunity	Attachment due to business gain	
	Choose the place because of it economic potential and suitability	Choose the place because of the business and the people	Frequently use the rail transport	
	Has control over space due to length of engagement The place where they can afford to pay rent for businesses			
Satisfaction	Satisfy with the variety of shops	Happy with the new roof shelter for protection Satisfy with variety of things offered at lower prices	Satisfied with the place because it attracts a lot of people to shop	Variety (3), sustain life (2),price (3), roof shelter, people (2), changes, transportation, facilities
	Suitable place to sustain life and daily needs	Satisfy with variety of shops	Satisfy with variety of things offered	
	Satisfy with variety of goods offered at lower prices	Satisfied with the street as people's attraction Satisfied with the changes and suggested not to destroy the street character	Satisfied with transportation and facilities	
	Satisfied with the current improvement	Special choice of traditional food	Attracted to the entertainment activities	

Table 3 (continued)

Comfort	Comfortable place to work and shop Comfortable with familiar shopping spots	Comfortable and happy living in the area where things are accessible	Happy and comfortable with the place to shop and relax	Facilities, roof shelter (2) cleaner, convenient, eating, shopping, access, walking
	Convenient facilities (LRT)	Comfortable to work under roof shelter	Convenient and happy with the place and its facilities	
	Mosque within walking distance	Cleaner environment	Easy to get places to eat and to do shopping , to get necessities	
	Roof shelter offers protection		Comfort of access and walking	
	More organised vending spaces			

(Source: Interviews)

(a1) (a2) (b1) (b2)

(c1) (c2) (c3) (d1) (d2)
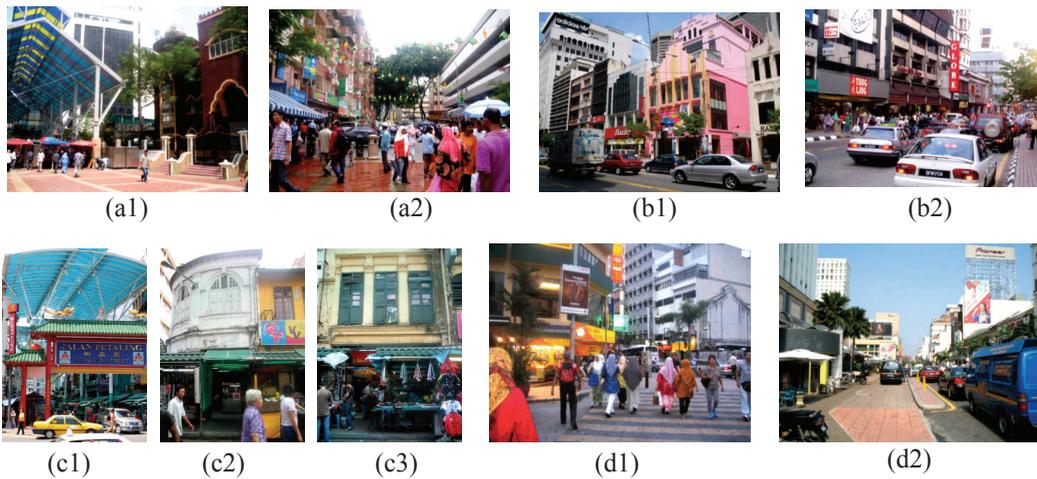
Fig. 1: Old and new buildings defining the legibility of JMI (a1, a2), JTAR (b1, b2), JP (c1, c2, c3) and JBB (d1, d2)

contributes to the respondents' perception, is reflected in the results of the survey. More than 70% of the respondents strongly agreed that the streets have very clear layout that facilitates easy movement as well as a stronger functional attachment. In the case of JBB, the majority of the users perceived that the presence of many modern shopping complexes shows the ability of the place to establish its popularity as a shopping

and leisure attraction, and thus, drawing users and visitors to the location.

The streets were seen to be among the most vibrant spaces in the city centre and they provided places for shopping activities. The congruence between the physical characteristics (through buildings, place markers, open spaces and landscape) and the associated activities have created places which users can easily identify

TABLE 4
The percentage showing a comparison between legibility and functional attachment

Place	Attachment	Legibility (Physical elements)							N=330
		layout	signage	greenery	view	landscape	building	Place markers	complexes
JMI-TAR	Best place	78.0	62.7	36.1	36.6	39.8	53.0	57.3	67.1
JP	Best place	70.8	44.6	26.2	33.8	38.5	58.5	56.9	54.7
JBB	Best place	78.0	74.4	37.8	63.4	61.0	60.5	75.6	90.1

Best place: Based on the statement, 'this is the best place for what I would like to do'
(Source: Field surveys)

with. This influences the users' engagement to the places. In the midst of change, the significance of the historical place markers is evident from the following statements made by a local newspaper:

> "While most of the colonial buildings have undergone some form of transformation, the 82 year-old Coliseum Café & Hotel in Jalan Tuanku Abdul Rahman has remained virtually unchanged. Built in 1921 it was a popular hangout for colonial planters, miners and traders. We can safely say that everything is unchanged here" (Colesium Assistant Manager – Richard K: The Star, Sat. Aug 10, 2002, p. 2-3).

> "Another landmark, the intriguing three-storey Seng Kee coffee shop at the corner of Petaling Street and Jalan Cheng Lok was demolished in the late 1990s and rebuilt as a bland four storey block. As a 'tribute' to our heritage, no doubt, a ground floor now houses, of all things, a McDonald" (The Star, Sat. Feb 3, 2001, p.3).

The findings suggest that the physical attributes and characteristics have significant influences on the attachment. The majority of the users who identified JMI-TAR, JP and JBB as strategically located and highly accessible also agreed that the streets are the best place for their

intentions of being there. Here, legibility plays an important role in increasing the capability of the streets to function as shopping and working places. These further support the notion that the physical features and appearance play an important role in influencing the sense of place and contributes to place attachment (Steadman, 2003; Relph, 1976). In more specific, they provide appropriate structure and images to support the development of place attachment (Tuan, 1974), and therefore, the objects should be easily identifiable and legible to the observers.

CONCLUSION

The study on the physical legibility and attachment to shopping places in Kuala Lumpur city centre indicates the need for more identifiable elements to secure the physical and functional characteristics of these places. The clarity of the urban physical structure, as well as the distinctiveness of buildings and landscape, influences how people use spaces to sustain attachment. Since these streets are among the oldest streets in Kuala Lumpur, the physical significance and perceived image of the streets have reinforced place attachment which is influenced by the length of engagement and familiarity. The sense of place is developed not only through the ability of the physical elements to stimulate the human senses but also the form and degree of attachment as a result of a strong identification of urban elements and continuous engagement in activities. Therefore, it is concluded that the legibility of the physical

elements, contributed by the nodes, landmarks (place markers) and associated characteristics, has a significant function in making distinctive and meaningful places as urban designers aim at creating more responsive places for people to stay, to work and to play.

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Unleashing Youth Potentials in Developing the Agricultural Sector

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ABSTRACT

The participation of youth in agriculture is imperative given the fact that the hope and aspiration of agriculture, and the nation for that matter, rest on their shoulders. This successful and persistent youth in agriculture would pave their paths to be nucleus farmers. Youth involvement in trying out or getting involved in agriculture very much depends on their perception on agriculture itself. This research seeks to identify the perception of youth on agriculture and in particular it seeks to: 1) study the respondents' profiles among the youth link to agriculture; 2) to study their perception on agriculture; and 3) to identify the agriculture education programme provided for the youth. The positive view on agriculture that is suggested by the research indicates that the youth do not totally deny or place a negative image on agriculture. Various agriculture education programmes have been and are currently organized to develop agriculture education among youth either by the government or the private agencies. In general, the young farmers are unaware of the programmes organized by the government or the private agencies. This shows ineffective communication for the beneficiary (youth) and the organizer of the programme. Effective agriculture education actually depends on how far and significant the commitment given by every party. Multiple efforts are needed to ensure the effectiveness of an education programme.

Keywords: Youth, successor farmers, perception, Malaysia agricultural development

INTRODUCTION

The importance of youth in all facets of national development has been amply noted in the many national development policies of Malaysia because they are the future stirrers of the national affairs and the cream of our society.

Young people are not only the vessel that transmits the practice of agriculture from the present generation to the future but they are the agent of change in advancing agriculture and the communities in which agriculture is practiced. Having been noted, it is deplorable to see a lack of or reduced participation of young people in agriculture and related activities. This throws light   on the need to arouse the youths to step-in and fill this vacuum in agricultural societies. This

section of the paper laments on the literatures available on the subject of youth participation in agriculture.

Be it in any community, agriculture or otherwise, youth and the community development are interwoven. This is particularly important for agricultural communities where a seamless succession of participants in the practice cannot be overlooked. However, as observed by Armistead and Wexler (1997), "this vital interdependence of youth development and community development is too often ignored".

But who are these youths? Why are their participations in agriculture important? Youth, according to the United Nations' general assembly, are the persons who fall between the ages of 15 and 24 inclusively (Idriss, 2003). The

term differs slightly from one nation or group nations to another.

As part of the much cherished human resource of Malaysia and the pillar for the nation, they must be developed and included as part of developing quality and productive human resource. Although economic liberalization and privatization policies are thought to have been the catalyst to the economic development currently achieve in Malaysia, if the youth are unable to continue the current success enjoyed then it will not last in generating future development, causing slow down in the economic development.

The government of Malaysia through development programmes has always included youth in preparing the agenda on the education of youth towards agriculture. Such opportunities to be involved in agriculture are always made available to them with support from various agencies to ensure success in the youth career in the agricultural sector that they participate. According to the Department of Statistics (2010), the rural youth (15 until 39 years old) is the highest population with 4, 000 people.

The government has executed the Eighth Malaysian Plan (8th MP), 2001-2005 in the period where youth development programmes were carried out to upgrade the role and the participation of youth in the development of the nation. The programmes included education and training skills while at the same time fostering discipline and independence, cooperation within the society and building quality leadership among them.

Results from this plan have showed positive improvement in line with its objectives. It was indicated that youth, within the age range of 15 until 39 years old, accounts for 41.5% out of the total population in 2005. During the 8th MP, the average youth has increased by 2.4% annually from 9.85 million in 2000 to 11.10 million in 2005 (Table 1).

Meanwhile, the total number of youth who were working in all sectors in 2005 was 6.67 million or 60.3 % out of the total youth population compared to 6.16 million or 62.9% in 2000. Most of them were working at the manufacturing sector to grab the increasing opportunities. This sector increases to 24% in 2005. The next sector is commercial, retail and wholesale, as well as hotel and restaurant with 23.8 % followed by other services at 18.9% (Refer Table 2).

According to the career categories, the percentage of youth that worked in professional and technical areas had decreased from 12% in 2000 to 8.7% in 2005. Other than that, the percentage of youth who worked in administration and management had increased to 2.8%. Meanwhile, despite the higher education achievement among the youth, those who worked in clerical and related careers had decreased by 1.6% during the same period. (Refer Table 3).

The youth development programme during the 9th Malaysia Plan (9thMP) stresses on empowering the youth to enable them to be more involved in building the nation, strengthening the nation and social integration to be the role models in the society. The strategic pillars

TABLE 1
Total Population According to Age Group, 2000-2010

Age Group	Million People			% out of the Total		
	2000	2005	2010	2000	2005	2010
Below 14 years old	8.00	8.72	9.18	34.0	32.6	31.7
15-39 years old	9.85	11.10	11.65	42.0	41.5	40.2
More than 39 years old	5.64	6.93	8.13	24.0	25.9	28.1
Total	23.49	26.75	28.96	100.0	100.0	100.0

Source: Economic Planning Unit

TABLE 2
Youth in Human Resource According to Sectors for 2000 and 2005

Sector	'000 People		% out of the Total		Average Annual Growth Rate (%)
	2000	2005	2000	2005	RMK 8
Agriculture, Forestry, Farming and Fishing	770.9	751.1	12.5	11.3	-0.5
Mining and Quarry	17.9	21.2	0.3	0.3	3.4
Manufacturing	1,731.0	1,603.5	28.1	24.0	-1.5
Electricity, Gas and Water	25.7	29.2	0.4	0.4	2.6
Construction	498.7	598.6	8.1	9.0	3.7
Finance, Insurance, Property and Business Service	351.4	493.4	5.7	7.4	7.0
Transportation, Storage and Communication	266.4	326.0	4.3	4.9	4.1
Commercial, Retail and wholesale, Hotel and Restaurant	1,197.1	1,588.8	19.4	23.8	5.8
Other Services	1,303.6	1,259.5	21.2	18.9	-0.7
Total	6,162.7	6,671.3	100.0	100.0	1.8

Source: Economic Planning Unit

TABLE 3
Youth in Human Resource According to Occupation in 2000 and 2005

Occupation	'000 People		% out of the Total		Average Annual Growth Rate (%)
	2000	2005	2000	2005	RMK 8
Professional, Technical and Related Careers	736.6	1,248.8	12.0	18.7	11.1
Administration and management	223.9	425.5	3.6	6.4	13.7
Clerical and Related Careers	779.1	736.7	12.6	11.0	-1.1
Service, Sales and Related Careers	1,430.7	1,023.9	23.2	15.3	-6.5
Agricultural Workers	764.9	654.7	12.4	9.8	-3.1
Manufacturing and Related Careers	2,228.0	2,581.7	36.2	38.7	3.0
Total	6,163.2	6,671.3	100.0	100.0	1.6

Source: Economic Planning Unit

in developing youth are: 1) empowering the youth for the future by increasing the access to education and training; 2) intensifying youth participation in youth organizations; 3) fostering the spirit of competition among the youth; 4) strengthening the legal framework for youth development programme and; 5) encouraging unity and social integration in the nation.

In the 9th MP, the youth agriculture development programme has been introduced to encourage and attract the interest of more youth in implementing projects whereby they will be given training and counselling to carry out commercial agricultural-based activities. The implementation of this programme includes the setting up of the agriculture-based business

organizations and encouraging the use of modern technology to establish a young and modern generation of young farmers.

LITERATURE REVIEW

Edginton, Kowalski and Randall (2005) defined youth as a very vital asset in the economic development. They signified and portrayed the belief, values and idea of the parents and function in fulfilling the ambulation, vision future and aspiration. At the same time, the youth today initiate and bring new perspective to our culture.

According to the *Successor Theory*, youth is also the future successor to farmers who will shoulder the role of developing regional agriculture. There are many definitions of successor farmers, among them are based on Tabata (1996) theory. He defined successor farmers as a) the successors who are responsible to changes in innovation, technology and the management of production development; b) as successor to agriculture production and successor to regional agriculture development. Wataya (1959) referred successors to those who realized the productivity and high profit effort based on time or current era. They are the social cluster to productivity development known as the successor of production.

Therefore, the meaning of successors, as addressed by Tabata (1996), is those who are responsible to changes in innovation technology and the management. Thus, the level of changes in measuring or planning for new and innovative successors must be beyond the meaning of "farmers who simply farm only".

On the youth development in agriculture, Norsida (2008) stressed that the perception and acceptance of the youth on agriculture is discouraging, despite the need for the younger generation to inhering and move the national agricultural sector. This problem has to be viewed as an important agenda to be solved because if it is left unaddressed, within one or two decades, the country will face lack of human resource particularly in agriculture. The paradigm of the youth on agriculture needs to be changed so that they are interested to be involved in this sector. It can be done by offering high income from agriculture and providing capital support and consultation as well as conducive environment to encourage them.

However, with various issues and challenges faced by youth today, more agencies should be involved in planning the youth development. In general, youth development involves a mental, physical, social and emotional development process to make the youth ready to live in a productive and satisfying environment in a community or society.

Srisak (1997) who studied the youth development programme in Thailand has underlined several qualities that the youth must have namely: 1) having healthy family relationship; 2) having healthy physical and mental, balanced self development in line with their age, sound personality, respect and self confidence; 3) High awareness of their culture and understanding religious practice, life and local values; 4) Having various communication skills, knowledge and understand the latest information system and its usage in the Thai cultural context; 5) Loyalty in democracy and willingness to sacrifice for the common interest; 6) Understanding of their roles, rights and Thai laws-which are related to the daily life and respecting their rights-the rights of other people; 7) A simple life, awareness of social responsibilities and good management; 8) Awareness of the responsibilities to the environment as the source of natural and sustainable development; and 9) Ability to increase one's self-directed development.

Hazelman (n.d) in his research regarded the best training are done by three Asian countries namely Japan, Philippines and Thailand to educate and train the rural youth. He found that factors that propagated the success in training youth in the rural areas were: 1) The target group in developing training was chosen based on the need of the group member through common consent; 2) Training given was using the practical learning method by sharing knowledge and skills among the participants; and 3) Club members also given on the job training from

the group income which is obtained from the activities done.

Regarding to community and youth development, Armistead and Wexler (1997) stated that communities are dependent upon the minds, hearts and hands of their young people and youth are dependent upon the viability, vitality, protection and attention of their community.

Globally, there is recognition that the participation of youths in the development of agriculture is paramount and this is evident in policies and programmes initiated by the government to encourage young people to be engaged in agriculture. The Federal government of Nigeria, as argued by Jibowo (2005), has introduced various agricultural development schemes with the aim of encouraging the youth and boosting food production and farmers' income through the provision of agricultural infrastructure, inputs and effective extension work at the federal level. Such programmes are seen to have trickled down to local government as well.

Muhammad-Lawal, Omotesho and Falola (2009) in the paper entitled "Technical Efficiency of Youth Participation in Agriculture: A Case Study of The Youth - In - Agriculture Programme in Ondo State, South Western Nigeria" recommended that for youth to be effective agents in improving agricultural programmes in Ondo State, South Western Nigeria, they need support in accessing inputs, gathering relevant knowledge and experience, building effects for agricultural practices and adequate extension service.

In addressing the state of youth participation in Philippines, Ria Janine (2008) described the situation as "declining enrolment rate in agriculture-related courses, low participation of the Filipino youth in agriculture-related activities and the persistence of problems that threatens the sustainability of Philippine agriculture".

Remarking on the state of affairs of youth participation in Taiwan, Chen (2008) fronds at the awareness of the youth on agriculture describing them as being indulged in "the material world, [and] are rarely aware nowadays of where their food comes from. Most of them don't even know how sustainable food production might benefit agriculture and the natural environment".

In Botswana, the government is cognizant of the generally lack of youth participation in agriculture and to encourage them, the government made alliance with a credit facility CEDA to launch a specific programme called Young Farmers Fund in April 2006, to enable the youth to get credit in order to establish agricultural businesses. Since the youth had a problem of accessing land, they were allowed to lease land so that they could do their businesses at low premium rates and for a long grace period.

Addressing the need for young people to take centre stage in stirring the course of agriculture in the Caribbean, Suriname (2010), underscored that youths participation in agriculture is a necessity because: there is compelling evident that the age of the present farmers is getting old; persistent skyrocketing of regional food import bills; a mindset changed on how people view farmers in terms of their status; to address the high unemployment rate in the region; to increase agricultural productivity and hence food security; to address the rising crime among youth by making them engaged in something meaningful.

In a high level 2010 UN Economic and Social Council (ECOSOC) luncheon meeting on the importance of women participation in agriculture. Nereide Segala Coelho, the grassroots leader and a woman farmer, Rede Pintadas, from Brazil could not resist except to note that the "importance of youth participation in agricultural production and rural development and identified innovation, partnerships, and technology as critical for increasing productivity. Among her main recommendations were to: learn how to utilize all local natural resources; combine popular with scientific knowledge; utilize proper technology for food production: water storage, irrigation, technology, organization of production, and distribution; encourage the creation of women-led organizations and initiatives; guarantee land access to women; engage the youth; and see food as a generator

of life." This is a significant indication of the premium placed on youth taking on agriculture.

Russell (1993) was convinced that the role of youths in agriculture needs a relook from a holistic perspective in the United States and opined that "Colleges of Agriculture need to address these complex problems by focusing resources on youth development needs. Such an initiative should be aimed at communicating a more positive image of agriculture to young people and reaching and creating a larger pool of youth".

He went further to suggest the following objectives for colleges to rejuvenate agriculture into the limelight. He said colleges needs to: 1) Establish a special task force on youth development in and about agriculture to draft a plan to implement this new college priority; 2) Request new campus resources and reallocate existing resources within Colleges of Agriculture to initiate this programmatic thrust of the colleges; 3) Involve all academic units of the colleges in assuming appropriate roles and responsibility for youth development in and about agriculture as a coordinated, high-priority initiative in each state.

PROBLEM STATEMENT AND OBJECTIVES OF STUDY

The government has given deserving attention to the current agricultural sector, indicating the premium the government placed on the sector and the development it generates for the nation thereto. However, the development depends on too many factors including the role played by the actors in agriculture namely the farmers, entrepreneurs and the government.

In order to fulfil this objective set by the nation, the farmers need to move and spearhead the development. It is hoped that the young farmers in the agricultural community are productive, creative, imaginative and highly competitive. However in reality, although there have been many programmes and plans for agriculture education organized by the relevant ministries and agencies, the youth involvement in agriculture is still not encouraging.

Youth participation in agriculture education depends on many factors, among them are the perception on agriculture, knowledge and open-mindedness on information related to agriculture education programmes, curriculum and the content of the programme and others. Perception and positive view among the youth on agriculture would indicate how they accept and view the agricultural sector itself whether it is negative or positive..

Interest is among the factors in motivating the youth to choose agriculture as a career. Interest can be fostered through exposure to knowledge on agriculture at a very young age. However, there are questions that need to be answered; are the youth well exposed since the very beginning to be aware of the education programme that they can enrol in; are there ample opportunities provided to them; is the government effort sufficient in providing the current agriculture education programmes; how do they want the careers in agriculture to be perceived;? do they see it as a profession that demand high expertise, high entrepreneurship level. The youth's view on agriculture in general is vital because at least they can evaluate the contribution and the importance of the agricultural sector to the development of the nation. Today's youth may view agriculture as a way of life, a satisfaction, a traditional culture or as an indicator to every plan in youth development programme in agriculture.

Generally, this research seeks to identify the perception of youth on agriculture and in particular this research seeks to: 1) study the respondents' profiles among the youth link to agriculture; 2) study their perception on agriculture; and 3) identify the agriculture education programme provided for the youth.

METHODOLOGY

Research Concept

As a guideline for the research, a research concept has been determined as follows. Youth in research is categorized into beginning, middle and final level according to the level

of knowledge on agriculture and also their experience in agriculture. In this research, it is assumed that there are different categories of youth and their involvement in agriculture does not provide the answer to their different views, thus this will yield a good result for research or guideline for the youth education programme in agriculture.

Youths' Perception on Agriculture

It is vital to know how youth perceive agriculture. Their views on agriculture or careers in agriculture can be divided into two either positive or negative. The most prominent positive and negative views seen among them can be the answer to the current status of their r views on agriculture in general. From the positive perspective, agriculture is a promising career, agriculture is good and it has a potential to be developed, agriculture is a career that youth must be involved in to help future development of agricultural sector. Negative views or image on agriculture include; a high risked sector, not a high status career, not glamorous and looked down upon, uninteresting and tiring career.

Factors that Prevent Youth Involvement in Agriculture

There are various factors for the lack of youth involvement in agriculture. By studying the various factors, the problem of youth participation in agriculture can be addressed according to the importance. If all the pre-requisites are fulfilled, would the youth still participate in agriculture? The findings found the answers to the research questions of how far youth are interested directly or indirectly in participating in agriculture. The factors that prevent them from participating are; lack of capital, bureaucracy in the management related to agriculture, lack of technical knowledge and management, lack of interest and having no desire.

Agriculture Education Programme

In order to upgrade the interest, knowledge and participation in agriculture, a strong agriculture education programme must be planned and implemented. Are the youth today aware of the existence of agriculture education programmes especially designed for them? If not, does the information reach the target group effectively? If the youth know the existence of agriculture education programme or the wide opportunities in agriculture education, they may be more willing to participate. There is an assumption that if the youth join in the agriculture education, their participation in this sector would increase. Therefore, knowledge in agriculture can be fostered at the early age to instil the interest of youth in joining this sector in the future. Some examples of education programmes include Agriculture Institute programme, Agricultural Science programme at Technical and Vocational High Schools and Agricultural College programme.

Sampling and Data Analysis

The respondents are categorized into six groups based on their interest : 1) The students who are currently enrolling in agriculture education programmes in technical and vocational high schools; 2) The students who are currently enrolling in agriculture education programmes in Agriculture Institute; 3) The students who are currently enrolling in agriculture education programmes in university; 4) Youth from Agriculture Incubator and Agriculture College Programme; 5) Agricultural entrepreneurs who actively involves in agriculture activities; and 6) Youth who are not involved in any agriculture education programmes or working in the agriculture sector at several selected areas in Kedah, Kelantan, Perak and Selangor (Table 4). The total number of respondents are 1, 433. Respondents in this research refer to youth within the age 16 years old until 40 years old. The questionnaire consists of questions that have been tested to ensure its reliability and validity.

Reliability is the consistency of measurement, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. In short, it is the repeatability of a measurement. A measure is considered reliable if a person's score on the same test given twice is similar. Alpha coefficient ranges in value from 0 to 1 and may be used to describe the reliability of factors extracted from dichotomous (that is, questions with two possible answers) and/or multi-point formatted questionnaires or scales (i.e., rating scale: 1 = poor, 5 = excellent). The higher the score, the more reliable the generated scale is. The value of 0.7 is considered as acceptable reliability coefficient but lower thresholds are sometimes used in the literature. For example, if the Cronbach alpha for a set of scores turns out to be .90, we can interpret that the test is 90% reliable, and by extension it is 10% unreliable (100% - 90% = 10%). Validity is often assessed along with reliability - the extent to which a measurement gives consistent results. Descriptive statistical tools like frequency counts and percentage were used to analyze the data.

The justification why more respondents have background knowledge or experience in agriculture was chosen in this research because the researcher feels that youth who are knowledgeable in agriculture tend to give more accurate response compared to youth who do not have any knowledge and experience in agriculture. If they are not involved in agriculture but having background education in agriculture at secondary school level, then they are unable to provide a concrete response when asked about this topic. However, as a comparison or in order to get certain responses, the views of youth who are not involved in agriculture are also taken into account.

RESULTS AND DISCUSSION

Respondents' Profile

The results of the research on the respondents' background information are shown in Table 5. The highest number of respondents is from 16 until 20 years old with 49.3% out of the total number of respondents and they are studying at Technical and Vocational High School majoring in agriculture sciences. Meanwhile, youth who are from 31 until 35 years old is the lowest with (3.5%) while the average respondents' age is 21 years old. It is found that 55.5% of the respondents are males and 44.5% of them are females from various races.

The results of the research also found that 1.5% of the respondents at least have obtained a minimum education of Standard 6.. The highest number of respondents that is 503 or 35.1% passed their high school certificate (SPM).

TABLE 4
Categories of the Respondents

No.	Category	No. Respondents (n)	Percentage (%)
1	Youth who is currently or have completed agriculture education programs at Agriculture Institute	196	13.68
2	Youth from Technical and Vocational High Schools	424	29.59
3	Youth among agricultural entrepreneurs	223	15.56
4	Youth who is currently enrolling in Agriculture Science Program at the local university	170	11.86
5	Youth without any agriculture education	239	16.68
6	Youth from Agriculture Incubator and Agriculture College Program	181	12.63
	Total	1, 433	100.00

This shows that at least the respondents have completed Form 5 before seeking employment.

TABLE 5
Respondents' Background Information (n=1433)

Demographics Profile	Percentage (%)
Age:	
16-20 years old	49.4
21-25 years old	35.7
26-30 years old	7.1
31-35 years old	3.5
36-40 years old	4.3
Average: 21.40	
Sex:	
Male	55.5
Female	44.5
Highest Education Level:	
Standard 6	1.5
SRP/LCE	19.3
SPM/MCE	35.1
STPM/Certificate	24.9
Diploma	5.4
First Degree	13.6
Masters Degree	0.1

RESPONDENTS' PERCEPTION

Perceptions on Agriculture Sector

Respondents' interest to venture into agriculture very much depends on their perception on agriculture or how they view the agriculture sector. They think that career in agriculture is promising if it is done properly (92.2% agree). Some believe that this sector has some potentials if it is given due attention by all relevant parties. Other than that, the respondents feel that the youth involvement will increase with more exposure and information. Such positive perceptions obtained from the respondents showed that youth do not place any negative image on agriculture (Refer to Table 6).

The conclusion that can be drawn from the respondents' perception is that all parties have to draw more interest for the youth to be involved in agriculture by providing incentives and support from every aspect. It is their own awareness to get involved without fear of shouldering any risks. They have to shift their paradigm and believe that careers in agriculture are also a professional career demanding sound technical and management skills. This sector has to prove that it is a sector that can generate high income and provide career and business opportunities for those who are wiling to work hard in it.

Factors that Prevent Youth from Getting Involved in Agriculture Sector

There are various physical or mental factors that hinder the youth from getting involved in the agriculture sector. From the physical perspective, it is found that lack of capital (88.1%) is the main problem since involvement in agriculture demand high capital. Other than that, other factors that prevent them are; bureaucracy in various matters related to agriculture (67.3%), lack of knowledge in terms of technical and farm management (66.6%), lack of sufficient exposure in agriculture (64.1%), infrastructure and insufficient facilities to attract more youth to stay in the village, lack of source and difficulties in obtaining relevant information (Refer Table 7). From the mental perspective, 67% of the respondents are afraid to try and take the risk, to try. , fear of the public perception and society acceptance, fear of unstable income returns and profits, lack of interest and willingness and also lack of strong support from the family and the community.

The Need and Readiness of Youth on Agriculture Education Programme

Various agriculture education programmes have been and are currently organized to develop agriculture education among youth either by the government or the private agencies. This education programmes are organized at secondary school level up to tertiary level (universities). The mushrooming of agriculture schools, institutes and colleges to educate and train the youth in agriculture are concretive

TABLE 6
Youth Perceptions on Agriculture (n=1433)

Positive Perceptions	(%)
It is a promising career with benefits if done properly	92.2
A good and potential sector	81.6
It is a career that youth should be involved in for the sake of future agriculture development	77.6
Careers in agriculture is noble and blessed since they are working with the soil	76.5
The location of the agriculture areas does not prevent most of them who are from the rural areas to participate in agriculture	76.4
It is an area that they are able to be involved in given more exposure about it	75.4
It is a career that can give satisfaction and experience	68.1
It is a career that must be given attention	65.0
It is a career that must be regarded as professional career and demanding high skills	63.6
Working as a farmer is a way of life that can be fully enjoyed	56.0
It is a traditional career that must be inherited and proud of	47.0
Negative Perceptions	
It is a high risked career	33.1
It is not a high status career, not glamorous and looked down at	20.8
It is not a fun career and tiring	16.3
Low return in agriculture and takes a long time to enjoy the returns	16.1
The last career choice	13.7
It is a career that is only suitable for those living in the village and rural areas	10.3
It is a career discouraged by family members and friends to be involved in	10.3

efforts by the government and the private agencies in producing young and knowledgeable farmers.

In general, the young farmers are unaware of the programmes organized by the government or the private agencies. This shows ineffective communication for the beneficiary (youth) and the organizer of the programme. Thus, it can be said that youth have to be more proactive with the current situation while the organizer of the programmes has to publicize their programmes more effectively. However, many youth particularly students have participated in the programmes organized. This shows that the students have high interest to increase their knowledge if there are suitable programmes offered to them. The government has to put more effort in increasing the youth interest and developing this sector in the future. Other than

that, the trainers' capability and high knowledge play a vital role apart from effective training programmes (Refer to Table 8). The findings of this research also discovered that 95.7% of the respondents agree that agriculture must begin at the primary level in order to foster youth interest in agriculture and 90.2% of respondents agree with the statement "A strong formal and informal agriculture education programme is needed at the primary level".

CONCLUSIONS, IMPLICATION AND RECOMMENDATIONS

Improving the Youths' Perception on Agriculture Sector

There is a need for continuous effort to draw higher youth participation in the agriculture sector by heightening the interest and providing

TABLE 7
Respondents' Opinions on the Factors in Preventing Youth from Getting Involved in
Agriculture (n=1433)

Factors Preventing Youth from Getting Involved in Agriculture	Percentage (%)
Lack of capital	88.1
Bureaucracy in various matters related to agriculture	67.3
Afraid to take risk and fear of trying	67.0
Lack of knowledge in terms of technical and the management of agriculture	66.6
Lack of exposure in agriculture	64.1
Lack of interest and willingness	61.9
Unfavourable view and image on farmers as careers	58.6
Insufficient infrastructure and facilities in the rurals areas to attract more youth to stay in the village	57.4
Unstable income returns and profits	56.9
Lack of strong support from the family and the community	50.5
Lack of source of and difficulties in obtaining information on certain areas	49.8
Unclear and insufficient counselling by the agriculture officers and agencies	48.4
The current agriculture education program is not encouraging	40.3
Lack of agriculture education that should be done at preschool level	39.3
Fear of the public view and society acceptance	38.3

knowledge on agriculture. There should be a concerted and continuous effort between the government and the other agencies in taking necessary actions in order to form more positive outlook and support the development of the national agriculture.

Organizing expo and exhibition, campaigns, promotion and road-shows via print and electronic media, "Agriculture Showroom" and various activities must be held frequently to introduce agriculture to the youth and the public. Such organized programmes are able to attract the Malaysian youth to get to know agriculture closer and spark interest in getting involved in it.

A Solution to the Factors that Prevent Youth from Getting Involved in Agriculture Sector

As mentioned before, capital is the main factor that prevents youth's involvement in agriculture. If the government is more serious in assisting them with financial resource with less stringent requirements in getting loans, they may be

more interested and willing to venture in such businesses. Other than that, the bureaucracy system must be reduced because it can lessen the interest of new young farmers to embark in agriculture. The involvement of agriculture officers in giving training and counselling is critically needed not just to give instructions but also to encourage and assist them particularly those who are lack of knowledge in agriculture. The government has to be more concern in providing basic facilities in the rural agricultural area. Such facilities must be provided at the collection site with complete infrastructure to attract more people to live in the rural areas where agriculture is developed.

Strong Agriculture Educational Approach and Preparing Suitable Programmes

The education and training programmes must be suitable and address the need of the youth community and the reality in the rural area as well as reflecting the effective education.

TABLE 8
Level of Respondents' Knowledge on Agriculture Education Programme (n=1433)

Agriculture Education Programme	Unaware at all	Don't really know	Aware	Very Unaware
	%	%	%	%
Institute of Agriculture Programme	20.9	36.4	27.2	15.4
Agriculture College Programme under Ministry of Agriculture and Agro-based Industry	18.4	37.4	34.0	10.0
Agriculture Science Studies at Technical High Schools under Ministry of Education	14.7	28.1	40.2	17.0
Agriculture Science Studies at Technical and Vocational High Schools under Ministry of Education	15.3	30.0	38.8	15.9
Agricultural 4B Youth Movement Program	30.7	42.3	21.8	5.2
Youth Agricultural Entrepreneur Scheme Under Permanent Food Production Park Project (TKPM)	34.0	38.9	21.1	5.9
Income Increment Scheme Under Ministry of Agriculture and Agro-based Industry and FAMA	27.9	40.5	26.9	4.7
Agriculture Skill Courses under National Agriculture Training Council	26.2	39.1	27.2	7.5
Pioneering Entrepreneur Guidance Programs under FELDA Colleges	28.1	40.8	25.5	5.7
Entrepreneur Guidance Programs under National Institute of Entrepreneurship organized by Ministry of Entrepreneur and Cooperative Development (MECD)	29.7	44.5	22.2	3.6
Agriculture Entrepreneur Incubator Program organized by Department of Agriculture, Ministry of Agriculture and Agro-based Industry	27.5	32.5	27.4	12.6

In short, such education programme must be suitable and portray the agro-ecological and socio-cultural aspects of an area.

The Ministry of Agriculture and Agro-based Industry must work hand in hand with the Ministry of Education in educating the students on agriculture at school level. A good learning module on agriculture and being sensitive to the current situation must be considered. Such curriculum must be based on the needs of both male and female youth based on their age and level of education. Other than the agriculture education programme, an education programme that assists and exposes the youth to the modern economy and other various development programmes must be implemented to enable them to be more empowered and proactive in every aspect of the national development.

In order to prepare young farmers who can spearhead the progress of the nation as the main pillar of human capital who are successful in the agriculture sector, the youth today must also be physically and mentally developed. An education programme related to the enrichment of religious, moral, ethics, culture and identity of the nation must be integrated in the agriculture education programme.

Agencies Actions that Get Involved in Youth Agriculture Education

Effective agriculture education actually depends on how far and serious the commitment given by

every party. Multiple efforts are needed to ensure the effectiveness of an education programme. In this case, collaboration between the state government and the government centres is needed in developing the agriculture education for youth at state level.

Local development agencies must be involved in planning activities related to agriculture education and the organization involved must have a technical advantage to provide and implement all programmes that have been planned. Such institutions must also be able to access and adapt to the need or interest of the youth residing in the rural areas.

The government must always sustain any opportunities and forms of incentives that can assist the development of the youth particularly in the rural areas by allocating a special budget for them. In order to address the issue of declining involvement of youth in the agriculture, various programmes involving them in this sector have to be planned and several actions need to be taken. These actions include:

1) To Establish the Programme that Produces Skilled Successor Farmer

The agencies need to create the extension programme that is relevant to youth, by organising courses and training, giving them professional status as skilled farmers and supporting the young farmers through various assistances. This programme will help to foster and empower the successful future generation of farmers.

2) To Organize Course and Training Programme

There are various courses that have values to attract the youth on agriculture that have to be organized particularly for them. The courses should focus on the latest production of technology know-how and farm management. Other than that, such courses must stress on how to encourage them to work in group. The most important thing is that these courses address every level of the youth self development.

3) To establish Practical Programme (Internship) for Secondary and High School Students

This can be done by choosing a target group, the secondary and high school students who are really interested to participate in agriculture in the future. Such activities are able to increase their understanding on agriculture and to improve their interest to be successor farmers in agriculture through practical programmes during school holidays.

4) To Conduct Classes on Farm Management and Life Skills as Farmers

For those who are currently involved in agriculture, it is vital to expand their talents in several aspects of management of agriculture and life skills as farmers. These youth are able to enrol in classes conducted phase by phase by the agricultural agencies and others on a part time basis.

5) To Establish Informal Trainer for Agriculture

The agricultural agencies are able to utilise the young farmers who have been involved in agriculture as an informal trainer as a way to obtain and give information to their peers as well as others for various purposes.

6) To Provide Support through the I-Turner Concept

This is a programme planned for the youth who have been working in other sectors (a concept known as *I-Turner*) to join agriculture but lack of information, training, capital and expertise. Such support can encourage more youth to work in the agricultural sector.

7) To Provide Further Training for the Agriculture Officers

To educate the youth farmers, agencies involved must provide trainers among the extension officers. However, courses and training must be conducted in order to increase the capability

of these officers. This is to ensure that they are aware of the current knowledge and technology in agriculture, to know farm management well, to obtain knowledge on farming practices and others. The results of this research can provide suggestions to the policy makers particularly the agencies that are involved in developing and encouraging more youth to join in agricultural sector. Suitable methods have been proposed to be utilized by the agencies involved as programmes and actions in their agenda to educate young farmers as the successor of the future agricultural generation.

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Measuring Refurbishment Contractors' Service Quality and Client Satisfaction: A Case Study at Public Institutions of Higher Education

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ABSTRACT

This study aimed to examine contractors' service quality performance and to explore the relationship between service quality and client satisfaction when undertaking refurbishment projects for public institutions of higher learning in Malaysia. Data were collected through a structured questionnaire. The questionnaire was generated based on the five service quality determinants in SERVQUAL, namely, reliability, responsiveness, assurance, empathy, and tangibles. From the five determinants, thirty-two attributes which might affect project service quality in refurbishment projects were identified to ascertain clients' service quality expectations. Out of the 150 questionnaires distributed to 20 public institutions of higher learning, only 74 were completed and returned, resulting in a response rate of 49%. The results indicated that the reliability factor was the most important variable of service quality and that clients at public institutions of higher learning had high expectations in terms of service quality from refurbishment contractors. The results also showed that the values of service quality scores were negative for all attributes and those contractors were not currently meeting their clients' expectations in the refurbishment projects. Finally, the study revealed that the dimensions of empathy and assurance had significant effects on customer satisfaction.

Key word: Service quality, Satisfaction, Refurbishment, Contractor, SERVQUAL

INTRODUCTION

Managing the refurbishment of buildings requires the involvement of typical stakeholders, such as building clients, users, designer, consultants, and the refurbishment contractor. Construction refurbishment has typically been viewed as a production process with the product being completed to upgrade the existing facility. In addition to providing this product, contractors also provide service (Maloney, 2002). Some of the refurbishment contractors' responsibilities for building maintenance work are to repair building defects and to upgrade facilities to meet the building clients' or users' expectations. Hence, work standards and demand for quality service in managing property have become increasingly important issues, specifically during maintenance and refurbishment work. Within this context are clients or end users, whose needs change over time and may not be satisfied by their existing premises. Clients or end users are those who actually work or live in, and thus, spend most of their time in the constructed facilities. It is essential that when building owners and refurbishment contractors

maintain or refurbish their facilities, they deliver the service that meets the users' requirements and satisfaction. Liu and Walker (1998) considered satisfaction as an attribute of success. Meanwhile, Torbica and Stroh (2001) believe that if end-users are satisfied, the project can be considered to have been successfully completed in the long run.

The current trend in the construction and refurbishment industry is now moving towards higher quality. As a result, contractors have been forced to upgrade the quality of their service (Hasegawa, 1988). With the rising expectations of the people, business transformation, and economic growth in Malaysia, there is growing awareness of the need among building owners, professionals, and the authorities to raise the standards in managing their properties. In fact, quality is now the cornerstone of competitive strategies for contractors seeking to widen and secure their client base (Pheng & Hong, 2005). Recently, many studies on product quality are conducted in the construction industry and they have influenced the growth of quality assurance systems in accordance with the ISO 9000 family of standards (e.g. Kam & Tang, 1997; Shammas-Toma *et al.*, 1998; Landin, 2000).

Therefore, this research was carried out to determine the service quality from the perspectives of clients or clients' representatives who had experience in managing refurbishment projects in public institutions of higher learning in Malaysia. Nowadays, Malaysia has a total of 20 public institutions of higher learning and some of these institutions are over 50 years old. At present, there are many development projects and refurbishment work which are implemented by these universities to upgrade the teaching facilities, campus living, and learning environment. The rising needs for these development and refurbishment projects provide the opportunities for contractors. Outsourcing has become one of the strategies used by the Facilities Management departments at public institutions of higher learning for maintenance purposes or work to get the best value for money, to maintain the service standard, and to increase efficiency. The increasing number of contractor companies in the construction industry indicates that they are fiercely competing with one another to get projects, and one of the common strategies is by lowering their prices. According to the Construction Industry Development Board (2009), Malaysia's construction industry consists of over 65,000 registered contractor firms. Thus, lower price currently dominates as the primary competitive advantage (Asahara, 1992), but this trend is not successful in the Malaysian construction industry since the NSTP reported in 2002 that the Ministry of Work had stopped awarding contracts to the lowest bidder. Consequently, this has compelled contractors to constantly think of new ways to gain a competitive edge. There is a possibility for a well-reputed contractor to develop more attractive services. Hence, service quality may be the main or only differentiating element in the eyes of clients, as it cannot be easily copied and duplicated.

Furthermore, in construction refurbishment, determining quality service dimensions and customer satisfaction in the market competition is important. The problem is to identify which of the quality service dimensions or attributes and customers' perception of the construction refurbishment services contribute to the overall customer satisfaction levels. This is further complicated by the intangible nature of the services, and quality service is inherently more difficult to measure than product quality. Moreover, efforts in defining and measuring the attributes of customer quality service in refurbishment construction are not fully known.

This study aimed to: (1) identify the dimensions of service quality that should be provided by a contractor, (2) test whether refurbishment contractors provide good service quality to clients, and (3) examine the relationship between the service quality provided by the refurbishment contractors and client satisfaction while managing refurbishment projects at public institutions of higher learning. The results gathered from this study will be useful for refurbishment contractors to provide high quality service that meets or exceeds clients' expectations and to fill in the gap which exists in

the service quality expected by clients and that which is currently provided by refurbishment contractors.

LITERATURE REVIEW

"Service quality," as perceived by customers, refers to the extent of discrepancy between customers' expectations or desires and their perceptions (Zeithaml *et al.*, 1990). ''Expectations'' are the desires and wants of customers (i.e. what they feel a service provider should offer them). ''Perception'' refers to the customers' evaluation of the service provider. The key to ensure good service quality is meeting or exceeding what customers expect from the service (Zeithaml *et al.*, 1990). The judgment of high or low service quality is dependent on how customers perceive the service performance in the context of what they have expected. Three underlying themes related to service quality are: (1) service quality is more difficult for the customers to evaluate than goods quality; (2) quality evaluations are not made solely on the outcome of a service, but also involve evaluations of the process of service delivery; and (3) service quality perceptions result from a comparison of customers' expectations with the actual service performance (Zeithaml *et al.*, 1990). Rust and Oliver (1994) mentioned that "effectively managing service quality requires a clear understanding of what service means to the customer." From a customer's perspective, a measure of service quality is usually referred to as customer satisfaction (Vincent *et al.*, 2008). Hence, measuring customer satisfaction leads to identifying ways to improve customer service quality.

While it may be comparatively easy to identify adequate dimensions for a specific service, researchers have sought to identify whether there are generic dimensions of service quality that can be identified. In this regard, the five dimensions of service quality proposed by Parasuraman *et al.* (1988) have been considered as the most widely accepted dimensions of service quality in various settings. These are:

a. *Tangibles* refers to the physical facilities, equipment, and appearance of personnel

b. *Reliability* refers to the ability to perform the promised service dependably and accurately.

c. *Responsiveness* refers to the willingness to help customers and provide prompt service.

d. *Assurance* refers to the knowledge and courtesy of employees and their ability to inspire trust and confidence.

e. *Empathy* refers to the caring, individualized attention the firm provides its customers.

Thus, to measure customer satisfaction using different dimensions of service quality, Parasuraman *et al.* (1988) developed a multiple-scale survey research instrument called SERQUAL. SERVQUAL has so far been used in several studies to measure service quality in the construction and refurbishment industry. Among other, Hoxley (1998) used SERVQUAL to determine the effects of fee tendering on the quality of consultancy services, and found that quality was perceived to be higher when clients pre-selected consultants carefully and when adequate weighting was given to the consultants' abilities in the final selection process. He later found that fee tendering did not lead to a decline in clients' perceptions of service quality.

Holm and Brochner (1997) studied the ultimate satisfaction in housing refurbishment and found a strong relationship between satisfaction and dissatisfaction with contractor reputations among the residents. They further stated that the commonly used definition of a service industry is being compatible with the characteristics of refurbishment projects.

Holm (2000) assessed the impacts of customer orientation in the refurbishment industry, and discovered that refurbishment contractors who ensured customer satisfaction would have better reputations and increased customer loyalty. In addition, he also found

that both product quality (i.e. the tangible repairs undertaken) and service quality (i.e., the intangibles) were cores to tenant satisfaction with housing refurbishments.

Siu *et al.* (2001) investigated the determinants of service quality in the maintenance of mechanical and engineering services. They found that service providers overestimated the clients' expectations of the quality of service to be provided. Moreover, the service performance of the current providers was generally below clients' expectations. They concluded that service providers have, to some extent, lost touch with clients' needs and expectations, and recommended that they work closer with their clients to better meet their expectations.

Arditi and Lee (2003) developed a method for measuring corporate service quality and project service quality of D&B firms. The methodology that they developed could be used by individual D&B firms or owners of D&B projects to assess the service quality of an individual D&B firm. In addition, this tool could also be used to rank D&B contractors relative to service quality.

Ling and Chong (2004) studied design-and-build contractors' service quality in public projects in Singapore using five SERVQUAL dimensions, namely, reliability, responsiveness, assurance, empathy, and tangibles, with a total of 34 attributes to identify the D&B contractor service performance. The study found that D&B contractors did not meet the clients' expectations in all the five dimensions of service quality. This also indicated that the D&B contractors were not giving clients the satisfaction that they hoped for.

While some of the previous studies have revealed that SERVQUAL can be used to assess the quality of contractors and consultants, industry surveys on contractors' refurbishment project service quality are still lacking.

SCOPE OF THE STUDY

This study was carried out to elicit the service quality dimensions as well as to investigate the clients' expectations and to assess the contractor service performance when

undertaking refurbishment projects. This study focused on the perspectives of clients or client representatives who have had experience in managing refurbishment projects at public institutions of higher learning. A total of twenty public institutions of higher learning in Malaysia were selected for this research study. The literature review in this thesis covered the principles of service quality and customer satisfaction, and these are applied in various services industries so as to improve perceived customer service quality. These principles were also employed in the context of construction refurbishment. Meanwhile, the concepts of service quality, customer satisfaction, service quality dimensions of customer quality, and the importance of these concepts in managing refurbishment construction projects have been defined in several studies.

The application of these principles focused on particular key elements attributable to successful quality based on the level of customer satisfaction. This relates to service that is typically provided by the contractor during the refurbishment process. The research was carried out using the analysis of data collected from the questionnaires. It is important to note that this research focused on any refurbishment projects, either the ones which had ben fully completed or in the process of construction refurbishment. The final stage of the study focused on the significance of clients' expectation and satisfaction with the services and quality of work provided by the contractors during the refurbishment project.

RESEARCH METHODOLOGY

A total of 150 questionnaires were sent out to the respondents through surface mail. The survey package comprised of a cover letter stating the objectives of the study, the questionnaire, and a self-addressed and stamped envelope. The population for this study consisted of the clients or client representatives who have had experiences in managing and procuring refurbishment projects in public institutions of higher learning. Overall, these institutions have

their own facilities management departments or asset management departments which are responsible for procuring and managing new development projects, operations, and maintenance works, including refurbishment. In these organisations, the Directors or Heads of Division were contacted via telephone and e-mail. They helped to identify all the officers who have handled or are in the process of managing refurbishment projects at their respective institution. From a total of 150 questionnaires distributed to 20 institutions, only 74 questionnaires were completed and returned, giving a rate of 49 percent.

The questionnaire was generated based on the five service quality determinants in SERVQUAL (Parasuraman *et al.*, 1988), namely reliability, responsiveness, assurance, empathy, and tangibles. From the five determinants, a total of 32 attributes which might affect project service quality in refurbishment projects were identified. The literature review revealed that the SERVQUAL has not been frequently used to assess contractors' refurbishment project service quality, so all the attributes which had been developed to ascertain clients' service quality expectations were based on previous study by Ling and Chong (2004). The authors found that the study was closely related to the contractors' field. Note that some attributes of the questionnaire were modified in such a way to match the context of refurbishment undertaken

TABLE 1
Profile of the types of respondents

	Frequency	Percent (%)
Types of respondents		
Professional	26	35.1
Upper management	24	32.4
Middle management	24	32.4
Position in project		
Client	46	62.2
Client Rep.	28	37.8
Years of experience		
1 - 5 years	29	39.2
6 - 10 years	24	32.4
11 - 15 years	11	14.9
16 - 20 years	6	8.1
More 21 years	4	5.4
Involvement in previous refurbishment project(s)		
Never	5	6.8
1 - 5 projects	38	51.35
6 - 10 projects	23	31
More 11 projects	8	10.85
The types of refurbishment contractor classes the respondents have dealt with		
Class A	15	20.3
Class B	14	18.9
Class C	16	21.6
Class D	15	20.3
Class F	14	18.9
Types of contract procurement		
Traditional	50	67.6
Design & Build	8	10.8
Const. Mgmt.	3	4.1
Project Mgmt.	12	16.2
Others	1	1.35

in the study. All the attributes were then tested in a pilot survey, and minor changes were made to the questionnaire.

The questionnaire was divided into 3 major sections, which included a guide to filling in the form, demographic profile (general information pertaining to the respondents and the organizations), and the final section containing the 32 statements. The respondents were requested to rate their expected levels of service (expectations) using the Likert scale ranging from 1 (not important) to 5 (very important). The respondents were also asked to rate the perceived levels of service quality (perceptions, after project completion) provided by the refurbishment contractors, also using the Likert scale ranging from 1 (not satisfied at all) to 5 (very satisfied). Finally, the respondents were requested to indicate the importance of the five Service Quality determinants by weighting each determinant out of a total of 100 points. After the final data for this study had been collected, measuring service quality performance in SERVQUAL was calculated using the formula given below. An overall weighted SQ score was calculated to take into account the relative importance of the various dimensions.

SQ score = Weighted Perception score - Weighted Expectation score   (1)

    where,

Weighted Expectation score = Expectation score x Importance weight   (2)

Weighted Perception score = Perception score x Importance weightw   (3)

According to Parasuraman *et al.* (1988), assessing the quality of service using SERVQUAL involves computing the difference between the ratings customers assigned to the paired expectation and the perception statements. Therefore, the perceived service quality was computed along the five determinants by subtracting the expectation scores from the perception scores. It is crucial to highlight that a negative Service Quality score (SQ score) indicates that the level of the contractor's service quality is below the clients' expectations, while a positive service quality score means that the contractors have exceeded their clients' expectations.

This formula is actually the same technique that was recommended by previous service quality researchers to measure service quality and customer satisfaction (e.g. Carman, 1990; McDougall & Levesque, 1992), whereby the SERVQUAL gap between customers' expectations and perceptions were multiplied by how important customers rated each element of the service. SPSS (version 16.0) was used to compute and analyze the data. In addition, descriptive statistics was also carried out to identify the means and standard deviations of the service quality according to each of the demographic variables. Pair wise T-test analysis was used to compare the mean and variance score of the clients' expectations and contractors' achievement of the attributes, as perceived by the clients.

RESULTS AND DISCUSSION

Respondents' Demographic Profile

The findings identified the type of respondents as consisting of three groups, namely; (1) professionals ($n = 26$), (2) upper management ($n = 24$), and (3) middle management ($n = 24$). The results showed that majority of the respondents worked as clients in the refurbishment projects. Most of the respondents had 6-10 years of experience in the construction industry and had been involved with 1-5 refurbishments projects. Thus, it is concluded that the feedback of the respondents is noteworthy. The majority of the respondents had dealt with class C contractors, while most of them had used the traditional system in implementing the refurbishments projects.

Analysis Reliability of the Survey Instrument

According to Nunnally and Berstein (1994), an internal consistency greater than .70 is reasonably reliable. After the gathering the final data for this study, the reliability coefficients

TABLE 2
Reliability of each measurement used in the study

Item	Service Quality Dimensions	Number of Variables	Alpha
1.	Tangible	7	.796
2.	Responsiveness	6	.710
3.	Reliability	7	.848
4.	Assurance	6	.803
5.	Empathy	6	.804

were calculated using SPSS v.16. The reliability coefficients for each of the five dimensions of the service quality scale are as follows: Tangibles (.796), Responsiveness (.71), Reliability (.848), Assurance (.803), and Empathy (.804). The reliability coefficients for the scales utilized in this study are presented in Table 2.

Importance Weights of the Service Quality Determinants

The respondents were asked to indicate the relative importance of each of the five determinants of service quality by giving them weights totalling to 100. The ratings given by the respondents for each determinant were then summed up (see Table 3). The results show that clients consider Reliability (30.2) to be the most important determinant in the project service quality, and they also expect refurbishment contractors to perform the service they have promised accurately, dependably, and with the promised quality of work. Meanwhile, Empathy (13.3) is perceived to be the least important dimension.

TABLE 3
Importance Weights of the Service
Quality Determinants

Item	Service Quality Dimensions	Weight
1.	Reliability	30.2
2.	Responsiveness	23.6
3.	Assurance	17.3
4.	Tangibles	15.6
5.	Empathy	13.3

Service Quality Performance

The service quality expected by the clients and received by them (perception; after project completion) is shown in Table 4. Column 3 shows the attributes on the service quality operationalised from the five SERVQUAL factors, while columns 1 and 2 indicate the number of attributes and references. Columns 4 and 5 respectively illustrate the results gathered on the clients' expectations in terms of how important they regard each attribute. Columns 6 and 7 show the findings on the extent to which the refurbishment contractors have achieved each service quality attribute, as perceived by their clients. Columns 8 and 11 are the paired samples T-test comparing the mean scores of the clients' expectations and the contractors' perception of the attributes. The T-test computes the differences between the values of the two variables for each case and tests whether the average differs from 0. The difference is between the service before, or that expected by client and that after receiving the service, as perceived by the clients. As the clients were also asked to indicate how important the five SERVQUAL factors are, these importance weights were also used to convert the ratings into weighted ratings using Equations 2 and 3 which have been given in Table 3 (see columns 12 and 13, respectively). Finally, the service quality score was calculated using Equation 1 and is presented in Column 14. For a better interpretation, the statistical results were summarized into five service quality dimensions (SERVQUAL Scores) which are shown in Table 5, and the results are also illustrated in *Fig. 1*. A discussion of the results is given in the subsequent sections.

TABLE 4
Statistical results for the refurbishment contractors' service quality

No	Ref	Service Quality Dimensions & attributes	Unweighted expectation		Unweighted perception		Paired Differences				Weighted expectation mean	Weighted perception mean	Service quality (SQ)
			Mean	Rank	Mean	Rank	Mean	Std. Dev.	t-value	Sig.(2-tailed)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Tangibles	**3.90**		**3.00**						**0.609**	**0.469**	**-0.140**
1	TAN1	The written and graphical output of contractor is well presented	3.84	28	3.14	9	-0.70	0.86	-7.064	0.000	0.599	0.489	-0.110
2	TAN2	Contractor staffs are always tidy in appearance	3.43	32	2.82	32	-0.61	0.84	-6.220	0.000	0.536	0.441	-0.095
3	TAN3	Contractor has up-to-date equipment technology	4.03	21	2.95	27	-1.08	0.79	-11.778	0.000	0.629	0.460	-0.169
4	TAN4	Contractor has innovative in construction methods	4.08	19	3.09	15	-0.99	0.84	-10.154	0.000	0.637	0.483	-0.154
5	TAN5	Contractor has visually appealing physical facilities	3.78	30	2.85	30	-0.93	0.78	-10.255	0.000	0.591	0.445	-0.146
6	TAN6	Contractor has a motivated and united workforce	3.99	24	2.99	25	-1.00	0.86	-10.002	0.000	0.622	0.466	-0.156
7	TAN7	Contractor has in-housed or external technical expertise	4.15	15	3.19	5	-0.96	0.71	-11.612	0.000	0.648	0.498	-0.150
		Responsiveness	**4.38**		**3.15**						**1.033**	**0.743**	**-0.290**
8	RES1	Contractor tells client exactly when the work will be carried out	4.50	6	3.16	7	-1.34	0.94	-12.238	0.000	1.061	0.745	-0.315
9	RES2	Contractor ensures project hand-over is well ahead of the date for occupation by users	4.54	5	3.03	20	-1.51	0.91	-14.303	0.000	1.070	0.713	-0.357
10	RES3	Contractor is flexible to accommodate variation of requirements during the project	4.27	11	3.12	12	-1.15	0.84	-11.780	0.000	1.006	0.736	-0.271
11	RES4	Contractor responses promptly to client's requests and problems	4.38	8	3.31	2	-1.07	0.88	-10.424	0.000	1.032	0.780	-0.252
12	RES5	Contractor employees are always willing to help	4.20	14	3.23	4	-0.97	0.86	-9.736	0.000	0.990	0.761	-0.229
13	RES6	Contractor accords priority to complaints (defects) on completed project	4.41	7	3.07	16	-1.34	0.97	-11.876	0.000	1.038	0.723	-0.315
		Reliability	**4.47**		**3.13**						**1.352**	**0.946**	**-0.406**
14	REL1	Contractor maintains a good reputation	4.62	2	3.42	1	-1.20	0.76	-13.646	0.000	1.397	1.034	-0.364
15	REL2	Contractor maintains high construction quality	4.65	1	3.12	13	-1.53	0.98	-13.372	0.000	1.405	0.944	-0.462
16	REL3	Contractor maintains an open and honest relationship with client	4.35	9	3.03	21	-1.32	0.97	-11.785	0.000	1.315	0.915	-0.400
17	REL4	Contractor's construction is done right first time	4.58	3	3.07	17	-1.51	1.10	-11.826	0.000	1.385	0.927	-0.458
18	REL5	Contractor's meet the exact specifications and requirement	4.58	4	3.07	18	-1.51	0.88	-14.801	0.000	1.385	0.927	-0.458
19	REL6	Contractor promises to do something by a certain time, they will do so	4.23	12	3.07	19	-1.16	0.84	-11.839	0.000	1.279	0.927	-0.351
20	REL7	Contractor provides the same level of service performance to all clients at different times	4.28	10	3.14	10	-1.15	0.90	-10.957	0.000	1.295	0.948	-0.347
		Assurance	**4.09**		**3.14**						**0.709**	**0.544**	**-0.165**
21	ASS1	Contractor makes client feel secure in leaving the project in its hands	4.11	18	3.24	3	-0.86	0.88	-8.446	0.000	0.712	0.562	-0.150
22	ASS2	Contractor has staff who are consistently courteous and polite with client	4.00	22	3.15	8	-0.85	0.90	-8.121	0.000	0.694	0.546	-0.148
23	ASS3	Contractor has staff whose behavior instills confidence in client	4.00	23	3.14	11	-0.86	0.78	-9.513	0.000	0.694	0.544	-0.150
24	ASS4	Contractor has competent staff to perform technical duties	4.22	13	3.12	14	-1.09	0.92	-10.190	0.000	0.731	0.541	-0.190
25	ASS5	Contractor has staff who have the knowledge to answer client's questions	4.08	20	3.19	6	-0.89	0.84	-9.167	0.000	0.708	0.553	-0.155
26	ASS6	Contractor has the capability to cover subcontractor's works if it fails	4.14	16	2.99	26	-1.15	0.89	-11.147	0.000	0.717	0.518	-0.199
		Empathy	**3.92**		**2.95**						**0.520**	**0.391**	**-0.129**
27	EMP1	Contractor understands the specific needs of client	3.96	25	3.01	22	-0.95	0.95	-8.572	0.000	0.525	0.399	-0.125
28	EMP2	Contractor makes an effort to understand the general requirements client	3.93	26	2.93	31	-1.00	0.98	-8.785	0.000	0.521	0.389	-0.133
29	EMP3	Contractor produces works without ruining client's reputation	3.93	27	3.00	23	-0.93	0.94	-8.523	0.000	0.521	0.398	-0.124
30	EMP4	Contractor staffs give individual attention to client	3.82	29	3.03	28	-0.80	0.86	-7.977	0.000	0.507	0.401	-0.106
31	EMP5	Contractor has the client's best interests at heart	3.76	31	2.85	24	-0.91	1.04	-7.519	0.000	0.498	0.378	-0.120
32	EMP6	Contractor is contactable at all times	4.12	17	2.86	29	-1.26	0.79	-13.601	0.000	0.546	0.380	-0.167

The Importance of Service Quality Dimensions

The determination of service quality dimensions is important, as it will enable refurbishment contractors to understand which service quality dimension should be prioritized while managing refurbishment projects. As presented in Table 5, among the five dimensions, the most important one for expectation performance is reliability, with a weighted mean of 1.35. This is followed by the dimensions of responsiveness (mean = 1.03), assurance (mean = 0.71), and tangibles (mean = 0.61). Empathy was found to be the least important dimension (mean = 0.52). The respondents were also asked to indicate the relative importance of each of the five determinants of service quality (by giving them weights totalling to 100) in Section C of the questionnaire. The ratings given by the respondents for each determinant were then

summed up. The results revealed that the clients considered reliability (mean = 0.321) as the most important determinant in the project service quality, followed by responsiveness (mean = 0.236), whereas empathy (0.123) was perceived to be of the least important (see Table 3).

Therefore, reliability is the most important dimension that providers should look into and improve on in order to meet clients' expectations, as clients put substantial weight on that particular dimension. The high ranks of the reliability dimensions also suggest that clients from public institutions of higher learning expect refurbishment contractors to perform the services as they have promised independently and to achieve the quality and accuracy of work. To them, the appearance of the physical facilities of the refurbishment contractors is not that important in the delivery of construction tasks. This could be due to the fact that during the
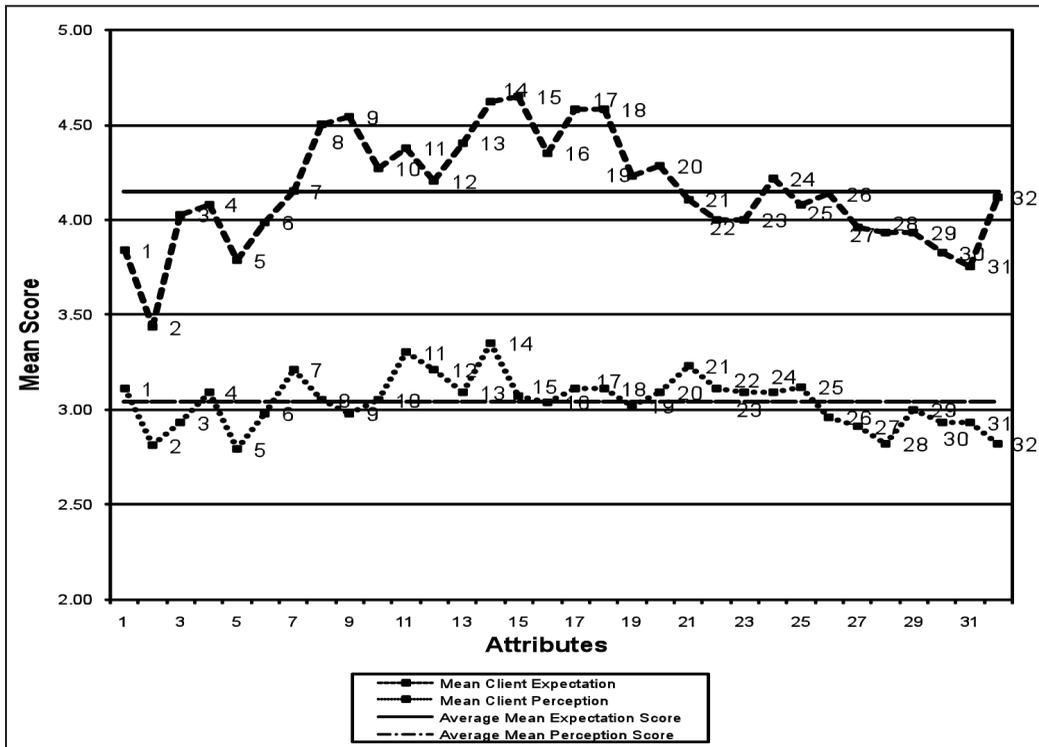
Fig. 1: A diagram showing the mean score for the clients' expectations and their perceptions of service quality

construction and management of refurbishment projects, complicated equipment with the latest technology are not needed, unlike in the new construction projects. Therefore, to fulfil the clients' needs, the refurbishment contractors must ensure that the services they deliver are of good quality and reliable at all times.

The SERVQUAL Gap Difference

The paired samples T-test was used to compare the means of the expectations and the perceptions on the SERVQUAL dimensions. These service quality gaps were calculated by subtracting the respondents' expectations from their perceptions. A negative service quality gap indicated that the respondents' expectations were greater than their perceptions, while a positive service quality gap indicated that the respondents' perceptions exceeded their expectations. The results presented in Table 5 indicated that the weighted score for the reliability dimension had the greatest service gap of -0.41, followed by responsiveness (-0.29), assurance (-0.17),

and tangibles (-0.14). Meanwhile, empathy recorded the smallest service gap (-0.13). For the paired samples T-Test, the negative sign of the t-values for all the variables indicated that the expectations were higher than the perceptions (see Table 4). In all the five service dimensions, the respondents exhibited dissatisfaction. In other words, there was a significant difference between the customers' expectations and their perceptions on the overall service quality dimension.

The Level of Satisfaction and Service Quality

In order to determine the level of satisfaction of clients, the quality of services by the refurbishment contractors was measured using the SERVQUAL scores. The level of service quality satisfaction was calculated by subtracting the weighted perceived performance (perception) scores from the weighted expectation scores. All the SERVQUAL scores for each of the five dimensions were found to be negative,

TABLE 5
SERVQUAL Scores

Dimensions	Perception mean	Rank	Expectation mean	Rank	SERVQUAL score
Unweighted					
Tangibles	3.00	4	3.90	5	-0.90
Responsiveness	3.15	1	4.38	2	-1.23
Reliability	3.13	3	4.47	1	-1.34
Assurance	3.14	2	4.09	3	-0.95
Empathy	2.95	5	3.92	4	-0.97
Overall	3.07		4.15		-1.08
Weighted					
Tangibles	0.47	4	0.61	4	-0.14
Responsiveness	0.74	2	1.03	2	-0.29
Reliability	0.95	1	1.35	1	-0.41
Assurance	0.54	3	0.71	3	-0.17
Empathy	0.39	5	0.52	5	-0.13
Overall	0.62		0.84		-0.23

TABLE 6
Model summary for the effects of service quality on customer satisfaction

Model	R Square	Adjusted R Square	Change Statistics			
			R Square Change	F Change	df1	Sig. F Change
1	.442	.401	.442	10.772	5	.000

a. Predictors: (Constant), Empathy, Responsive, Assurance, Tangible, Reliability
b. Dependent Variable: Satisfaction

TABLE 7
The influence of the five service quality dimensions on client satisfaction

Model	Service Quality Dimension	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.539	.435		1.238	.220
	Tangible	-.067	.136	-.060	-.494	.623
	Responsiveness	-.028	.121	-.027	-.236	.814
	Reliability	-.034	.142	-.031	-.238	.812
	Assurance	**.316**	**.141**	**.263**	**2.243**	**.028**
	Empathy	**.658**	**.117**	**.585**	**5.630**	**.000**

a. Dependent Variable: Satisfaction

suggesting that there was a gap between the respondents' expectations of what the services of a refurbishment contractor should be and their perceptions of the service quality that was actually offered by refurbishment contractors. Furthermore, the results showed that the total overall weighted score was -0.23 (see Table 5), implying that the services as perceived by the clients were below the clients' expectations. Hence, the service quality provided by refurbishment contractors did not satisfy clients.

The Relationships between Service Quality and Client Satisfaction

To determine the effects of the service quality dimensions on client satisfaction, a multiple regression analysis was performed to examine the relationship between the measures of service quality provided by the contractors and the measures of client satisfaction. Multiple regression analysis allows the assessment of the degree of the relationship between dependent and independent variables by forming variate of independent variables (Hair *et al.*, 2006). In this study, the regression model considers client satisfaction as a dependent variable, and the five factors of service quality as independent variables. The entry of the variable selection method involving all the five factors of service quality was utilized for the 74 respondents. The results from the regression model indicated that it was statistically significant (F=10.772, p=.000), as reported by an adjusted R^2 of 0.442 (see Table 6). This finding further suggested that

TABLE 8
The correlations between the items measuring empathy, assurance and
customer satisfaction

	CS	ASS1	ASS2	ASS3	ASS4	ASS5	ASS6	EMP1	EMP2	EMP3	EMP4	EMP5	EMP6
CS	1	.116	.269*	.138	**.379****	.181	**.375****	.235*	.241*	.369**	**.425****	**.490****	**.426****
ASS1		1	.374	.514	.541	.164	.252	.296	.137	.353	.151	.327	.215
ASS2			1	.521	.383	.350	.042	.328	.199	.228	.227	.272	.261
ASS3				1	.419	.461	.290	.226	.106	.111	.042	.131	.142
ASS4					1	.263	.500	.205	.169	.295	.200	.299	.255
ASS5						1	.433	.118	-.065	.090	-.115	.204	.145
ASS6							1	.103	.101	.101	.027	.061	.213
EMP1								1	.532	.276	.275	.280	.235
EMP2									1	.294	.544	.321	.342
EMP3										1	.402	.496	.424
EMP4											1	.387	.328
EMP5												1	.560
EMP6													1

Note : * Correlation is significant at 0.05 level (2-tailed).
         ** Correlation is significant at 0.01 level (2-tailed).
         CS = Customer Satisfaction, ASS = Assurance, EMP = Empathy

the service variable was able to explain 44.2% of the overall client satisfaction, as clarified by the five factors of service quality.

In Table 7, the results of the regression coefficient from the multiple regressions show the influence of the five service quality factors on the overall client satisfaction. The regression coefficients indicated that the factors of empathy ($\beta = 0.658$) and assurance ($\beta = 0.316$) exerted the strongest influences on the overall client satisfaction, followed by reliability, tangibles, and responsiveness. It should be noted that responsiveness exerted the weakest influence on the overall client satisfaction. In order to obtain more detailed information in relation to the relationship between the independent and dependent variables of the present study, the Pearson product moment correlations for each of the items measuring these dimensions were also calculated (see Table 8). In particular, the relationship between the first item on the dimension of empathy and the second item measuring the dimension of assurance was assessed. Among the five factors of the dimension of empathy, "contractor produces work without ruining client's reputation" had the strongest correlation with the overall

satisfaction (r=0.490, p<.05). This was seconded by the sixth item under empathy, i.e. the "contractor is accessible at all times" (r = .426, p<.05). The fourth item under empathy, i.e. the "contractor makes an effort to understand the general requirements of the client" ranked at third (r=0.425, p<.05). Among the six items in the dimension of assurance, the fourth attribute, i.e. the "contractor has competent staff to perform technical duties" and the sixth attribute, i.e. "Contractor has the capability to cover subcontractor's works if it fails" were found to be statistically correlated with client satisfaction, with r=0.379 (p<.05) and r=0.375 (p<.05), respectively.

CONCLUSION

This study aimed to identify service quality dimensions so as to assess the service performance of the refurbishment contractors and to determine the relationship between the service quality provided by the refurbishment contractors and client satisfaction when managing refurbishment projects in Malaysia's public institutions of higher learning, from the clients' perspective. The service quality expectations of the clients and the extent to

which these expectations were achieved by the refurbishment contractors on the 32 attributes under the five determinants of service quality (SERVQUAL) were obtained and determined through a questionnaire survey. The findings of this study revealed the following:

1. Reliability was ranked as the most important dimension, followed by responsiveness, while the least important dimension was empathy.

2. The clients were found to have high expectations of the refurbishment contractors' service quality. Based on the SERVQUAL score results, the weighted score for the service quality gap in the reliability dimension was ranked to be the highest (-0.41), followed by responsiveness (-0.29), assurance (-0.17), and tangibles (-0.14). The smallest service gap was found in the empathy dimension (-0.13). Meanwhile, the negative t-values for all the variables indicated that the expectations were higher than the perceptions.

3. The total overall SERVQUAL score provided by refurbishment contractors was -0.23, indicating that the performance of the service provided by the refurbishment contractors did not meet the clients' expectation. This also means that the clients, i.e. the public institutions of higher learning, were not satisfied with their contractors' performance.

4. Empathy and assurance were found to have significant effects on customer satisfaction, as compared to responsiveness which had insignificant impacts on customer satisfaction.

The implication of this study is that refurbishment contractors need to significantly improve themselves in the area of project service quality.

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Crimes in the Straits Settlements before World War II

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ABSTRACT

Not much has been done on research and writing on the history of crimes in colonial Malaya. Therefore, this study aimed to elaborate and discuss about the history of criminal activities and behaviours in the Straits Settlements (Penang, Melaka and Singapore) since the end of 19th century until the period of World War II. Some of the crimes that often occurred were crimes on property and crimes on human beings. Thus, this study attempted to examine the major factors that had led to all these crimes and investigated on what the English colonial administration had done in order to overcome the problem. In addition, this study also looked into criminal activities that had been done by the multi-racial local citizens who had and practised different cultures and religions in Singapore, Melaka and also Penang. The main question of this study is that whether there are close ties and causal relationship between the occurrence of crimes and the economic development in the Straits Settlements. In addition, this study also attempted to explain whether those crimes could be linked with the presence of the Chinese immigrants who had caused significant social and economic change in the Straits Settlements. Last but not least, this study also tried to explain the aspects that influenced the occurrence of crimes, apart from identifying the English colonial administration's efforts in handling the problem.

Key words: Crimes, Straits Settlements, Singapore, Melaka, Penang, Malay history

INTRODUCTION

The history of crime occurrences during the era of English colonial rule in the Straits Settlements (Penang, Melaka and Singapore) can be categorized into two categories; namely, the criminal activities at seas (piracy) and criminal activities on land. This study focused on the latter type of crimes. The criminal activities on land included crimes, such as robbery, rape and murder that became a major security problem for the British Colonial Administration. Even worse, groups' competition to gain control over prostitution activities and other criminal activities had eventually increased the

cases of murder and blackmailing that created chaos and thus, disrupting public safety and harmony. In the early stage, the British colonial administration thought that the police force alone was enough to ensure the security in the Straits Settlements. However, the drastic rise of crimes left the administration with no choice but to use other ways to overcome all those crimes, including enforcing the rules and ordinance that they thought they could use in combating the crimes in the Straits Settlements.

The rise of crimes in the Straits Settlements was also a result from the British policy that brought in prisoners from India to serve

their punishments in the Straits Settlements, especially in Singapore which functioned as a penal station at that time (Turnbull, 1970). These Indian convicts were transported from British India to the Straits Settlements to serve their sentences and assist the British administration in the problem of labour shortage and other development requirements. Singapore, being the fastest growing state among the three settlements, immediately became a convict centre. However, control over these prisoners was rather loose. After serving their punishments and sentences, most of these prisoners from India were freed, whereby most of them then settled down in the Strait Settlements. As a result of the lack of control from the British authorities over those ex-prisoners, security problems and crimes emerged and threatened the public safety in the area. In Melaka, the history of crimes during the era of the Dutch was mostly committed by slaves (Radin Fernando, 2006). In fact, a huge portion of the population in Melaka in the seventeenth and eighteenth centuries was made up of slaves (Nordin Hussin, 2007). Nonetheless, the crimes in Melaka under the Dutch Administration were perfectly under control since there were tight rules and regulations. This was totally different when the British ruled Melaka. On the other hand, most crimes that occurred in Penang were committed by the Chinese immigrants (Nordin Hussin, 2007). These Chinese immigrants were divided into a few groups and thus led to all sort of conflicts and murders on the island (Nordin Hussin, 2007). Based on these data, it could be seen that the main factor which led to the security problems in the Straits of Settlements was the presence of foreign immigrants spurred by British's no-restriction immigration policy.

MANAGEMENT OF CRIMES DURING THE BRITISH COLONIAL ERA

The management of crimes under the British administration in the Straits Settlements was written in the Penal Code.[1] The Law of Straits Settlements strictly stated the role of Penal Code in strengthened rules and laws related to crimes.[2] According to the code, individuals from the Straits Settlements who committed crimes at places outside the British occupation would also be trialed and handled according to the rules and regulations of the Penal Code, just like the crimes committed in the Straits Settlements itself.[3] The Penal Code also mentioned clearly about the acts against the law that could be punished under the law of the Straits Settlements constructed based on the British legal system.[4] Chapter XVI in the Penal Code also clearly stated that there are two types of criminal acts that should be punished; these were the crimes on properties and crimes on human beings. The crimes on human beings refer to the criminal acts that involved human lives, such as murder act or hurting other individuals on purpose (Straits Settlements Penal Code, 1884, p. 31). The same goes to other criminal acts like kidnapping, human smuggling and trafficking for prostitution, as well as rapping that could be punished with heavy penalties such as 10 years in prison and caning (Straits Settlements Penal Code, 1884, p. 33-37).

It is undeniable that the presence of the British in the Straits Settlements had brought rapid development not only in terms of its economy but also in terms of politics and social conditions. In 1830, British unified Melaka, Penang and Singapore under one administration under the control of British Government based in India.[5] Despite the huge changes in the administrative aspect, the problem of crime was still a huge threat to the public safety in the area, especially in Singapore which served as the penal station for prisoners from India and Hong Kong.[6] The lack of prison staffs and security forces like police in the Straits Settlements also created a situation where dangerous criminals and prisoners who served as labours for the British administration in the Straits Settlements became very difficult to control and observe. As a result, a lot of them were free to commit crimes like robbery in the Straits Settlements.

At the early stage in the formation of the Straits Settlements, the centre of the British administration was placed in Penang and was then moved to Singapore in 1836 (John Bastin, 1959).[7] As the centre of British administration

of Straits Settlements, Singapore became a place where every decision related to British colonies was made (John Bastin, 1959, p. 5).[8] Its role as a administrative centre and trading port made it a popular destination for foreign immigrants in search of occupations. As a result, Singapore became an island that consisted of citizens from different races, religions and cultural backgrounds. The interactions between such a unique society gave rise to all kinds of social problems with their own implications on the security of the state. All these made it even difficult for the colonial government to enforce the law and ensure social harmony in the Straits Settlement. In addition, the British colonial government was busy handling the rise of crimes in India and thus paid very little attention to the Straits Settlements.

In the colonial administration in the Straits Settlements, a Governor was assisted by Executive Council and Legislative Council, which was entrusted with law-making role in the Straits Settlements, including laws related to crimes that were crucial to overcome the phenomenon of the drastic rise of crimes in the Straits Settlements (John Bastin, 1959).[9] The governor had the power of assent and veto on all bills. However, the governor would have to wait for the royal approval in any law-making process, indicating that the ruler of England had the right to exercise the veto power over any ordinance in his colonies (Straits Settlements Government Gazette, January-February 1900, p. 5).[10] This apparently delayed and slowed down the legislature process and disrupted the justice system in the Straits Settlements. Penang was also facing the same problem where there was no enforcement of laws since the British administration in Calcutta only paid little attention to that island. All these stemmed from the failure of the British to coordinate its legislative power in its colonies, especially in the Straits Settlements (Nordin Hussin, 2007).

ECONOMIC DEVELOPMENT IN THE STRAITS SETTLEMENTS AND THE RISE OF CRIMES

Rapid economic growth in the Straits Settlements not only could be seen through its profits from the import and export activities but also through its annual income.[11] The total income of the Straits Settlements in 1896 hit $4,223,881 and this increased to $4,320,207 in 1897. In 1898, the total income of these states reached $5,071,282 and it continued to increase to $5,199,150 in 1899. The continuous increase in the annual income proved that there were rapid economic growths in the end of the 19th century and early 20th century that gave rise to the development of criminal activities in the Straits Settlements.[12]

Meanwhile, the presence of foreign immigrants had increased the total population in the Straits Settlements. This is parallel to the 1921 Statistic Report which stated that the main factor that had led to the increase in the total population in Malaya was the immigration of Chinese and Indians to the Straits Settlements and Malaya.[13] The criminal activities in the Straits Settlements were closely linked to the presence of these foreign immigrants. This was because most of the criminal activities in the Straits Settlements were committed by these immigrants. In 1891, the total population of the Straits Settlements was 501,059, but this amount increased as much as 71,190 to 572,249 in 1901. In particular, the number of the Chinese immigrants increased as much as 72,464 people, while the Indian immigrants increased around 11,985 people in the same period. One of the major implications of the presence of these foreign immigrants was the emergence of various types of social problems, such as prostitution, gang fights and increase of crimes rate.

DEVELOPMENT OF CRIMINAL ACTIVITIES IN THE STRAITS SETTLEMENTS 1895-1899

The end of the 19th century witnessed the occurance of various types of crime as a result of mass immigration by foreign immigrants into Malaya, especially through the Straits Settlements.[14] This could be seen in the report provided by the police regarding the criminal activities detected from 1895-1899, as shown in Table 1 below.

The increase of crime rates was also parellel to the rapid economic development, alongside with the increase in the total population and the influx of the foreign immigrants. In 1895, there were 10 murder cases and 8 cases of armed robbery (Jarman, 1998, p. 211-536).[15] In the time period between 1895-1899, there were 76 murder cases and 68 cases of armed robbery in the Straits Settlements (Jarman, 1998). There were also other criminal activities such as blackmailing. This was normally done by triad members towards those who were involved with prostitution during that time. In addition, there were also simple crimes like theft and burglary. In fact, there were 113 cases of burglary reported in Penang in 1898, 107 cases in Singapore and 18 cases in Melaka.[16]

Other factors that led to the occurrence of crimes during this period were the lack in the number of police officers and their overlapping responsibilities. For example, the Chief Police Officer of Melaka, who served the government and the people mainly as a peacekeeper, was also an Assistant Protector for the Chinese community and hence, took over the responsibilities of the Inspector and Detective that were left vacant in order to save cost.[17] The Chief Police Officer could also be the Excise Licensing Officer, Superintendent of Fire Brigade etc.[18] The vancancy for the post of Inspector in Kesang and Pangkalan Balak even made the Chief Police Officer visit every police station in that area to distribute the salary for the policemen every month, and this duty alone had taken about half a month to settle.[19] Therefore, the Chief Police Officer was unable to give full attention to his real responsibility as a peacekeeper in urban areas which were already full with criminal activities.[20] The British administration in the Straits settlements also tried to reduce cost by cutting down the number of government servants, particularly the policemen. In 1895, the total number of policemen in Melaka was reduced from 272 to merely 223 people. In Penang, the number of Corporal and Constable policemen were also greatly reduced. As a result, the criminal cases that had been trialed in the Police Court were also reduced from 617 cases in 1894 to 547 cases in 1895, a reduction of 70 cases.

Besides, there were also police officers in the Straits Settlements who had caused problems and were expelled from the police force. For example, in 1895 in Melaka, a police officer called Inspector Blackburn was charged and sentenced to 3 months in prison for his involvement in bribery (Jarman, 1998).[21] Another example is the case of Ong Seng Chye, a police officer who had worked in the Department of Crime Registration in a police station in Singapore and was expelled from the police

TABLE 1
The Overall Criminal Activities in the Straits Settlements, 1895-1899

States	1895	1896	1897	1898	1899
Singapore	11 496	12 361	12 671	13 190	11 932
Penang	9 241	9 284	9 677	10 283	14 845
Melaka	561	795	843	875	854
Total	21 298	22 440	23 191	24 348	27 631

Source: Annual Report of Police Force in the Straits Settlements and the Crimes Rate For 1898 in 11/939, Straits Settlements Government Gazette, year 1899, April- June,Vol. XXXIII, Part 2

force having misconduct in his service.[22] In 1898 alone, 202 policemen were expelled from the police force in the Straits Settlements.[23] They were reported to commit bribery, violence act, gambling, robbery, theft, blackmailing, created fake evidence and many more.[24] The weakness of the security team and dishonesty of the police officers led to the increase in the crime rates in the period between 1895-1899.

THE DEVELOPMENT OF CRIMINAL ACTIVITIES IN THE STRAITS SETTLEMENTS IN 1900-1940

According to the Annual Report of the Straits Settlements and Annual Report of Straits Settlements Department 1900-1940, there was a drastic rise in criminal activities in the

Straits Settlements. Table 2 shows the rate of the criminal activities detected in the Straits Settlements for 20 years. The table shows that 1901 was the year with most criminal activities accounted for 6.3% of the total criminal activities in the period of 20 years. Meanwhile, Penang had the highest percentage of criminal activities, with 51.4%, compared to Singapore (45%) and Melaka (3.6%).

There are few factors that can explain the reason for the high crime rates between 1900-1919. There was a close connection between the increase in the criminal activities and the rapid economic development in the Straits Settlements. At that point of time, the Straits Settlements were very much relying on tin trading imported from Malaya. When the United States of America

TABLE 2
Overall Crime Cases Reported in the Straits Settlements, 1900-1919

Year	Singapore	%	Penang	%	Melaka	%	Total	%
1900	11 543		12 757		816		25 116	
1901	11 778	+1.9	13 473	+5.3	955	+14.6	26 206	+4.2
1902	11 413	-3.1	11 663	-13.4	992	+ 3.7	24 068	-8.2
1903	12 778	+10.7	10 609	-9.0	865	-12.8	24 252	+0.8
1904	10 941	-14.3	11 180	+5.1	1075	+19.5	23 196	-4.4
1905	12 765	+14.3	10 300	-7.9	1317	+18.4	24 382	+4.9
1906	12 498	-2.1	9 127	-11.4	988	-24.9	22 613	- 7.3
1907	10 596	-15.2	8 514	-6-7	900	- 8.9	20 010	-11.5
1908	15 926	+33.5	7 796	-8.4	1090	+17.4	24 812	+19.4
1909	11 311	-28.9	7 364	-5.5	1082	- 0.7	19 757	-20.4
1910	11 834	+ 4.4	6656	-9.3	1233	+12.2	19 723	- 0.2
1911	9 667	-18.3	6810	+2.3	1477	+16.5	17 954	- 9.0
1912	9 084	- 6.0	7135	+4.6	1516	- 2.6	17 735	- 1.2
1913	11 482	+20.9	6 264	-12.2	1607	- 5.7	19 353	+ 8.4
1914	11 223	- 2.3	5 920	-5.5	2097	+23.4	19 240	- 0.6
1915	8 852	-21.1	6 674	+11.3	1827	-12.9	17 373	- 9.7
1916	8 497	- 4.0	5 496	-17.7	1874	+ 2.5	15 867	- 8.7
1917	9 587	+11.4	4 624	-15.9	2151	+12.9	16 362	+ 3.0
1918	12 420	+22.8	4 684	+1.3	1906	-11.4	19 010	-13.9
1919	9 758	-21.4	5 304	+11.7	1117	-41.4	17 735	- 6.7
Total	202 452		162 350		26885		414 764	

Source: Annual Report of SS, Vol. 5-7, SS Annual Departmental Report,1900-1919

attempted to get tins directly from its source, it resulted in an economic slowdown in 1901 and brought about negative impacts to the tin trading in the Straits Settlements (Parkinson, 1957, p. 96-103). The negative impact on the mining sector then led to the rise in crimes since the salary of the miners and factory workers was reduced. At the same time, the increases in the cost of living and the prices of land, houses and constructor materials in the Straits Settlements were also the factors that had contributed to the increase in the number of crimes in 1901.[25]

Fig. 1 shows the overall criminal activities in the Straits Settlements during the period of 1900-1919. Singapore had the highest crime rate during 1908-1909, and Penang had its highest crime rate during 1900-1901, while Melaka had the highest crime rate during 1916-1917. On the contrary, Singapore had its lowest crime

rate during the period of 1916-1917, followed by Penang in 1918-1919, and Melaka in 1900-1901.

Table 3 shows the overall criminal activities for seizable offences. Based on the data presented in the table, the highest crime rate was in 1938, i.e. before World War II broke out. In the same year, Singapore reached the highest percentage of crime rate, followed by Penang and Melaka. This was because of the Sino-Japanese War which had happened a year earlier, whereby the Chinese communities in Malaya and the Straits Settlements showed their support for their origin country - China by boycotting Japanese products.[26] This in turn increased the crime rates in the Straits Settlements whereby whoever purchased Japanese products were beaten, injured or even killed. In the period of 1920-1938, the lowest crime rate was recorded in 1923, when the economy began to recover

TABLE 3
Overall Crime Cases Reported in the Straits Settlements, 1920-1938

Year	Singapore	%	Penang	%	Melaka	%	Total	%
1920	2949	-	1438	-	715	-	5102	-
1921	3066	+ 3.9	1390	-3.3	811	+12	5267	+3
1922	3359	+ 8.7	1391	+ 0.1	614	-24	5364	+2
1923	2137	- 36.4	997	-28.3	547	-11	3681	-31
1924	4108	+48.0	1569	+36.5	743	+26	6420	+42
1925	3693	-10.1	1429	- 8.9	677	-9	5799	-9
1926	3389	- 8.2	1353	- 5.3	569	-16	5311	-8
1927	4175	+18.8	1616	+16.3	641	+11	6432	+17
1928	4624	+ 9.7	1544	- 4.5	706	+9	6874	+6
1929	4598	-0.6	1561	- 1.1	774	+9	6933	+1
1930	5101	+9.9	1653	- 5.6	784	+1	7538	+8
1931	4996	-2.1	1570	- 5.0	906	+13	7472	-1
1932	4 905	-1.8	1638	+ 4.2	873	- 4	7416	-1
1933	3 829	-21.9	1395	- 14.8	903	+ 3	6127	-17
1934	3 307	-13.6	1288	- 7.7	586	-35	5181	-15
1935	3 725	+11.2	1259	- 2.3	517	-11	5501	+5
1936	3 831	+ 2.8	1416	+11.1	462	-10	5709	+4
1937	4 702	+18.5	1571	+ 9.9	488	+5	6761	+16
1938	6 893	+31.8	1899	+17.3	521	+6	9313	+27
Total	77 387		27977		12837		118 201	

Source: Annual Report of the Straits Settlement, Vol. 7-11, SS Annual Departmental Report, 1920-1938
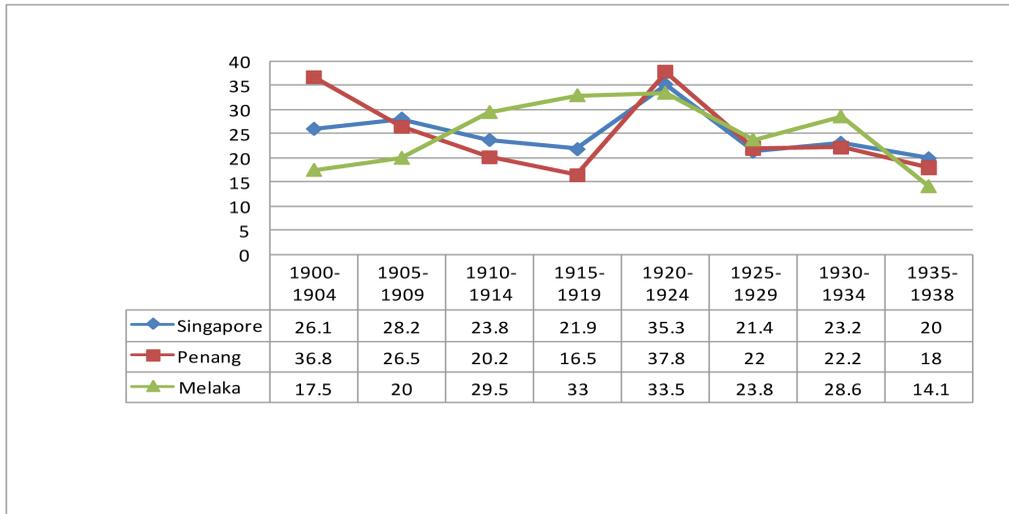
	1900-1904	1905-1909	1910-1914	1915-1919	1920-1924	1925-1929	1930-1934	1935-1938
Singapore	26.1	28.2	23.8	21.9	35.3	21.4	23.2	20
Penang	36.8	26.5	20.2	16.5	37.8	22	22.2	18
Melaka	17.5	20	29.5	33	33.5	23.8	28.6	14.1

Source: Annual Report of the Straits Settlement, Vol. 7-11 SS Annual
Departmental Report, 1900-1938

Fig. 1: The Overall Crimes in Singapore, Penang and Melaka in 1900-1938.

after the economic slowdown which took place in the early 1920s. It is important to note that the economic slowdown in the early 1920s had caused unemployment and tough living conditions to the people. Therefore, widespread criminal activities could be witnessed during that period of time. When the economic started to recover, however, the problem of unemployment started to reduce, and the living conditions of the people in the Straits Settlements also began to improve. Thus, the crime rate was also reduced at that time.

The increase in the number of crimes in the Straits Settlement during 1920-1938 is illustrated in Table 3. Singapore was still the leading state with the highest crime rates among the three states of the Straits Settlements. In Singapore, the criminal activities increased in 1920-1921, 1922-1923 and also 1924-1925 because of global economic slowdown. In Melaka and Penang, however, the crime rates decreased in 1920-1921 and 1922-1923, but it showed the a similar trend with Singapore when the crime rates increased in 1924-1925. Once again, the crime rates in Melaka and Penang dropped in 1926-1927. The three states shared the same trend throughout

the periods of 1928-1929 and 1930-1931, with an increase in the crime activities in all the states. This trend changed in the period of 1932-1933, when the crime rates only decreased in Penang and Singapore but increased in Melaka. Similarly, there was a similar trend between the three states in 1934-1935 when the crime rates dropped simultaneously. In 1936-1937, the crime rates declined in Melaka, while Penang and Singapore showed an increasing trend in crimes for the same period

CRIMINALS IN THE STRAITS SETTLEMENTS BY RACE AND GENDER

The population in the Straits Settlements was made up of the multi-ethnic society consisting of Malays and immigrants of other ethnics. This means that the criminals in the Straits Settlements were from the multi-ethnic society. Based on the Straits Settlements Prison's Report, the nationality and race of the criminals admitted to the prison could be identified.[27] The number of criminals jailed here included only the those who had undergone trials and were sentenced

to either jail or death sentence depending on the offences committed. To ease the supervision of the prison, the numbers and particulars, such as the criminals' race and nationality, were recorded. Table 4 shows the diversity of the race for the criminals in the Straits Settlements for the period of 1930-1938.[28] Unfortunately, almost all the records by the British did not indicate the ethnicity of the criminals, both in the Straits Settlements and any other British settlements.[29]

Table 4 shows that 99.6% of the total criminals in 1930 were Asians, and only 0.4% was European. The Asian society here refers to the various ethnics, with Malay[30] contributed to 1.8% of the total criminals in 1930, Chinese (92.4%),[31] Indians (5%)[32] and other nationalities that were not specified (0.4%). When the criminals were compared, the number of those from the Asian and European society declined by 0.1% in 1931, in accordance with the decline in the number of criminals in prison for that particular year. The reduction in the number of criminals during the economic slowdown is considered as strange because of this scenario usually produces more criminals, but that was not the case in 1931. This was because in that year, the government took measures to send more immigrants to their home country, especially the Chinese labourers, and blocking the entry of

male immigrants to the Straits Settlements. As a result, there was a reduction of 3.1% of the Chinese criminals in the area for that period. However, the number of Malay and Indian criminals increased for the same year. This could be easily understood since there was economic instability at the point of time that had led to the rise in the criminal activities. Therefore, it is clear that the decline in the number of Asian criminals resulted from the reduction in the number of the Chinese criminals and those of other races who were sent into prison in that year. In 1932, the number of Asian offenders increased as much as 1109. Unfortunately, data related to their ethnicity were not available. On the other hand, the number of the European criminals declined by about 10 people compared to their number in 1931.

Similarly in 1933, the number of the Chinese and Indians criminals declined as a result of the British policy in sending the Chinese and Indian immigrants back to China and India to solve unemployment problem and also due to the banishment of the punishment sentenced to hardcore criminals. The number of the Malay criminals also increased because of the tough living condition during the era of economic slowdown, whereby depression caused them to commit crimes.

TABLE 4
Criminals in the Straits Settlements According to Race, 1930-1938

Year	Asians								Total Asians	%	Eur	%	Total
	Malay	%	Chinese	%	Indians	%	Others	%					
1930	215	1.8	10970	92.4	592	5.0	53	0.4	11830	99.6	44	0.4	11874
1931	325	3.0	9647	89.3	757	7.0	43	0.4	10772	99.7	34	0.3	10806
1932	*	--	*	--	*	--	*	--	11881	99.7	33	0.3	11914
1933	540	0.7	7073	86.8	502	6.2	17	0.2	8132	99.8	16	0.2	8148
1934	935	15/6	4592	76.8	401	6.7	21	0.4	5949	99.5	28	0.5	5977
1935	964	10.9	6896	78.5	753	8.6	147	1.7	8760	99.7	27	0.3	8787
1936	*	--	*	--	*	--	*	--	8794	99.4	51	0.6	8845
1937	701	9.0	6099	78.7	711	9.2	191	2.5	7702	99.4	44	0.6	7746
1938	342	3.4	9204	91.3	430	4.3	49	0.5	10025	99.5	54	0.5	10079
Total	4022		54481		4146		521		83845		331		84176

*Data not found; Eur – European. (Source: SS Departmental Annual Report, 1930-1938)

As for the locals, they could not be sentenced to banishment or to be sent home. This had apparently increased the number of Malay criminals. A comparison made in 1934 and 1935 revealed that the rate of the Malay criminals continued to increase, while the number of the immigrant criminals declined in 1934, although it increased again in 1935. The recovery of the economic conditions from the recession led to the withdrawal of restrictions on the entry of the Chinese and Indian immigrants into the Straits Settlements, while the number of the immigrants to be sent home in the Straits Settlements was reduced. This consequently contributed to the increasing number of Indian and Chinese criminals.

1936 witnessed the increase in the number of criminals from Asia and Europe. Meanwhile, the year 1937 was filled with various turbulences involving the Chinese (such as Sino-Japanese War) which saw a reduction in the criminal rates for the entire majority races - Chinese, Indian and Malay. Besides, more criminals were sentenced to banishment, while many Chinese immigrants were sent home because of their involvement in the crimes spurred by their anti-Japanese spirit and the influence of the communist elements. Similarly in 1938, the number of the Chinese criminals increased as the spill-over effect of the turbulence which had occurred in the previous year. This situation contributed to the increase in the Asian criminals even though the Malay, Indian and criminals of other races continued to decline. The majority of the criminals were the Chinese, while the Malays and Indians were ranked as second. European and other Asian criminals were very low in rates. There were not many Europeans who became criminals in the Straits Settlements. The actual number of the European criminals were 68,392 persons for the period of 1932-1937, as compared to the Chinese (847,914 persons) and Indians (622,441 persons) for the same period.[33] The majority of the criminals were Chinese because of their involvement in triads and gangs.

There were also women who involved in criminal activities in the Straits Settlements although the number was far lower than the male

counterparts. Statistic showed that the smallest percentage of the female criminals was in 1930, with only 2.3% from the total number of criminals for the said year. Nonetheless, the subsequent years saw an increase in the percentage of female criminals in prison compared to the male criminals. Such increases could be associated with the entry of more female immigrants into the Straits Settlements in the 1930s because the economic recession during that time forced the colonial government to impose restrictions on the entry of male immigrants. However, this restriction was not applied on the female immigrants. Thus, this was the reason for the decline in the percentage of male criminals in 1931. Furthermore, the British colonial government practiced the policy of sending more male immigrants to their country of origin to avoid unemployment. Therefore, 1937 also saw the lowest percentage of the male criminals in prison in the Straits Settlements. This decrease certainly had the connection with the decline in the crime rates triggered by gangsters, banishment sentences imposed on criminals, and the communist elements that had threatened the security of the Straits Settlements. On the other hand, the highest percentage of the female criminals was recorded in 1937, with 9.2% of the total number of criminals recorded. This could be closely linked to several developments that occurred during that time, such as the rise of the extreme nationalism among the Chinese due to Sino-Japanese War. Meanwhile, the highest rates recorded for the male criminals were in 1930, which was immediately right before the enforcement of laws that restricted the entry of the foreign immigrants into the Straits Settlements.

It is generally normal that the criminal activities committed by men are higher than those by women. Studies conducted by Criminology experts revealed that the criminal activities conducted by female criminals would always be lower than male criminals no matter where the study was conducted (Sheley, 1979, p. 59). Caesare Lombrozo assumed that this happens because women naturally do not have the desire to get involved with crimes while men have the

initiative to do so.[34] This is because men usually play the role of breadwinner and have to bear the burden of the family, while women are normally housewives. This is consistent with the situation in the Straits Settlements, where there were many male Chinese and Indian immigrants who had migrated to the Straits Settlements to find themselves jobs and livelihood. This situation certainly contributed to the high number of the male criminals in the area. In 1930 for example, the entry of the Chinese and Indian male immigrants amounted to 158,123 and 49,030 people, respectively, while the numbers of the Chinese and Indian female immigrants only amounted to 44 313 and 8933 people, respectively.[35] The huge differences of 74.3% (153,907 for the Chinese immigrants) and 81.8% (40,097 for the Indian immigrants) between the male and female immigrants clearly indicated the answers for the question on why there were more male criminals compared to the female criminals in the British colonies, particularly in the Straits Settlements.

CONCLUSION

The occurrence of the criminal activities that occurred in the Straits Settlement before the Second World War is apparently not healthy. Overall, the crimes were increasing in the Straits Settlements even though there were certain years when the crime rates actually declined. Statistics showed that the average of the crime cases in the Straits Settlements was estimated to be 544 cases per year, which could be considered as a high rate. The high crime rates were particularly detected specifically during the economic slowdown in the period of World War I (1914), the economic depression during 1921-1922, 1928-1932 or the rapid economic recovery during 1908-1912. There were also high crime rates during the period of the Sino-Japanese War in 1937-1938. This also showed that the political development in China had also affected the occurrences of crimes in the Straits Settlements. In more specific, the decline in the crime rates was normally detected after the occurrence of certain events. One good example

was the economic recovery after the economic slowdown during World War I. The decline in the crime rates was a good indication because it proved that the colonial government had taken effective measures to tackle the problem. Overall, there were also increases in the property crimes such as theft and burglary, and also crimes like murder each year.

An observation of the development or occurrence of crimes in Singapore, Penang and Melaka before the Second World War revealed a few things that were associated with the criminal behaviour that could actually be explained. The crime rates in all three states of the Straits Settlements showed an up and down trend, depending on the current conditions, especially the economic and social conditions at that point of time. For instance, the development of the overall crime rates for 1900-1919 revealed a declining trend from 6.1% in 1900 to 4.3% in 1919. Meanwhile, the period of 1920-1938 onwards witnessed the opposite trend, with an increase of 4.3% in 1920 to 7.9% in 1938. This trend suggested that the crime rates were actually increasing in tandem with the economic growth in the Straits Settlements.

The study on the rate of crimes involving property in the early years showed inconsistent fluctuations. The trend in the occurrences or development of crimes in those years was more directed to the decline in the crime rate in the early stage, whereby the rate was rather high (8.3%). Meanwhile, the crimes involving properties showed a different development in their trend in the early stages, with a low crime rate of about 4.4% which then increased to 7.7%. Overall, the most common crimes occurred in the Straits Settlements were thefts (86.4%), while the lowest was extortion with only 0.9%.

Based on the studies conducted in prisons in Singapore, Penang and Melaka, it was found that the majority of the criminals in the Straits Settlements were Chinese who normally involved in serious crimes involving properties and crimes committed on human beings. They were also involved in gangsters, triads and opium, which became important elements in the Chinese culture. Their active involvement in

the criminal activities was related to their large number in the Straits Settlements, particularly in Singapore. Based on the statistics for crimes, on the other hand, the percentages of the Malay and Indian criminals were far lower compared to that of the Chinese who contributed around 6% of the total number of criminals for each race. The Malay criminals were made up of the local Malays and other Malay ethnics who migrated from the Dutch East India Islands. However, the records by the British did not particularly differentiate the local Malays from other Malay ethnics that migrated into the Straits Settlements. In terms of gender, majority of the total criminals are made up of adult male criminals. Although there were also teenage male criminals, they were separated from older prisoners to avoid them from being influenced by the latter criminals who had repeatedly been in and out of prisons.

Hence, it could be stated that the economic development played a major role in causing crimes, especially ones involving properties. In other words, the economic growth in the Straits Settlements had led to the increase in the number of crimes such as group robberies. One thing for sure is that these criminal activities declined during the economic slowdown. Similarly, cheating and extortion were more prevalent during the time of rapid economic growth. In addition, economic development also indirectly led to crimes on human beings. When there were crimes involving properties such as group robbery or burglary, they sometimes ended with rape, murder and injuries. This means that although economic growth was good to improve the living standard of the people in the Straits Settlements, it also exposed them to various crimes involving properties and human beings.

From the economic factor as discussed above, it revealed that economic slowdown would also lead to various types of crimes. During the world economic recession in the era of World War I, the criminal activities increased drastically because of the financial problems faced by the society when their wages were reduced while some others lost their jobs. The situation led to the occurrences of crimes,

mainly because the people, especially labourers who did not have sufficient financial resources to meet their needs. Moreover, the increases in the prices of goods, house rental and cost of living were also among the challenging living conditions where people had struggle for their survival. Hence, it was not surprising that criminal activities like theft and burglary increased drastically at that time. Similarly, crimes involving human beings like murder would also increase because stress could cause someone to lose their mind and resorted to committing violent crimes.

By comparison, however, economic slowdown or recession would encourage or lead to more crimes because the poor living conditions and poverty could force people into stealing or robbing to fulfil the needs in their lives. Although economic growth also led to high crime rates, these were usually done by those who wanted to get wealth easily and not due to stress. Criminals who get involved with thefts or robbery during the economic recession would stop doing so when the economic condition became stable because by that time they would have gotten jobs and stable income to ensure their survival.

As for the efforts made by the British administration to tackle the problems involving crimes in the Straits Settlements which were administered by the Government of India (1826-1867) at that time, the three states were also placed under the British administration in London, whereby the efforts to tackle crimes at the early stage were not thoroughly effective successful because of the administration's failure to control the activities of the triads that had led to other criminal activities. Legal and police organizations as the two main aspects in crime prevention were not given enough attention. Moreover, the criminal laws in the Straits Settlements were also based on the ones passed and enforced in India although the situations in India and the Straits Settlements differed significantly. The British administration in London emphasized on the problems involving gangsters and triads in the Straits Settlements. As a result, their efforts to control the Chinese

community in the period of 1867 – 1899 could be clearly seen through the legal aspect and its enforcement by the police. In particular, the Ordinance of Society Registration, Societies Ordinance and all the amendments enabled the British government to identify the number of secret societies or triads and their leaders so that strategies could be planned and carried out to overcome the said problems. In addition, the legal system extracted from India and London was later adjusted in accordance with and to suit the local conditions to assist the police in carrying out their responsibilities as the guardians of peace. The Criminal Penal Code, which is the reference to the British authorities, strictly outlined the type of crimes, penalties and jurisdiction of the parties involved in managing the crimes. Meanwhile, the police only had the power or the authority to arrest criminals who were involved in serious crimes such as murder, rape and robbery. Other cases were placed under the jurisdiction of the court. In other words, the police could not simply arrest anyone (criminals) without having any warrants or court orders.

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ENDNOTES

[1] British crime laws are based on crime laws in India. Penal Code refers to ordinance created in 1871, adjusted in 1872 and 1882. Refer to *The Laws of the Straits Settlements* (Revised Edition), Vol. 1, 1835-1900, p.v.

[2] *Straits Settlements* (S.S.) No. 12 of 1941, *An Ordinance and Amend the Panel Code*, p. 207.

3 To the English colonial administration, the significance of these laws was because these laws were accepted and applied to all citizens in the Straits Settlements no matter where they are. Please refer to *The Laws of Straits Settlement*, p. 64.

[4] The interesting part is that these laws were so important for the British that they took initiative to translate the types of crime and their punishments from English to Bahasa Melayu. Please refer to *Straits Settlements (S.S.) Penal Code*, 1884.

[5] Before the establishment of the Straits Settlements, the three colonies were administrated separately by different residents in each state. This indeed gave rise to all sorts of problems in terms of financial problems, human resources, etc. The administration of the Straits Settlements was transferred from India to London in 1867 to overcome these problems.

[6] The government of the Straits Settlements received a lot of complaints from the community about criminal activities committed by prisoners from Hong Kong. Thus, the colonial government stopped sending in Chinese prisoners from Hong Kong to that area.

[7] Penang failed to fulfil British requirement as a military base and trading centre in order to contain the Dutch in Southeast Asia. The island has shallow waters and is not suitable for the placing of 'Akbar' warships. These were the factors that brought changes to the administration centre. Please refer to John Bastin, Historical Sketch of Penang in 1794, in *JMBRAS*, Vol.32, Parts 1-2, No. 185 & 186, 1959.

[8] Resident Counsellor assigned to administer the respective states and was responsible to Governor of the Straits Settlements. Governor is appointed by the Commission under the "Royal Sign Manual and Signet". Administrative affairs were (based on the Governor's instructions) conducted in Singapore by the Colonial Secretary, while in Penang and Singapore by a resident counsellor with the help of their respective District officials. Administration of the cities was handled by the Municipal Council in the respective states, while the administration in

rural areas was managed by the "Rural Boards" in each British settlement. Ibid, p. 5.

[9] Executive Council headed by Governor of the Straits Settlements was made up of Army Commanding Officer, Colonial Secretary, Resident Counsellor, State Counsel, Treasurer, 2 official members and two unofficial members. Legislative Council is headed by the Governor along with 11 ex-officio members, 2 official members, two appointed members who were not official and 11 unofficial members nominated. Ibid.

[10] Laws enacted by the Legislative Council are based Imperial Act of Parliament, Sultan's command in the Council (Orders of the King in Council) and the ordinance of Legislative Council. Refer to Straits Settlements (SS) Government Gazette, January-February 1900, p. 5

[11] Straits Settlement Revenue Detailed (D3-D8). In *Straits Settlements (S.S) Blue Book Volume 1. 1895*.

[12] Abstract of Revenue and Expenditure and Of Receipts and Payments on Personal Accounts 1901 (C7 - C 11), Straits Settlement, Blue Book, Volume 1, 1895.

[13] This is different from the European countries where the rise of population was resulted from higher birth rate compared to death rate. Refer to P/PER 2/5, 2007/0043775, the Census of British Malaya (The Straits Settlements, Federated Malay States And Protected Malay States of Johor, Kedah, Perlis, Kelantan, Terengganu and Brunei, 1921.

[14] English's domination over the Malay states in Malaya, such as Perak, Negeri Sembilan, Selangor and Pahang triggered this phenomenon. The British's attempt to gain profit from Malaya's natural resources, such as crops, tin and rubber trading, had attracted many groups of immigrants to Malaya. They came through the ports of Penang and Singapore and settled there while waiting for the chance to work in the said Malay states.

[15] *Annual Reports of the Straits Settlements 1855-1941*, Vol. 4: 1892-1900, Archive Editions, 1998, pp. 211 – 536.

[16] Not all cases were convicted because there were two cases released by the Chief Police Officer, 193 by the Police Magistrate and 33 cases trialled in the Supreme Court. See *S.S. 11/93 9 (2006 / 0000958), The Straits Settlements (SS) Government Gazette* April - June, Vol. 33, Part 2 for the Year 1899, it 12-13.

[17] S.S 11/89: Supplement to the Straits Settlements Government Gazette, Friday 2 July 1898, in *Straits Settlement Government Gazette*, July - August 1898, p. 14.

[18] For all the other extra responsibilities, the Police Chief never received any reward or allowance. Ibid, p. 14.

[19] The post of Inspector was abolished to save the government spending by eliminating positions that were considered as government's financial burden.

[20] There was too much work burden shouldered by the Police Chief that the Resident Counsellor of Melaka during his Administration Report in 1897 proposed that the Chief Police Officer be excluded from certain responsibilities like being the Chinese Protectorate. He also suggested for the creation of the post called Assistant Superintendent who would take over the patrol duties at all police stations in order to pay the police salaries. See SS Gazette, July-August 1898.

[21] *Annual Reports of the Straits Settlements (SS)1855-1941*, Vol. 4: 1892-1900, Archive Editions, 1998.

[22] General Resident, 1299/1897, Dismissal of Ong Seng Chye, clerk, Registration of Crime Police, Singapore. For incompetence, memorandum from Secretary of General Resident, Kuala Lumpur, to the Secretary of Colony offices in Singapore, dated 24 February, 1897.

[23] Actually there were a total of 4278 cases involving police misconduct reported but 3933 cases were released by the Chief Police Officer, 83 cases released by the Police Magistrate and only 202 were convicted. Refer to the *Straits Settlements (SS) Government Gazette*, April-June, Vol.32, Part 2, for the Year 1899, p. 7.

[24] Although there were cases involving misconducts of police officers which did not have sufficient evidence for conviction, their behaviour was good enough for them to get expelled from the police force. Low salary and high work loads were said to be the causes of many incidents of misconduct involving bribery and extortion. See Annual Report of the Police Force of the Straits Settlements and Conditions for the Year 1899 in Criminal *Straits Settlements (S.S.) Government Gazette*, Part 1, 1900, p. 1-16.

[25] Annual Report of the SS for the Year 1901 by W.T. Taylor, Secretary for the British Colonies.

[26] Sino-Japanese war actually took place in 1894-1895. The second Sino-Japanese War began in 1931 and became worse in 1937.

[27] The British record showed that there were two types of prison for criminals and civil offenders. Please refer to Prison Report by S.S.W. Bartley, 28 Feb 1912. In *Straits Settlements Annual Departmental Report* for the Year 1911, p. 35.

[28] The criminal prison was to place offenders for the criminal offenders as stated under the Penal and other ordinance, except for Penal Code such as the Ordinance of Weapons and Explosives, Ordinance of Opium and others. Refer to report by the Acting Inspector NNS Prisons, G. Hall in *Straits Settlements Government Gazette* April-June 1907.

[29] Prison Report before 1930 merely listed the race to Asiatic offenders who were Malays, Chinese, Indians and other Asians, while all Caucasian offenders were listed as Europeans or Americans. There were also reports that mentioned about the race of the criminals, but did not specify their ethnicity, such as Hokkien, Tamil or Javanese. Refer to the Prison Report By E.G. Broadrick, Esq. Acting Inspector of Prison, NNS in the Straits Settlements (SS) Annual Departmental Report, 1902, p. 93.

[30] All the Malay ethnics, whether they were local Malays or those who migrated to the Straits Settlements from the Malay World, were categorized as Malays by the British Government. These Malay ethnics include Malays from Java, Acheh, Sunda, Madura, Bugis, etc. Please refer to the *Annual Report of Straits Settlement*, 1855-1941, Vol. II, 1936-1941, p. 413.

[31] Chinese Immigrants were made up of various Chinese ethnicity including Cantonese, Hakka, Hokkien, Teochew and others. However, all of them were categorized as Chinese to make things easier for the British administration.

[32] Indian immigrants who migrated to Malaya and the Straits Settlements were also made up of various ethnicities, such as Tamil, Malayalam, Telegu, etc. Just like the Chinese and Malays, all the ethnic groups from India were categorized as Indians for easier management by the British administration. Refer to K.S. Sandhu, 1969, *Indians in Malaya: Immigration and Settlement, 1786-1957*. Cambridge: University of Cambridge, p. 97. Also refer to SS Government Gazette, August-September, 1907, p. 1685.

[33] Refer to SS Annual Departmental Report, 1932-1937.

[34] This was related to their roles as housewives, while men had their roles as breadwinner. This situation was different in the Straits Settlements, where there were a lot of female immigrants who worked as labourers, prostitutes, etc. Refer to Caesare Lombrozo (1903). *The Female Offender*. New York: Appleton.

[35] The Straits Settlements Report for the Year 1930. By M.B. Shelley, Acting Colonial Secretary, S.S. 27 April 1931, in the Annual Report of SS, 1855-1941, Vol. 9, 1927-1931.

Promoting Teachers' Technology Professional Development through Laptops

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ABSTRACT

This paper reports on a survey study that was carried out to determine the impact levels of laptops use on teachers' technology professional development. Teachers' technology professional development is approached as a constructivism process that demands teachers to learn how to use technology and apply them in their daily routines. Teachers in this study were granted laptops from the Teaching-Learning of Science and Mathematics in English (PPSMI) programme. Hence, they were regarded as the early adopters of technology innovation in schools, and became the agents of change. It is believed that playing the teachers' role as the agents of change has contributed on a significant change in their practice. Based on the notion, this study was conducted to reveal the impacts of laptop use by teachers on their professional development. A survey was carried out among 386 laptop teachers using a set of questonnaire that measures the impact from four dimensions; namely teaching-learning, the use of resources, communication and sharing of information, and teachers' laptop competency. The findings explicate that teachers' use of laptop has a moderate impact on their technology professional development.

Keywords: Impact, laptop, laptop use, PPSMI, professional development, teacher

INTRODUCTION

Malaysia has great aspirations to become an information and communications technology (ICT) competent country. Malaysia's former Prime Minister, Tun Dr. Mahathir Mohamed, in his speech, "Malaysia: The Way Forward" at the Malaysian Business Council in 1991, expressed his hope to build Malaysia as a fully developed country:

> By the year 2020, Malaysia can be a united nation, with a confident Malaysian society, infused by strong moral and ethical values, living in a society that is democratic, liberal and tolerant, caring, economically just and equitable, progressive and prosperous, and in full possession of an economy that is competitive, dynamic, robust and resilient.
>
> (Wawasan 2020, 1991, p. 21-22)

Tun Dr. Mahathir Mohamed had also introduced nine central strategic challenges that Malaysians need to overcome in order to become a fully developed nation. These include the challenge to form a progressive, scientific and technology savvy community.

> The sixth is the challenge of establishing a scientific and progressive society, a society that is innovative and forward-looking, one that is not only a consumer

of technology but also a contributor to the scientific and technological civilization of the future.

(Wawasan 2020, 1991, p. 22)

Since the early 1970s, the Malaysian Government has introduced a myriad of initiatives to facilitate a wider adoption of ICT and to boost capabilities in every field including education (Ministry of Education, 2005). Thus, new initiatives and innovations have been introduced to elevate the Malaysian educational system to fulfil the national aspirations as well as to meet the international challenges. Consistent with the Seventh National Plan (1996-2000) that pointed out education as a process of producing knowledgeable, highly-skilled experts by the year 2020, schools have been identified as the best place to expose students, who have yet to become future workers, to the ICT (Bismillah Khatoon Abdul Kader, 2007).

The emergence of ICT in Malaysia's education system started from the Smart School Concept which was rolled out in 1999 (Ministry of Education, 1997). In this initiative, schools were provided with computers and other related applications. The implementation of the Smart School project is Malaysia's brand of creating "Schools of the Future". With their concept of bringing technology not only to educators and administrators but to the young as well, this project aimed for these groups to get access and to have a good grasp of ICT (Ministry of Education, 2005).

Another programme embarked by the Malaysian government was the MoE-Intel School Adoption Project for 1:1 e-learning (Ministry of Education & Intel Malaysia, 2008). This particular programme, which was launched in 2007, is consistent with the objective of the National Education Blueprint that aims to establish smart partnerships with all the parties outside the Ministry of Education. As part of the project, Intel is responsible of sponsoring 2000 classmate personal computer (CMPC) and supplying the licenses for the Microsoft Windows XP operating system and the Microsoft Office, providing workshops for participating

schools, and trainings for facilitators under the Intel® Teach programme.

Mobile computing started to sprout in 2003. It was then laptop began to dominate the field of education, initially as a part of the teaching and learning of Science and Mathematics in English (better known by its Malay acronym, PPSMI) programme (Choong, 2004; Pillay & Thomas, 2004; Microsoft's Partnership in Learning, 2007). This programme was launched to prepare the new generation with the advancements and development of knowledge, as the acceleration of science and technology demands new skills and capabilities to meet global challenges and needs (Noraini Idris *et al.*, 2006).

Laptop, Classroom and Teachers' Professional Development

The use of laptop in schools is visualised as beneficial to teachers and students. It is believed that diffusing the laptop technology in education can transform classroom for the better. Laptops offer portability, immediacy, accessibility and convenience, and hence, a great degree of flexibility of usage (Laptop Computer Pilot Interim Report 2002-2003, 2003). When laptop makes its way into the schools, teachers are the key to its full utilisation. Teachers are expected to produce a learning experience beyond the four walls in a technology augmented classroom (International Society for Technology in Education, 2010).

Scholars highlighted that laptop brings added value to its users and the learning environment (Dunleavy *et al.*, 2007). As such, online research and productivity tools provide effective use and wide range in the instructional approach used. Teachers also frequently use laptops for drill and practice exercises for instruction, remediation, reinforcement and assessment of concepts. By practising these, teachers have increased their ability to give rapid feedback on class' and students' progress.

Teachers use laptop as a tool to support their virtual communications in online environments, a venue where they share information and ideas synchronously or asynchronously (Dunleavy

et al., 2007). These have also promoted collaborations among teachers. They share information about the technology, find solutions to technical problems, and share ideas about classroom management strategies (Rockman, 2004; Cunningham *et al*., 2003). There is also evidence that laptops can allow increased communication between students, parents and teachers (Cunningham *et al*., 2003).

Moreover, some previous studies have also demonstrated that having laptops affords greater access to resources for lesson preparation, and provides for streamlining of management or administrative tasks (Cunningham *et al.*, 2003; Windschilt & Sahl, 2002). These researchers have reported increases in teachers' technology confidence and competence. A more recent study by Cowie and Jones (2005) revealed that teachers developed confidence and expertise from the use of laptop, and regarded them as an addition to their professional lives.

Meanwhile, other scholars have found that teachers' capability to integrate laptop in classroom instruction depends on their skills (Moses *et al.*, 2010). They further emphasized that it is imperative for teachers to master their technology skills as they are the sole individuals who integrate technology into the classroom. Nevertheless, the adoption of technology into the teachers' practices has brought a new paradigm, where teachers began to shift their role as the instructional leaders and masters of all knowledge (Rockman, 2004), and became more professional in their career (Cowie & Jones, 2005).

Since the main entry point for the new technology is the classroom, the professional development of teachers is therefore the key to its widespread use (Pugach & Warger, 2001). Professional development has become increasingly important as a way to ensure that teachers thrive in matching the teaching goals with their students' needs (Diaz-Maggioli, 2003). The ultimate purpose of professional development is to promote effective teaching that will result in learning benefits for all students.

In this study, teachers' technology professional development was approached as a constructivism process where teachers are regarded as individual learners who are responsible of their own experiential learning (Kanuka & Anderson, 1999), and construct their own understanding (Smaldino *et al*, 2008). Scholars suggest that teachers' professional development is therefore based on constructivism (Villegas-Reimers, 2003; McLaughlin & Zarrow, 2001; Lieberman, 1994). Nonetheless, it was against this theory that this study was based on, where it was perceived that teachers as learners who constructed their own understanding in learning how to use the laptops, and thus, contributed to their professional development.

The PPSMI programme and laptop endowment have long been implemented in schools, but information on teachers' technology professional development from the initiative is still scarce. Therefore, this study aimed to investigate how teachers use laptop in schools, and to determine the level of the impact from the use on their technology professional development. It is hoped that the findings of this study can serve as a springboard for the people of authority to better understand teachers' use of laptops, and chart their plans for more technology professional development programmes for the teachers.

MATERIALS AND METHODS

This study was based on the work by Cunningham *et al*. (2003), who framed teachers' professional development based on their technology competency and daily routines, namely teaching-learning, use of resources, as well as communication and sharing of information. A set of questionnaire was designed and developed by the researchers based on the previous research and literature, especially the work by Cunningham *et al*. (2003) and Silvernail and Lane (2004). These two studies were chosen because the nature of both studies is very similar to this study and addressed almost similar objectives. Permissions to use the instruments

were obtained prior to its construction to be used in the current study.

The instrument was translated using the back-to-back translation technique by a panel of translators who are language experts. A bilingual questionnaire was used so as to enhance teachers' comprehension when answering the questions. The questionnaire was tested for its validity and reliability, prior to its distribution. A committee of technology experts were also formed to review for the relevancy and appropriateness of the items. In addition, the internal consistency tabulated from the SPSS Statistical Package revealed that the items obtained an alpha value of .925, which is considered as a high and reliable scale (DeVellis, 1991; Hinton, 2004; Pallant, 2005).

The survey was administered in the secondary Government schools in Johor. The schools in this state consist of urban and rural schools, and there were a total of 2710 teachers from the three selected districts chosen as the population. These schools possess similar characteristics as they are daily secondary schools in the same state and have similar education system and curriculum. A total of 386 teachers from 28 selected schools had participated in the survey. They were chosen based on a proportional stratified random sampling method from the total population of the PPSMI teachers in Johor.

RESULTS AND DISCUSSION

Demographic Information

There were 79 males and 307 females participated in this survey. Teachers reported to spending an average of 4.55 hours (S.D. = 2.46) per day using the laptops, and have a range of less than a year to 32 years of teaching experience (M = 10.41; SD = 8.48).

Teachers' Professional Development

In the following sections, the results from the survey are organized and discussed according to the professional development dimensions; namely teaching-learning, use of resources,

communication and sharing of information, and laptop competency. The participants stated their preferences from five choices with the respective scoring — 1 point (Strongly Disagree), 2 points (Disagree), 3 points (Neutral), 4 points (Agree) and 5 points (Strongly Agree).

Teaching-Learning

From the analysis of the impact of laptops use on teachers' teaching-learning, it was found that almost half of the teachers agreed (49.7%) and strongly agreed (41.2%) that the use of laptops benefited their classroom instructions (M=4.28, S.D.=0.75). In terms of time, 40.9% of the teachers agreed that the use of laptops saved their time, while 25.4% of them strongly agreed on this (M=3.71, S.D.=1.08). On the contrary, a majority of the teachers disagreed (49.5%) and strongly disagreed (25.4%) that the presence of laptops in classroom was disruptive to their teaching (M=3.92, S.D.=0.88). Approximately one third of them (35.8%) were neutral when indicating whether they were able to teach better without the help of a laptop (M=3.05, S.D.=1.02).

However, the total percentages of the respondents who agreed and strongly agreed (35.0%) were higher compared to those who disagreed and strongly disagreed (29.7%) on the statement. This was expected as not all teachers would willingly embrace change (Cuban, 1986). There was a possibility that the teachers were so used to teaching the subjects without the aid of technology and caused them to refuse change. Yet, at the same time, most of the teachers agreed (46.9%) and strongly agreed (33.2%) that they could explain more effectively with the use of laptops to their students (M=4.06, S.D.=0.87). These laptops were used in conjunction with other ICT peripherals, such as the LCD projector.

Use of Resources

The analysis on the impact of laptops use on teachers' use of resources is presented in this section. A majority of the teachers agreed (51.8%) and strongly agreed (33.4%) that the

laptops have helped them to obtain access to more up-to-date information (M=4.13, S.D.=0.80). More than half of them agreed (40.9%) and strongly agreed (25.6%) that they had access to the Internet using the laptops from anywhere they like (M=3.76, S.D.=1.04). This result is in congruence with other scholars' findings that laptops have given teachers greater freedom to access the Internet from different locations (Cunningham *et al*., 2005; Laptop Computer Pilot Interim Report 2002-2003, 2003).

Now that teachers have laptops, a number of them agreed (46.4%) and strongly agreed (25.6%) that they could download documents from the Internet (M=3.85, S.D.=0.96). However, on using the laptop with the Internet to enhance teaching, the total percentage of the teachers who strongly disagreed, disagreed and neutral with the statement (47.1%) is almost equivalent to the percentages of those who agreed (40.2%) and strongly agreed (12.7%) (M=3.46, S.D.=0.95). Nevertheless, a majority of the teachers agreed (58.3%) and strongly agreed (21.0%) that the laptops have given them the access to a greater range of teaching resources than ever before (M=3.94, S.D.=0.79). This is supported by a number of them who also agreed (46.1%) and strongly agreed (14.0%) that they now intend to purchase educational electronic resources, such as CD, VCD and DVD, since they already have a laptop (M=3.55, S.D.=0.99).

Communication and Sharing of Information

An analysis on the impact of laptop use on teachers' communication and sharing of information revealed that the majority of teachers agreed (50.8%) and strongly agreed (17.1%) that the laptops have enabled them to share information with other teachers (M=3.84, S.D.=2.68). Meanwhile, a number of teachers agreed (33.9%) and strongly agreed (8.0%) that they use the laptops to exchange e-mails with colleague teachers via the Internet (M=3.24, S.D.=0.98). However, there were approximately one third of the teachers (35.8%) who were neutral to the statement. Although one third of the teacher agreed (34.5%) that the laptops promote efficient use of time as things can be sent to other teachers through e-mail, there were also an almost equal percentage of teachers who were neutral (34.2%) about it (M=3.35, S.D.=0.99).

In terms of uploading and sharing materials such as worksheets, score sheets and files in the school network, the percentages of the teachers who were neutral (33.2%) and agreed (32.6%) that they often do this were more or less the same (M=3.22, S.D.=1.02). However, there were a small number of them who strongly agreed (9.3%) on the statement. In terms of school network engagement, slightly more than one third of the teachers were neutral (41.2%) on their interest in the activity, but there were also a number of them who agreed (30.3%) and strongly agreed (9.3%) that they were not interested in getting actively involved in the school network using their laptops (M=3.35, S.D.=0.95). Nonetheless, there is also evidence that revealed that laptops have facilitated networking among the teachers in terms of communicating and exchanging information with each other via electronic mails, as they perceived that this activity could promote efficient use of time. This is supported by various studies by carried out by several researchers such as Rutledge *et al.* (2007), Warschauer and Grimes (2005), and Cunningham *et al*. (2004). This leads to the development of communities of learners where teachers work together, and consequently improves their professional development.

Teachers' Laptop Competency

The teachers in this study were allowed to bring the laptops home; doing so had enabled them to experiment and get familiar with the laptops and help them to gain confidence with the use of technology (Cunningham *et al*., 2004). In fact, the analysis on the impact of laptops use on the teachers' competency explicates a big margin of the teachers who agreed (60.4%) and strongly agreed (24.9%) that they are more ready to use technology resources since they already have a laptop (M=4.04, S.D.=0.77).

In congruence with the previous section that found laptops promote efficient use of time via electronic mail communications for teachers, this section also found that most of them disagreed (45.6%) and strongly disagreed (9.1%) that they were unfamiliar with some software and thus resulted in several of their tasks taking more time to be completed using the laptops (M=2.65, S.D.=1.04). Additionally, a majority of the teachers agreed (58.5%) and strongly agreed (20.2%) that they had become competent users of specific software packages, such as the presentation software, now that they already own a laptop (M=3.92, S.D.=0.79). Indeed, the percentages of the teachers who agreed (47.7%) and strongly agreed (13.7%) that they are now able to use graphic software more effectively with their laptop were high (M=3.92, S.D. =0.79). Moreover, more than half of them agreed (51.8%) and strongly agreed (17.9%) that they could produce high quality multimedia integrated worksheets using the laptops to make their lessons more exciting (M=3.75, S.D.=0.90).

Although approximately one third of the teachers agreed (35.2%) and strongly agreed (11.4%) that their lack of skills in typing had resulted in more time taken to complete tasks, there were also a number of teachers who disagreed (29.8%) and strongly disagreed (6.2%) with the statement (M=3.16, S.D.=1.16).

Conversely, a number of them agreed (50.5%) and strongly agreed (13.0%) that they could complete more tasks with the same time frame as before since they received the laptops (M=3.59, S.D.=0.95). On the contrary, there were a number of teachers who agreed (43.3%) and strongly agreed (13.5%) that they would prefer other methods than using the laptops to do things (M=3.55, S.D.=0.93). Even though the findings yield positive results, the teachers also pointed out that the methods, other than using the laptops, were also preferable in completing some tasks.

Impact of Laptop Use on Teachers' Professional Development

In order to determine the impacts of laptop use, levels were used. The levels were determined by transforming the data using quartiles in the SPSS Statistical Package. Professional development was categorized into three levels; namely, low, moderate and high, according to the 25th, 50th and 75th percentiles. The cumulative scores that fall below the 25th percentile is categorized as having a low impact, whereas between 25th and 75th percentile is a moderate impact, but the impact is high if the value is above 75th percentile.

Table 1 shows that the percentages of teachers who perceived that laptop has a

TABLE 1
Levels of Laptop Impact on Teachers' Professional Development

Dimension	Low % (f)	Moderate % (f)	High % (f)	Mean	SD
Teaching-Learning	30.1 (116)	35.2 (136)	34.7 (134)	3.80	0.67
Use of Resources	27.5 (106)	46.9 (181)	25.6 (99)	3.75	0.69
Communication and Sharing of Information	29.8 (115)	45.1 (174)	25.1 (97)	3.49	0.81
Laptop Competency	32.4 (125)	42.2 (163)	25.4 (98)	3.45	0.48
Overall Professional Development	26.4 (102)	48.7 (188)	24.9 (96)	3.62	0.47

moderate (35.2%) and high (34.7%) impact on their teaching-learning process were almost equivalent (M=3.80, S.D.=0.67). In terms of the use of resources, the analysis revealed that the impact was rather moderate (46.9%, M=3.93, S.D.=0.61). The laptop was found to have a moderate impact on almost half the teachers (45.1%) in terms of communication and information sharing (M=3.49, S.D.=0.81). A moderate impact was also found on teachers' laptop competency (42.2%, M=3.45, S.D.=0.48). On the whole, the impact level laptop use on teachers' professional development was found to be moderate (48.7%, M=3.62, S.D.=0.47).

The survey results showed that personal laptop ownership had a moderate impact on the four dimensions of teacher professional development; namely, teaching-learning, use of resource, communication and sharing of information, and teachers' laptop competency. In many cases, laptop has promoted the efficient use of time because of its mobility (Laptop Computer Pilot Interim Report 2002-2003, 2003), ability to be used in conjunction with ICT peripherals, and accessibility to the Internet and school intranet (Cunningham *et al*., 2003). It has also enhanced classroom instruction, facilitated teachers in understanding their students' needs and carrying out the assessment process, improved teachers' work quality, offered the opportunity to a wide range of resources through the Internet, encouraged electronic communication and networking among teachers, as well as boosted teachers' technology skills (Cowie & Jones, 2005; Silvernail & Lane, 2004; Cunningham *et al*., 2003). On the whole, the results suggested that the use of laptops has a positive moderate impact on teachers' professional development.

Based on the findings and the constructivism process, teachers are now learning from their experience of laptops use (Kanuka & Anderson, 1999). Although the impact was found to be moderate, it is imperative to recognise the importance of laptops use in shaping the professional development of teachers. The results were as such because teachers might need more time to familiarize themselves with the laptops in order to construct their own understanding to fully utilize them (Smaldino *et al.*, 2008). Nevertheless, it is believed that the continuance of laptops usage in schools can further enhance teachers' professional development.

CONCLUSION

This study has provided some insights into teachers' professional development, and their enhanced growth through the use of laptops. The teachers of the current study were found to have experienced a positive, moderate impact of laptop on their professional growth. For instance, the use of laptops during classroom instruction has helped teachers improvise the teaching-learning process. In addition, the laptop has been considered as the fountain of information. It has exposed teachers to the Internet, and enabled them to access a greater range of up-to-date teaching resources. Meanwhile, the availability of numerous downloadable instructional materials on the Internet has benefited teachers in aiding and enhancing their classroom instructions. With the ubiquitous Internet, teachers also enjoy exchanging e-mails with each other as they have perceived it as a tool to promote an efficient use of time. It has indeed improved their communication and networking with their colleagues, where they have started to actively communicating with each other via the school network (Rutledge, Duran & Carrol-Miranda, 2007; Warschauer & Grimes, 2005). Teachers share information by uploading and downloading files so that it can be used by other teachers. Besides, the flexibility of the laptop has offered the teachers with more choices about where and when to do their work (Cowie & Jones, 2005; Silvernail & Lane, 2004; Fairfax County Public School Office of Program Evaluation, 2003; Cunningham *et al*., 2003). Moreover, it was also seen that laptop use among teachers has promoted effective time utilization.

Teachers' engagement in technology rich environment has enlightened their technology literacy. Thus, it is important to note that the ubiquitous of laptop and its integration in school activities have contributed towards the

growth of teachers' professional development. Even though the findings reported a moderate level of laptop impact, it could be regarded as an indicator that teachers are now beginning to accept and assimilate their daily practices with the use of laptops.

It should be noted that teacher change is a timely and difficult process. As the front-runner of educational reform, teachers need to learn and apply new approaches in teaching. The rapid changes of the instructional approach in the education system require teachers to become proficient in dealing with something new. In the age of ICT, where life is at a fast lane, teachers are most likely required to put in extra efforts to keep themselves at par with the latest instructional technology. However, many have overlooked that change may be a threat to teachers as they take the risk of failure. Furthermore, some teachers are struggling to combat their fears, and at the same time, dealing with their anxiety of applying the new practices or procedures. Thus, it is imperative to recognize that change is a difficult process that requires a great amount of time.

As technology changes rapidly, further studies are needed to keep in tap with the new information that keeps on emerging every day. In order to inculcate measure and improvise technology professional development among teachers and to obtain more exciting results on this particular topic, a study which is qualitative and exploratory in nature can be conducted as a means to obtain in depth information and mass fascinating opinions on how laptops have benefited teachers in their professional development.

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The Roles of Social Support and Physical Activity Participation among Western Australian Adolescents

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ABSTRACT

The present study was undertaken to examine the roles of social supports on adolescents' involvement in out-of-school physical activities. 175 conveniently sampled middle high school students from three public schools in Western Australia participated in this study. Data were collected using self-report measures of physical activity (PA) duration, social support (modelling, instrumental, and motivational supports) and social support agents (mother, father, siblings, peers, and teachers). Using stepwise regression analysis, the results revealed that motivational and instrumental supports were significant predictors of the PA for the male and female adolescents, respectively. In terms of the roles of social agents, father was indicated as an influential agent of change for the male adolescents, while mother and peers were influential figures for the female adolescents' involvement in physical activity. The finding of this study reinforces the view that social support for PA may be best provided by the adolescents' same-sex parents. The finding also supports the notion that motivational and instrumental supports may be more effective in promoting male and female adolescent PA, respectively.

Keywords: Adolescents, physical activity, and social support for physical activity

INTRODUCTION

The relationships between physical activity (PA) and health-related outcomes are well documented. Indeed, there is evidence that shows PA provides an array of physical, psychological, social, and emotional benefits for individuals of all ages (Carroll & Loumidis, 2001; Centre for Disease Control and Prevention [CDC], 1997). Among adolescents, it has been specifically shown that higher levels of PA are associated with higher levels of perceived competence and lower levels of anxiety and depression (Parfitt & Eston, 2005). It has also been shown that PA is associated with an increase in cardiovascular fitness (Imperatore *et al*., 2006), a reduced risk of being overweight, and a tendency to possess fewer risk factors associated with coronary heart disease (Sharma, 2006). The recommended level of PA for adolescents to achieve these benefits is 30 – 60 minutes of moderate to vigorous activity per day (Corbin & Pangrazi, 1999). Unfortunately, a large proportion of adolescents do not meet this recommended level. For instance, in a survey in the United States, only 35.8% of high school students were found to meet the current recommended levels of PA (CDC, 2006). In an Australian study, although a sizeable percentage of the adolescents had adequate PA, girls (especially older girls) were lower in PA compared to boys (Booth *et al*., 1997). Given these findings, a number of researchers believe it is necessary to further

investigate factors that can potentially enhance adolescents' involvement in PA (eg., Sallis *et al*., 2000; Sallis *et al*., 1999).

There is evidence that show social support can positively influence adolescents' PA involvement (see Anderssen & Wold, 1997; Biddle & Goudas, 1996; Cleland, Venn *et al.*, 2003; Neumark-Sztainer, 2003; Prochaska *et al*., 2002; Sallis *et al*., 2000; Trost *et al*., 1997; Trost *et al*., 2003, for review). In an Australian study, for instance, parental exercise was positively associated with children's extracurricular sports participation ($p < 0.001$), and 1.6 km run/walk time ($p < 0.001$). Among girls only, cycling performance using PWC_{170} ($p = 0.013$) was also positively associated with their parents' exercise habit. However, the researchers also observed that the gender of the parents was not an independent predictor of the child's extracurricular sports participation and cardiorespiratory fitness. In other words, active participation in PA of either parent is likely to influence their children PA (Cleland *et al*., 2003).

Social support can take a number of forms, including instrumental support, motivational support, and modelling support. Instrumental support refers to a direct support, such as providing financial support, transportation, lending sports equipment and others. Motivational support reflects aspects such as encouragement and praise to adolescents for their participation in PA. Modelling support refers to the provision of support as a role model for PA involvement (Prochaska *et al*., 2002).

Although the influence of social support on adolescent PA has been generally consistent, Trost et al. (2003) have argued for further investigation of the specific mechanisms of support. Indeed, studies that had looked at these specific mechanisms revealed some inconsistent findings. For instance, Trost et al. (2003) revealed that parental modelling did not influence adolescent PA in their study, but other areas of support, such as instrumental support, and encouragement, did appear to influence adolescents' PA. They reasoned that modelling alone did not remove the barriers to PA, and

could therefore discourage some adolescents from participating in PA. In another study, Prochaska et al. (2002) studied the influence of parental encouragement, praise, transportation and direct involvement on adolescents' PA. Contrary to the findings by Trost et al. (2003), parental encouragement appeared to have no association with adolescent PA in the study of Prochaska et al. (2002). These discrepant findings suggest that various forms of support might influence adolescent PA involvement in different ways.

Adolescents can obtain numerous benefits from engaging in the recommended levels of PA. However, a large proportion of adolescents do not met the recommended levels of PA involvement. Although the influence of social support on adolescent PA has been consistent, there is evidence that different types of support may influence adolescent PA in a variety of ways. Therefore, the present study sought to examine the roles of the three types of social support for PA (motivational, modelling, and instrumental) and also the influence of the agents of social support on adolescents' involvement in out-of-school PA.

METHOD

Participants

Students from grades 8, 9, and 10 ($N = 203$) participated in this study. The participants were conveniently sampled from three public high schools in Western Australia. Approximate percentages of the participants from years 8, 9, and 10 were 29%, 34%, and 37%, respectively. The sample consisted of 55.6% boys and 44.4% girls, with a mean age of 13.4 years (SD = 1.0). Data were collected using self-report instruments. Twenty three incomplete questionnaires were discarded leaving 180 cases for final analysis. In addition to demographic information, the questionnaire included measures of out-of-school PA and social support for PA. Descriptions of these measures are presented below.

Instruments

Physical Activity. Conceptualized as the overall out-of school participation, PA was assessed using a single-item measure. Specifically, the students were asked: "Outside school hours in this term, how much time did you spend doing physical activities that made you get out of breath or sweat?" The response options were (1) Never, (2) About ½ hour per week, (3) About 1 hour per week, (4) About 2-3 hours per week, (5) About 4-6 hours per week, and (6) 7 or more hours per week. This same questionnaire has been used widely in other studies, and support for the validity of this measure has been reported elsewhere (see Booth *et al.*, 2001). For data analysis purposes, these categories were converted into equivalent minutes per week, based on the mid-point values (i.e., 30 min, 60 min, 150 min, 300 min, and 350 min).

Social Support for Physical Activity.

Perceived social support was measured using the three items taken from the New South Wales School and Physical Activity Survey (Booth *et al*., 1997). The items reflected three types of support (instrumental support, motivational support, and modelling support) provided by five different social agents (father, mother, siblings, teachers, and peers). For each question, a separate reference was made to the social agents. In more specific, the participants were asked the following questions: (1) How often does each of the following people (father, mother, best friends) play/participate in some sort of sports, exercise or other physical activities? (2) How often does each of the following people (father, mother, siblings, teachers, best friend) help you to play some sort of sport or to participate in other physical activities? (3) How often does each of the following people (father, mother, siblings, teachers, best friend) encourage you to play some sort of sport or participate in other physical activities? All the responses were made on a 5-point scale ranging from Never (*1*) to Very Often (*5*).

Procedures

Prior to data collection, permission to conduct the study was obtained from the relevant authorities. In specific, the approval was obtained from the University's Human Ethics Committee, the State Department of Education and Training, the school principals, and the Heads of Physical Education (PE) departments in the participating schools from Western Australia. Times and locations for questionnaire administration were then organized by the head of PE in each school. Prior to data collection, informed consent forms were distributed and signed by the students and their parents.

The participants were provided with standardized instructions during the data collection process. In more specific, the students were told that they would be responding to a series of statements reflecting their participation in PA outside of the school setting, and the support they received from their family, teachers, and friends to participate in PA. To minimize the effects of social desirability bias, the students were advised that the survey was not a test, and that there were no right or wrong answers. It was also emphasized that honest responses would help the researchers to better understand their PA experiences. Questionnaire completion took place in a classroom setting, and the participants took an average of 10 minutes to complete the questionnaire.

Statistical Analysis

Three statistical procedures were utilized. The descriptive statistics was used for data screening, while Pearson correlation coefficient was used to examine the relationships between the variables, and stepwise regression analyses were computed to examine the influence of the mechanism of social support and the influence of the agents of social support on PA among the participants. The data analysis was carried out using SPSS version 14. Prior to conducting the primary analyses, the data were examined for their accuracy, missing values and distributional properties. The missing values were minimal, and the mean substitutions were used where necessary. Mahalanobis

distance was used to detect multivariate outliers. At 0.001 cut-off point, five cases were identified as the outliers and were discarded, leaving the total number of usable questionnaires to 175. The frequency distributions indicated a mixture of positive and negative skewness. However, no variable transformations were deemed necessary.

RESULTS

The full-sample descriptive statistics are presented in Table 1. The results of the correlation analyses revealed significant positive relationships between the mechanism of social support, agents of social support, and adolescent PA. In more specific, out-of-school PA was positively correlated with instrumental support ($r = 0.30$, $p < 0.001$) and motivational support ($r = 0.30$, $p = < 0.001$). A significant but weak correlation was also obtained between out-of-school PA and modelling ($r = 0.17$, $p < 0.05$). With regard to the social support agents, positive relationships were found between father's support ($r = 0.25$, $p < 0.01$), mother's support ($r = 0.21$, $p < 0.01$), siblings' support ($r = 0.25$, $p < 0.01$), peers' support ($r = 0.24$, $p < 0.01$), and teacher's support ($r = 0.15$, $p < 0.05$).

In order to obtain the relative importance of the mechanism of social support and social support agents, the stepwise regressions were computed separately for the male and female participants. In terms of the mechanisms of support, instrumental support was the only significant predictor of PA participation for the male participants ($\beta = 0.35$, $t = 3.58$, $p < 0.01$). As for the female participants, encouragement was the only significant predictor of PA participation ($\beta = 0.42$, $t = 4.06$, $p < 0.001$). In terms of social support agents, mother's support ($\beta = 0.30$, $t = 2.63$, $p < 0.01$) and peer's support ($\beta = 0.23$, $t = 2.04$, $p < 0.05$) were the significant predictors of PA participation for the females, while father's support ($\beta = 0.30$, $t = 3.05$, $p < 0.01$) was the only significant predictor of PA for the male adolescents. Detailed results are presented in Tables 2 and 3.

DISCUSSION

Consistent with some previous studies (e.g., Sallis *et al.*, 2000), a positive relationship was obtained between social support and out-of-school PA. More importantly, the results suggested a stronger link between out-of-school PA and instrumental and motivational supports

TABLE 1
Full-Sample Descriptive Statistics for the Primary Measures

	N	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
Father Support	175	3.00	15.00	9.71	3.12	-0.33	-0.65
Mother Support	175	3.00	15.00	9.56	2.93	-0.16	-0.85
Sibling Support	175	2.00	10.00	5.97	2.23	-0.15	-0.75
Peer Support	175	3.00	15.00	10.21	2.81	-0.39	-0.15
Teacher Support	175	1.00	10.00	5.78	2.33	-0.01	-0.76
Out-of-School Physical Activity	175	0.00	420.00	160.80	148.83	0.52	-1.05
Modelling Support	175	3.00	15.00	9.68	2.45	-0.37	0.21
Instrumental Support	175	5.00	24.00	14.92	3.69	-0.15	-0.16
Motivational Support	175	5.00	25.00	16.67	4.63	-0.11	-0.67

Note:
Std. Error of Skewness = 0.18
Std. Error of Kurtosis = 0.37

TABLE 2
Results of the stepwise regression for the types of social support for the male and
female samples

	Male (n = 97)			Female (n = 78)		
Model 1	β	t	P Value	β	t	P Value
Instrumental Support	0.35	3.58	0.001	-0.08	0.64	0.52
Modelling Support	0.04	0.31	0.76	0.06	0.51	0.61
Motivational Support	-0.02	-0.16	0.87	0.42	4.06	0.00

TABLE 3
Results of the stepwise regression for the agents of social support for the male and
female samples

	Male (n = 97)			Female (n =78)		
Model 1	β	t	P Value	β	T	P Value
Father	0.30	3.04	0.00	0.07	0.57	0.57
Mother	-0.03	-0.28	0.78	0.38	3.57	0.00
Family	0.17	1.63	0.11	0.15	1.29	0.20
Friend	0.09	0.88	0.38	0.23	2.04	0.04
Teacher	0.14	1.43	0.16	-0.009	-0.08	0.93
Model 2						
Mother	-	-	-	0.30	2.63	0.01
Friend	-	-	-	0.23	2.04	0.04
Father	-	-	-	0.05	0.42	0.67
Family	-	-	-	0.07	0.57	0.57
Teacher	-	-	-	-0.15	-1.23	0.22

than with modelling support. These findings reinforce the views of Trost *et al*. (2003), who argued that modelling alone might be insufficient to promote adolescent PA. More specifically, Trost *et al* (2003) believe that modelling alone is insufficient because it does not remove the barriers to PA perceived by adolescents.

Indeed, in a study of PA barriers, Hohepa *et al*. (2006) interviewed forty-four high school students regarding the benefits of PA, barriers, and potential strategies to help students increase their activity levels. Structural constraints (e.g., transportation, accessibility and availability of activities, and travel distance) and intrapersonal constraints (e.g., the lack of motivation, perceived incompetence) emerged as the key

barriers to PA. In practical terms, social support strategies that acknowledge these barriers may be necessary for encouraging adolescents to adopt PA as parts of their daily activities. More specifically, providing direct assistance, such as transport to and from physical activity venues and providing positive reinforcement for adolescents PA participation may be effective in increasing adolescents' levels of physical activity (Trost *et al*., 2003).

The present study indicated that father was a significant agent of social support for the male adolescents while mother and peer were significant social support agents for the female adolescents. Indeed, this finding is parallel to the results obtained by Bauer *et al*. (2008), who

found that father's and mother's support could predict the male and female adolescents' PA involvement, respectively. The finding of this study further reinforces the view that that social support for PA may be best provided by the adolescents' same-sex parents.

Meanwhile, it has been shown that PA levels progressively decline from late childhood through adolescence (Thompson *et al*, 2003). At the same time, there is a significant, positive correlation between childhood physical activity levels and adult physical activity levels (Lotan *et al.*, 2005). From a public health perspective, increasing the level of physical activity within the population could be associated with substantial reductions in direct health care costs as well as reductions in indirect costs associated with reduced work productivity, disease-related disability, and premature death (Stephenson *et al.*, 2000). Thus, parental roles in promoting adolescent PA may help address the problem of increased physical inactivity among adolescents. In turn, this may translate into exercise habit during adulthood, which may help promote a healthy society.

In summary, the findings support the notion that motivational and instrumental supports may be more effective in promoting male and female adolescents' PA, respectively. In order to enhance the effectiveness of these strategies, specific social agents can play important roles in encouraging adolescents' participation in PA. Although the findings present some valuable implications, it must be acknowledged that this study is limited in several respects. Firstly, the present study utilized self-report measure of PA. This form of measurement is commonly influenced by recall errors and social desirability bias. Secondly, our measure of PA was limited to a single-item duration estimate. Therefore, it is necessary to replicate the findings using a more comprehensive measure of PA. In more specific, it would be desirable to obtain information about frequency, intensity, and duration in order to gain a more complete understanding of the relationship between social aspects of PA and adolescent PA.

To conclude, additional practical implications that can be gleaned from the present study include: (1) educating parents on their roles in promoting adolescents' physical activity, (2) encouraging parents to identify the barriers to physical activity among their children and providing direct assistance to remove these barriers, and (3) educating parents to encourage their children to participate in physical activity.

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Female Adolescent Prostitutes' Cognitive Distortion, Self-Esteem and Depression

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ABSTRACT

This study investigated the relationship between cognitive distortion, self-esteem and depression among female adolescents who were involved in prostitution in Malaysia. Subjects for this study were 42 adolescents aged between 15 and 20 years old. Four research instruments were used in this study; a set of questions for the demographic background of the subjects, Briere's Cognitive Distortion Scale (CDS), Rosenberg Self-Esteem Scale (RSES) and Reynolds Adolescent Depression Scale (RADS) for measuring cognitive distortion, self-esteem and depression, respectively. Data for this study were analyzed by using Pearson Correlation. Results of this study revealed that there was a significant negative correlation between cognitive distortion and self-esteem (r = .530, p < 0.001), a negative significant correlation between depression and self-esteem (r = .522, p < 0.001), and a significant positive correlation between cognitive distortion and depression (r = .712, p < 0.001). Implications for counselling are also discussed.

Key words: Adolescents, cognitive distortion, depression, prostitution, self-esteem

INTRODUCTION

Police raids on massage parlours and karaoke lounges are getting more frequently these days because these places are known to have disguised activities related to prostitution in the forms of health massages and karaoke. According to Lin (1998), more women involved in prostitution are being detained by the police. Even though most of the women who were caught by the authorities are foreigners, the number of local women involved in prostitution has also increased. The statistics has also shown that female adolescents' involvement in prostitution is on the rise (Lin, 1998; CATW-AP). This trend is worrying and of public concern.

Malaysia, being a Muslim country, is very concern about this particular problem because it gives a very negative effect on the image of the country. The involvement of adolescents in prostitution is a bad reflection on the kind of adult population and human capital that the country is going to have in the future. The major concerns of the public are the moral, religious and legal aspects. Of late, the physical and psychological health of the prostitutes has become an increasing concern for the public and the government, especially when it involves adolescents. The community as a whole is beginning to wonder whether there is any psychological explanation to this problem.

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At the local level, there is nothing much that we know about the psychological aspects of the adolescents who are involved in prostitution. Internationally, there are many studies on adolescents but not many have focused on the psychology of adolescents who are involved in prostitution. In some Malaysian studies such as the one by Lin (1998) focused on the social, legal and historical aspects of prostitution. Very few have attempted to look at the phenomenon from the psychological perspective. It has been widely accepted that the economic reason may be one of the few important factors that contribute to women being involved in prostitution (Lin, 1998). The other factors may be psychological and social (cf. Marton *et al*., 1993; Sheeber *et al*., 2001). As such, the primary focus of this study was to look at the relationships between cognitive distortion, self-esteem and depression among the female adolescents who are involved in prostitution in Malaysia. This study also attempted to relate the findings with these adolescents' family background.

Depression is very common among adolescents, whereby it is reported to affect 5 to 8 percent of them (Son 2000). Depression is a common mental disorder that comes in the forms of depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration (World Health Organisation, 1992). Depressive illness often interferes with normal functioning. Often, a combination of genetic, psychological and environmental factors is involved in the onset of depression. Those people who have low-self esteem can be more prone to depression as well (National Institute of Mental Health Depression, 2004).

During the last twenty years, studies have reported high rates of depressive symptoms in adolescents (see for instance, Angold, 1988; Fleming & Offord, 1990; Kovacs *et al*., 1984; Petersen *et al*., 1993; Wichstrom, 1999). High rates of depression and post traumatic stress disorder (PTSD) were also reported among sex workers (Farley & Barken, 1998). Depression has been closely associated with delinquent behaviour among adolescents

(Weisner & Windle, 2006; Brendgen *et al*., 2000). Adolescents who are depressed engage in violent and non-violent crimes, as well as promiscuous sexual behaviour (Naylor, 2008).

Theories proposing cognitive and learned-helplessness models of depression have stressed that maladaptive cognitive patterns are significant features in the development and maintenance of depressive symptoms (Tems *et al*., 1993). Cognitive distortion is a symptom that is commonly observed among depressed adults; however, adolescents who are depressed have significantly greater cognitive distortion than non-depressed adolescents (Marton *et al*., 1993). Cognitive distortion is an assumptions made on oneself, others, the environment, and the future. When these assumptions or attributions are inaccurate, unnecessarily negative, and interfere with optimal functioning, they will result in dysfunctional thinking patterns. Cognitive distortions are commonly associated with low self-esteem that is the tendency to blame oneself for negative events beyond one's control, a general sense of helplessness regarding unwanted events in one's life (Briere, 2000). Research on varieties of population has indicated a relationship between cognitive distortion and depression (Marton *et al*., 1993; Schroeder, 1994; Maxwell *et al*., 1997; Tirch, 2001; Roxburgh *et al*., 2008) and the prevalent of other mental health problems (Alegria *et al*., 1994; Gilchrist *et al*., 2005).

Koydemir and Demir (2008) found a negative correlation between cognitive distortion and self-esteem. Self-esteem is also a predictor of depressive symptoms when negative thinking (cognitive distortion) is a strong factor (Naylor, 2008). Harter and Whitesell (1996) also found that negative attribution style and low self-esteem are associated with depressive symptoms and clinical depression across age, gender and sample type. Meanwhile, the results from a study by Krotenberg (2003) revealed that the three variables, self-esteem, cognitive distortion and depression were correlated. On the contrary, self-esteem was observed to be negatively correlated with cognitive distortion and depression, while depression and cognitive

distortion were positively correlated. The study also found that there was a difference in cognitive distortion based on the respondents' ethnic background. Similarly, depressed children showed more cognitive errors, endorsed more negative attributions, and had lower self-esteem than those of the control groups when first hospitalized (Tems *et al*., 1993).

METHODOLOGY

Sample

The subjects for this study consisted of 42 Malaysian adolescents involved in prostitution. They were chosen to participate in this study through convenient sampling due to the nature of the participants (difficulty of obtaining prostitutes as respondents). They were from all over Malaysia; the police lockups, prison, rehabilitation centres, massage parlours and other places/streets where they had worked.

For the subjects who were in rehabilitation centres, prison and police lock-ups, data collection could only begin after obtaining the necessary official permits from the social welfare office, the prison departments, and the police headquarters, where they were detained or rehabilitated. The subjects from the massage parlours were contacted through the owners of the parlours, while the street prostitutes were obtained from the informants. The subjects were guaranteed full anonymity. It is crucial to note that consents from the subjects were obtained before data collection was carried out. All the respondents, including the pimps and other informants, were paid to participate in this research. For convenience and to avoid unnecessary problems, the questionnaires were distributed to the subjects in groups, based on where they lived or worked. As for those from the massage parlours and other places of work, the research instruments were distributed individually. The subjects with no reading ability were assisted by the research assistants to help them read and fill up the questionnaires.

Due to the sampling method, some inequalities were found in the demographic characteristics of the subjects. Ethnic and religious distributions were unbalanced, with the majority of them were Malays and Muslims (almost all Malays in Malaysia are Muslims). As for age, most of the subjects were in the 15 and 20 years age group. Most of the subjects just managed to complete high school education.

In this study, fathers' and mothers' incomes were used as indicators of the respondents' socio-economic status (SES). SES was referred to the Statistic Department of the Economic Planning Unit 2010. More than 65% of the subjects were at the lowest socio-economic status, as indicated by their fathers' and mothers' monthly incomes of less than RM1000 per month. In terms of the size of the family of origins, 45.3% came from large families with more than 5 siblings.

Location of the Study

The study was conducted throughout Malaysia. This covered various states including Wilayah Persekutuan, Kelantan, Selangor, Negeri Sembilan, Sabah, Sarawak, Perak and Johor.

Instrumentation

Four instruments were used in this research, namely, a set of questionnaires for the demographic characteristics, Rosenberg's Self-Esteem Scale (RSES) for measuring self-esteem (reliability = 0.92), Cognitive Distortion Scale (CDS) for the assessment of cognitive distortion (reliability = 0.96) and Reynolds' Adolescents Depression Scale (RADS) for measuring symptoms of depression (reliability = 0.90). The RSES, which was developed by Rosenberg (1965), contains 10 items; the CDS developed by Briere (2000) contains 40 items, while RADS developed by Reynolds (1986) contains 30 items. The RSES is a widely used measure of global self-esteem designed to asses the extent to which individuals consider themselves worthy and hold a positive attitude towards themselves. Each item of the RSES was rated on a four-point Likert scale, with higher scores indicating higher self-esteem. The total score is between 10 and 40. Meanwhile, the CDS covered five dimensions of cognitive distortion: self-criticism, self-blame, helplessness, hopelessness

and preoccupation with danger. Each item was rated on a five-point Likert scale, with higher scores indicating greater cognitive distortion. Each dimension contains eight items. The total score for the CDS is between 40 and 200, and for each dimension, the total score is between 8 and 40. As for the RADS, each item was rated on a four-point Likert scale, with higher scores indicating more symptoms of depression. The total score for RADS is between 30 and 120.

Data Analysis

Descriptive statistics were used for the demographic characteristics of the subjects. Meanwhile, Pearson correlation was used to determine the relationship between the three variables, namely, self-esteem, cognitive distortion and depression.

RESULTS

Descriptive Analysis

Table 1 presents the number of subjects by age, educational level, ethnicity and religious background, while Table 2 depicts the subjects' family background which includes fathers' income, mothers' income and the number of siblings.

TABLE 1
Subjects by Age, Educational Level,
Ethnicity and Religious Background

Demography	Frequency	%
Age in years		
15	4	9.5
16	3	7.1
17	6	14.3
18	9	21.4
19	8	19.0
20	12	28.6
Educational Level		
Never Been to School	2	4.8
Primary School	4	9.5
Secondary School	31	73.8
Certificate/Diploma	4	9.5
No Information	1	2.4

Table 1 (continued)

Ethnic group		
Malay	16	38.1
Chinese	8	19.0
Indian	1	7.1
Kadazan	10	23.8
Iban	5	11.9
Religion		
Muslim	19	45.2
Christian	13	31.0
Buddhist	8	19.0
Hindu	2	4.8
Total	42	100.0

TABLE 2
Respondents' Family Background

Family Background	Frequency	%
Father's Income		
Below RM500	11	27.5
RM501-RM1000	16	38.1
RM1001-RM1500	1	2.4
RM1501-RM2000	1	2.4
RM2001-RM2500	1	2.4
No Information	12	28.6
Mother's Income		
Below RM500	8	19.0
RM501-RM1000	8	19.0
No Information	26	61.9
No. of Siblings		
Only Child	2	4.8
2-4 persons	21	50.0
5-7 persons	16	38.1
8-10 persons	2	4.8
11 and above	1	2.4
Total	42	100.0

The respondents were asked how they perceived the relationship between their mothers and fathers. It was found that 19% had said that the relationships between their parents were not happy, even though the parents were still married and living together. 9.5% said that their parents were divorced, while 16.7% said their fathers had died (see Table 3). In terms of family relationship, as shown in Table 4, only 35.7% said that their families encouraged problem sharing, 14.3% said that their parents were overly controlling, 35.7% said their parents gave them too much freedom, while the rest (14.3%) said that the families were inconsistent in terms of their treatment towards them. Several

indicators shown in Tables 3 and 4 lead one to believe that the family relationship was not strong and that 35.7% of the parents did not exercise any control (i.e. giving them too much of freedom), too controlling or inconsistent in their parenting styles.

TABLE 3
Respondents' Perception of Parents' Relationship

State of Relationship	Frequency	%
Married – Happy	23	54.8
Married– Not Happy	8	19.0
Divorced	4	9.5
Father Died	7	16.7
Total	42	100.0

Most of the subjects came from the group with the lowest socio-economic status, as indicated by their fathers' and mothers' incomes. The number of siblings in their families of origin was also big (Statistic Department for the Economic Planning Unit, 2010). Meanwhile, their educational level is generally low, whereby most of them just managed to complete secondary/high school. The data on the families showed that the family relationship was rather weak and most parents did not exercise any control (i.e. giving them too much of freedom), too controlling, or inconsistent in their parenting styles.

TABLE 4
Family Relationship

Family Relationship	Frequency	%
Encouraged Problem Sharing	15	35.7
Overly Controlled	6	14.3
Too Much Freedom	15	35.7
Inconsistent	6	14.3
Total	42	100.0

Inferential Analysis

Following are the results of the inferential analysis.

TABLE 5
Relationship between Cognitive Distortion and Depression

Construct	r
Cognitive Distortion	
	.712**
Depression	

**$p < 0.001$

Table 5 presents the relationship between cognitive distortion and depression. The table shows that there is a significant positive correlation between cognitive distortion and depression among the adolescent prostitutes (r= .712, $p<0.001$), indicating that when cognitive distortion is high, depression is also high.

TABLE 6
Relationship between Cognitive Distortion and Self-esteem

Construct	r
Cogntive Distortion	
	-.530**
Self-esteem	

**$p < 0.001$

Table 6 presents the relationship between cognitive distortion and self-esteem. It was found that there is a significant negative correlation between cognitive distortion and self-esteem among the adolescent prostitutes (r = - 530, $p < 0.001$), suggesting that when cognitive distortion is high, self-esteem is low, and vice versa.

TABLE 7
Relationship between Depression and Self-esteem

Construct	r
Depression	
	-522**
Self-esteem	

**$p < 0.001$

Table 7 shows that there is a negative significant relationship between depression and self-esteem among the adolescent prostitutes

(r = -.522, *p*< 0.001), revealing that when depression is high, self-esteem is low, and vice versa.

DISCUSSION AND IMPLICATIONS

The results showed that there was negative correlation between cognitive distortion and self-esteem, suggesting that the more distorted their thinking was, the lower their self-esteem. This study also showed that there was a negative correlation between depression and self-esteem, and this indicated that the more depressed they were, the lower their self-esteem. The findings of this study also showed that cognitive distortion and depression were positively correlated. In other words, the more distorted their thinking, the more depressed they would become, and vice versa. Bromberg's (1997) radical feminist theory suggests that the degradation of women can be viewed in three ways: one, an activity is degraded so that it affirms and sustains the male power dynamic; two, the actor is degraded as a labourer in Marxist terms; three, the degradation itself is associated with men's perception of a whore. Our findings fit the theory that the prostitutes feel degraded in various ways. The feeling of degradation would explain the reason why the women had low self-esteem and high cognitive distortion.

It was also found that cognitive distortion and depression were positively correlated. This suggested that the more distorted the participants were in their thinking, the more depressed they would become. This finding can be explained by the learned-helplessness theory of depression. Learned helplessness theory is the view that clinical depression and related mental illnesses result from a perceived absence of control over the outcome of a situation (Seligman, 1975). Clearly, when the prostitutes perceived that they were no longer in control of a situation (helplessness or cognitive distortion), they went into major depression. Furthermore, Seligman (1992) argues that there are similarities between the symptoms of depression and helplessness. For example, symptoms of depression, such as a lack of interest in, and pleasure from, almost all activities, correspond to symptoms of learned helplessness, such as cognitive representation of uncontrollability (Seligman, 1992). Shnek *et al.* (1997) also found similar findings. They discovered that cognitive distortions have no independent effect. Based on this finding, they concluded that cognitive distortions might have caused the feelings of helplessness and low self-efficacy and in this way, they had indirect effects on depression (Shnek *et al*., 1997). In addition, Farley and Barkan's (1998) study supports our findings that prostitutes experience higher depression than the general population.

The negative correlation between cognitive distortion and self-esteem can be explained in terms of the role cognitive distortion plays in this context. Prostitutes' cognitive distortions could play the roles of psychological defence mechanisms to having low self-esteem. Prostitutes who had low cognitive distortion and low depression were most likely to have high self-esteem. In other words, eliminating distortions and negative thought may actually improve self-esteem and lower depression, and hence, explain the negative correlation between cognitive distortion and depression with self esteem.

Cognitive distortions are inaccurate ways of attending to or conferring meaning on experiences (Barriga *et al*., 2000). An individual with cognitive distortion perceives things, people and experiences in a distorted manner and differently from other individuals with no cognitive distortion. As such, a person with cognitive distortion may rationalize her immoral behaviour as acceptable and rational. Since cognitive distortion, depression and self-esteem are related, these three problems need to be addressed.

Counselling with spiritual content may be effective in decreasing cognitive distortion, as indicated in the study by Nave (2004). In his study on participants with high scores on all the five dimensions of CDS, Nave found that with spiritual prayer counselling, the participants demonstrated a significant decrease in their cognitive distortion.

Group and individual counselling and workshops for the prostitutes can be conducted in rehabilitation centres and prisons to give them the opportunities to reflect, return to normal life, and reconstruct self-esteem. Workshops with an objective to raise self-esteem were effective, as found by Vianna *et al.* (2006). Counselling using person-centred approach may enable them to pour out their feelings, while cognitive behaviour therapy will be effective in working with their troubled cognitions. McCarthy *et al.* (2008) observed that depressed students who had participated in their study felt that talking to someone was helpful in dealing with depression.

There are ways to reduce prostitution or related activities and among them are prevention through education in schools and public campaigns. School counsellors can play their roles through prevention education and campaigns. Evans *et al.* (2002) suggested school-based prevention activities for the prevention and treatment of depression. Many studies on adolescents have shown that parental support is very important in promoting positive self-esteem and prevention of depression. As such, counsellors should get the cooperation of parents while at the same time parents should be urged to play more active parts in helping their adolescents cope with life pressures and to be sure that they are not lured into immoral activities.

Economic history suggests that vices indulged by consenting adults are not likely to be eradicated by law (Chudakov *et al.*, 2006). Law alone will not be effective in dealing with the phenomenon. As such, an ideal rehabilitation for adolescents who had been involved in prostitution should be holistic, i.e. one that combines counselling, skill training and religious as well as moral education.

Some caveats are in order. The sample of this study was quite small, and thus, caution should be used when the results are to be generalized. In more specific, the study does not truly reflect the characteristics of a substantial majority of the prostitutes as the numbers are relatively small although the data the support the findings on the prostitutes are experiencing depression, cognitively distorted and have low self-esteem. Despite these limitations, the current study makes an important step towards increasing our understanding on the mental health of the prostitutes in Malaysia. The results have provided evidence on these aspects of mental health as serious issues that warrant public concerns.

CONCLUSION

The results of this study indicated that there were negative significant correlations between cognitive distortion and self-esteem and depression with self-esteem. It was also found that there was a positive correlation between depression and cognitive distortion.

By distorting their thoughts, the female adolescents involved in prostitution may have justified and rationalized their behaviour but failed to improve their self esteem and reduce their depression due to shame and continuous public rejection. In order to reduce prostitution and to ensure more well-adjusted individuals, a holistic approach to rehabilitation which combines counselling, skill training and religious as well as moral education should be given to these adolescents. In addition, preventive measures may also be taken through education and public campaigns, as well as parents' involvement and support.

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Inter-Ethnic and Mono-Ethnic Families: Examining the Association of Parenting and Child Emotional and Behavioural Adjustment

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ABSTRACT

Literature suggests that inter-ethnic children are not only one of the fastest growing populations in the last decade, but also show a higher prevalence of risk factor for poor outcomes, including family breakdown, academic underachievement and psychology maladjustment. The present research explores whether ethnically-mixed children are less well psychologically adjusted when compared to children from mono-ethnic families. Findings are reported from a study on the emotional and behavioural adjustments of children from 218 inter-ethnic Malay-Chinese and 214 mono-ethnic Malay and Chinese families in Malaysia. The centrality of familial ethnicity status (inter vs. mono), parental relationships quality, and parenting behaviour were also explored as correlates of children's psychological adjustment. Mother-child dyads were sampled for the survey and standardized self-administered questionnaires were utilised. In this sample of Malaysian families, multivariate analysis revealed that parental ethnicity mix, the quality of their marital relationships, and parenting behaviour predicted whether or not the children were emotionally and behaviourally adjusted. Overall, children from mixed parentage reported fewer emotional and behavioural problems than those from mono-ethnic minority families. The current study challenges traditional assumptions towards inter-ethnic families and shows that children of mixed-parentage may not be at risk of emotional and behavioural problems, as previously suggested. The findings have important implications for children development and interventions, with children of mixed-parentage in today's changing families.

Keywords: **Emotional and behavioural adjustments, ethnically-mixed families, mixed-parentage children, parenting**

INTRODUCTION

Empirical evidence indicates a growth in interethnic marriages in the current societies, such as in the United Kingdom (Salt & Rees, 2006; Office for National Statistics, 2001), the United States (U.S. 2000 Censuses; Tafoya & Hills, 2004) and also in Asian countries like Malaysia (Sanusi, 1985; Asia Sentinal, 2007). The present research focused on a sample from the multiethnic population in Malaysia. The figures of the latest Census 2010 indicated that

the population of the country has increased from 22 million in year 2000 to 27.5 million, with a distribution of 53.4% Malays, 26.0% Chinese, 11.7% Aboriginals, 7.7% Indians, and 1.2% other ethnics. In terms of religion, Islam is the most widely professed (60.4%), followed by Buddhism (19.2%), Christianity (9.1%), Hinduism (6.3%) and other religions (5.0%) (Economic Planning Unit Malaysia, 2010). Based on the statistics, Malay is the majority ethnic group in the country, while Chinese is considered as a significant ethnic

minority. In this study, the term 'ethnically-mixed' family refers to the type of marriage or family, which comprises two individuals of different ethnic backgrounds, whereas the term 'mixed-parentage' refers to the children from families with parents of different ethnic backgrounds. The term 'mono-ethnic' refers to parents and children who are living in a single ethnic family background. The term 'ethnicity' is used in the present study in accordance to its utilization for ethnic identification in the latest census in Malaysia.

The 2000 Census highlighted the emergence of a mixed ethnicity population in Malaysia. It was revealed that about 10% or 51,000 of the total households in Malaysia were of a mixed-ethnic nature, where the married partners originated from different ethnic backgrounds. This has implied the existence of a new and relatively young generation of mixed-parentage families in the Malaysian society. In more specific, previous studies have also reported that interethnic-marriages tend to be most common between two major ethnic groups in Malaysia, namely Malay and Chinese, from the 1960s (Kuo & Hassan, 1976; Rozumah *et al.*, 2003; Sanusi, 1981). Thus, it is expected that Malay-Chinese inter-ethnic families may made up a significant proportion of this unique population.

International literature consistently indicates that the dynamic within an inter-ethnic marriage is more complicated and constantly challenged by more divergences on cultural, marital and familial issues than those in a mono-ethnic marriage (Root, 2001; Sung, 1990). Within the Malaysian context, inter-ethnic marriages not only could create social impact on the intermarrying couples, they also have implications on their religion and identity development. Under the Malaysian Islamic Family Law Act 1984, if one of the spouses is Muslim, the other non-Muslim spouse has to convert to Islam in order to legalize the intercultural marriage (Ahmad, 1997). This is due to the fact that the marriage between a Muslim and a non-Muslim is forbidden by the law. Besides, it is widely acknowledged that in

Malaysia, religion has close connections with custom and cultural practices among the ethnic groups. For example, Islam has been linked to the Malay identity (Tan, 2000b). Therefore, the conversion to the Muslim religion may imply the convergence and conformity of Malays, Islamic cultural practices and identity, specifically in the Malay-Chinese intercultural families. In other words, in the Malay-Chinese intercultural marriages, the spouses who are Chinese and non-Muslim are very likely to 'let go' of their original religion and cultural beliefs and subsequently acculturate to Muslim and Malay identity. In addition, both ethnic groups have very strong family traditions and kinship ties, and it is extremely important for the members of each group to preserve and pass on their cultural heritage from one generation to the next (Djamour, 1959; Yen, 2000). Thus, the legal requisition of the social impacts on the culture and on identity has created a crossroads for these inter-ethnic couples/parents in Malaysia. It is asserted that parents in inter-ethnic families were more likely to exhibit differences and have a higher likelihood than the same-culture parents to encounter the differences in parenting expectations, goals and aims, based on their respective cultural backgrounds (Mackey & O'Brien, 1998).

As for children's psychological outcomes, some researchers reported adjustment difficulties among children of mixed-parentage, while a few documented positive implications or found that mixed-parentage children were not less well-adjusted compared to the children of mono-ethnic families (Rosenblatt, 1999; Tizard & Phoenix, 2002). However, little attention has been given to the dynamics and functioning of parenting by the parents in the inter-ethnic families and the ways it may relate to the psychological adjustments of their children. The aims of this paper were to examine the psychological adjustment among children from ethnically-mixed family background from an ecological perspective and to find out how they fare compared to those from the ethnically-matched family background. The following

sections review the literature on parenting behaviour and psychological adjustment among parents and children from ethnically-mixed families.

Parenting in Ethnically-Mixed Marriages

The healthy development of a child is dependent on how the child is treated by their parents during childhood (Stewart-Brown, 2000). Literature shows that parents in ethnically-mixed families face the similar parenting difficulties as those from ethnically-matched families, but they have additional concerns related to other aspects of child outcomes such as differences in physical appearance, cultural factors, ethnic identification, sibling's diverse appearance and possible shame or rejection by their own children (Kerwin *et al.*, 1993; Sung, 1990). More specifically, family scholars suggest that, even though nurturing behaviour is universal for parents, the different socialization goals and distinct expectations among parents, as a result of distinct cultural and family values, foster culturally specific parenting strategies and social environments for the children (Keller *et al.,* 2004; Quah, 2003). For example, Chao's (1994), in her comparative study of parenting behaviour, found that parents of Chinese- and European-American families have commonalities in their parenting goals; although, methods employed by these parents vary greatly. Therefore, in ethnically-mixed families, both parents with distinctive ethnic backgrounds may claim the same values; however, their definitions may be different.

In terms of parenting process, parents living in ethnically-mixed families may encounter issues related to social isolation, weaker network support, and identity conflict rather than poverty or other risk factors. Twine (1999), who had examined the parenting process among 65 White mothers with Black children in Britain, noted that mothers with mixed-parentage children are subjected to close evaluation from their Black communities; it appeared that these mothers are required to demonstrate greater 'maternal competence' in relation to cooking, discipline, hair care, decoration and dressing of their children. These additional challenges may be more prevalent in ethnically-mixed family settings and affect the parenting process among these parents. Different approaches in the teaching values and distinct (perhaps contradictory) parenting strategies reflective of the parents' differing ethnic backgrounds may create tension in the child of multicultural background if parents fail to negotiate and resolve their differences (Romano, 2001; Vivero *et al.*, 1999).

Meanwhile, parents from an ethnically-mixed family background were found to put in an extra effort to secure "healthy environments, interaction and relational outcomes for their children" (Radina & Cooney, 2000, p. 453). Such efforts may lead the parents to become more sensitive to signs of child problematic behaviour and buffer anxiety problems. In addition, Cheng and Powell (2007) found little evidence to support the idea that the differing values and preferences within the ethnically-mixed family have a negative impact on parenting practice in terms of allocating fewer educational investments and providing a lack of cultural resources compared to ethnically-matched families. Children being raised in ethnically-mixed families, however, are indeed less exposed to beneficial familial and social interaction. This may be explained by the problematic relationships between their parents and their immediate or extended family members, and also the societal disapproval that is prevalent in inter-ethnic families (Cheng & Powell, 2007; Sung, 1990). Nonetheless,, such assumptions have not been widely investigated and the effect on the development of children in ethnically-mixed families has not yet been studied empirically.

Emotional and Behavioural Adjustment among Mixed-parentage Children

Traditional theorists and scholars propose that mixed-parentage children are more vulnerable and at risk of developing problematic psychological outcomes than children from

ethnically-matched families (Robinson, 1995). In more specific, the existing research on ethnically-mixed families has indicated that the lack of familial support (Barn, 1999), bi-cultural role models, (Sung, 2003), the confusion and tension accompanying early cultural development (Vivero & Jenkins, 1999), and conflicting parenting strategies (Bowles, 1993) may have detrimental effects on the children's psychological adjustments. Barn (1999), in her study on British mixed-parentage children, also found that children of mixed-parentage are more likely to enter the care system, tend to do so at a younger age, and spend longer periods in care than the White children.

On one hand, parents from ethnically-mixed families were found to be more sensitive to early signs of difficult behaviour among their children (Radina & Cooney, 2000), but on the other, parents from ethnically-mixed families can be over-protective (Bowles, 1993). This may promote an emotional over-reliance or over-dependence, or conversely, even increase the occurrence of behavioural difficulties such as delinquency (Shih & Sanchez, 2005) and substance misuse (Beal *et al.*, 2001) amongst mixed-parentage children as compared to their monoethnic peers. Shih and Sanchez (2005) also reported depression to be severe among mixed-parentage individuals in comparison to those being raised in ethnically-matched families. However, the findings tend to depend on the type of population sampled, be it clinical or general.

Previous research has documented positive interaction and acceptance among mixed-parentage children (Chang, 1974: Cooney & Radina, 2000). Although mixed-parentage family backgrounds are always considered as a source of stress which could eventually lead to greater health and behavioural risk (Udry *et al.*, 2003), some studies argue that discrimination from both the dominant groups in society, as well as the minority community can also result in higher levels of resiliency. Other studies have also reported mixed results, with some studies documenting better psychological outcomes among multicultural individuals (Cauce *et al.,* 1992; Stephan & Stephan, 1991) and others

indicating their psychological health just as positive as their monoethnic peers (Field, 1996), benefiting from their exposure to a wider range of cultures and integrated identities (Stephan & Stephan, 1991). Some researchers assert that multicultural identification is considered to be a healthy process for child development (Korgen, 1998), while others reported that mixed-parentage children may choose an identity they find most appropriate or comfortable in a particular social situation or environment (Tizard & Phoenix, 2002).

A number of scholars assert that some of the clinical impressions dominating the literature may overstate the extent and range of problematic outcomes for mixed-parentage children (Stephan & Stephan, 1991). The focus on clinical populations and the failure to address the effects of children's minority status in general (i.e. without controlling for minority status), on their comparisons, are likely to lead to more pessimistic psychological outcomes among mixed-parentage children (Cheng & Powell, 2007). Tizard and Phoenix (2002) noted that studies which reported serious personality and identity problems in mixed-parentage children are restricted to clinical studies, where children were sampled because of their problems, as opposed to children found through schools or in the general community. This inconsistency calls for further clarification.

Published research on inter-ethnic marriage is still limited in Malaysia. The small number of available studies tended to concentrate on exploring the extent of these intercultural marriages and has described the processes and dynamics in intercultural families (Edmonds, 1968; Rozumah *et al.,* 2003; Sanusi, 1981). For example, a recent study by Rozumah and colleagues (2003) reported that among a sample of 659, almost half of intermarrying respondents reported high level of marital conflicts, low level of marital satisfaction and social support (e.g. emotional or instrumental), especially from close family members. Among the children, their identity development was found to be associated with religious factors, where Muslim parents put an emphasis on Malay and Islamic

identity. However, less attention is being paid on parent's child-rearing behaviour and how it relates to the psychological outcome of mixed-parentage children.

Theoretical Rationale

The aims of this paper were to examine the psychological adjustment among children from ethnically-mixed family background from an ecological perspective and to find out how they fare compared to those from ethnically-matched families. It is argued that the psychological adjustment of mixed-parentage children is determined by multiple individual, familial and social factors that are embedded within their developmental context.

Based on Bronfenbrenner's ecological theoretical framework (1979), the experiences and characteristics of the child and primary caregivers (such as parents) are crucial for understanding child development. This theoretical framework suggests that parenting behaviour is shaped by the different ethnic and cultural backgrounds of the parents within a family (in this case ethnically-mixed families). Thus, conflicting values about parenting among these families may possibly be influenced by the parental relationship and cultural adjustments between the parents (Vivero & Jenkins, 1999; Romano, 2001; Fu *et al.,* 2001). Meanwhile, the differences in the values, role expectations, family obligations and religion practices may create considerable problems and pressure for inter-ethnic couples (Sung, 1990), can lead to a low frequency of shared activities and decrease their consensus in decision-making, and thus, affect the level of relationship quality (Fu *et al.,* 2001). Therefore, it is hypothesized that the emotional and behavioural adjustment of the children in ethnically-mixed families is dependent not just on parenting behaviour, but also on the marital relations and cultural adjustments between the parents. All these factors may collectively influence parenting practices and contribute to the emotional and behavioural adjustment of the mixed-parentage children. In the present study, socio-demographical characteristics and parental relationship quality, as measured by marital satisfaction and cultural adjustments were treated as controls.

Research Questions

The existing literature has shown that parenting among ethnically-mixed parents is likely to be influenced by familial ethnicity status (mixed vs. matched) and relationship quality as functions of parenting behaviour. Literature in mixed-parentage children and their family is limited by its qualitative nature, clinical sample and a strong focus on the role of family, communities and society on children's multicultural identity development. The current study contributes to existing research by examining the unique and combined influences of personal, parental and family factors on the psychological adjustment of children from ethnically-mixed families in comparison to those from ethnically-matched families from the general population. The aim of this paper was to address three key research questions related to children from Inter-ethnic background.

- Do parents from ethnically-mixed and ethnically-matched families differ with regard to parenting behaviour?
- Do children from ethnically-mixed families differ with regard to psychological outcomes when compared to those from with Mono-ethnic families?
- What are the individual and combined influence of the familial ethnicity status, parental relationships and parenting behaviour on the quality of psychological adjustment among the children?

MATERIALS AND METHODS

Participants

A total of 423 mother-child dyads of Inter-ethnic (n = 218) and matched (n = 214) Malay

and Chinese families from the central zone of Peninsular Malaysia were recruited for this study. As there was no uniform database for ethnically-mixed marriages in Malaysia, as suggested by officials from agencies who are handling Islamic affairs and ethnic issues in Malaysia (including the Department of National Unity and Integration (DNUI) and Department of Islamic Development Malaysia (JAKIM), the sampling frame concentrated on two main sources: (1) government agencies and (2) non-governmental organizations (e.g., Malaysian Muslim Welfare Department (PERKIM), Malaysian Chinese Muslim Association (MACMA), Al-Hunafa and Al-Khaliffah) which have direct contact with ethnically-mixed families in Malaysia. The initial recommendations and referral from these agencies and their current members increased the response rate to the study. Due to the scarcity of this population, purposive and snowball sampling strategies were also used, where participating respondents were asked to refer to other ethnically-mixed families. These strategies were also the most common strategies used by research on ethnically-mixed families/ population (see Alibhai-Brown, 2001; Breger & Hill, 1998; Romano, 2001). In this study, only mothers and targeted children, aged 8-19 years old, from families with spouses from different ethnicity (either a Malay or Chinese ethnic background) and those from a ethnically-matched family (with spouses from the same ethnic group), participated in the study. The inclusion of only the mothers in the study was driven by the literature, i.e. mothers are more often in-charge with care-giving task than are fathers and child socialization is still mainly performed by the mothers in Asian communities (Chao, 2002; Kling, 1995; Ho, 1996). Thus, the exclusion of fathers from the study also meant that the researcher was unable to explore within-family cultural differences that exist between the parents in ethnically-mixed partnership.

Procedure

A set of standardized survey questions was used to gather information from the mother and child respondents. Standardized measures without a Malay and Chinese (Mandarin) version were translated using the forward and backward translation procedure (Werner & Campbell, 1970). The study used bilingual interviewers, where a total of 4 Malay and 4 Chinese interviewers were recruited for data collection. The ethnic backgrounds and linguistic preferences of both interviewers and respondents were arranged to match for interviews. Anonymous questionnaires were used, consent forms providing a brief description of the study were provided and personal written permission was sought from each mother and child. Both the mother and child were made aware they were free to withdraw from the study at anytime for any reason. Interviewers worked in pairs to interview the mother and child separately. This allowed for confidentiality, maximizing the comfort of the participants and ensuring the data quality. The distributions of geographical (state/district) and residential areas (urban/suburban/rural) were used as matching variables to maximize the comparability of inter-ethnic and mono-ethnic samples. It is often argued by researchers of comparative studies that subject samples from similar settings tend to have similar demographic profiles (Van de Vijer & Leung, 1997). Besides, in order to overcome any possible bias, statistical control was used as a second strategy to secure comparability amongst the two samples. This strategy is often used to control demographical differences across cultural groups, whereby these key demographic variables are be treated as covariates and controlled for when cultural comparisons are made (Van de Vijer & Leung, 1997).

Measures

Parenting practice: The Asian Parenting Inventory (API) was used to measure parenting constructs (Stewart *et al.*, 2000; Stewart *et al.*, 1998) in terms of 'parental warmth' (6 items) and 'control' (8 items). Children were asked to indicate their degree of agreement on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Items in the parental warmth

subscale reflected the level of parental warmth and acceptance. The parental control subscale included items assessing the restrictions or high demands made on their child. Higher scores in each subscale reflected higher levels of parental warmth and dominating-control, respectively. Some previous studies on Asian parents, which utilized these subscales, have consistently reported high alpha values (Cronbach alpha, α = 0.59 to 0.83) for both mother's and father's reports (Stewart *et al.,* 2000; 2002). In the present study, the Cronbach alphas for the warmth and control subscales were found to be 0.60 and 0.62, respectively.

Children's adjustment: The 25-item Malay version of Goodman Strength and Difficulties Questionnaire (SDQ) (1997) was used to measure 5 types of behavioural attributes among child/adolescents: 1) the prosocial subscale (5 items) focuses on the positive (strength) aspects of behaviour (Cronbach alpha, α = 0.64); and 2) the emotional symptoms subscale (5 items) measures emotional problems among the children (Cronbach alpha, α = 0.72); 3). The conduct problems subscale (5 items) measures behaviours, such as anger, fighting, cheating and stealing (Cronbach alpha, α = 0.59); 4). The hyperactivity subscale (5 items) focuses on child restlessness, fidgetiness and distraction (α = 0.37) and 5). The peer relationship problem subscale (5 items) assesses the child's relationship with peers (Cronbach alpha, α = 0.34). The total score for difficult behaviour was obtained by summing the score from hyperactivity, emotional symptoms, conduct problems and peer problems subscales. The child's emotional and behavioural problems were measured by the total score obtained in the emotional symptoms, conduct problems, hyperactivity and peer relationship subscales, where a higher total score indicated higher levels of emotional and behavioural problems. The reliability for the overall difficulties scale, i.e. Cronbach alpha (α = 0.77) is deemed to be acceptable, despite the fact that low reliabilities were recorded in the subscales.

Control Variables: Socio-Demographic Characteristics

Information on the socio-demographic factors related to the parents and children was also collected. This included father's and mother's levels of education, total family income, as well as child's age, gender and parity.

Parental relationships quality was measured in terms of marital satisfaction and cultural adjustments. The 4-item Kansas Marital Satisfaction Scale (KMSS) by Schumm (1986), adapted by Rumaya (1997), was used to assess mother's perception on their marital quality. The total score could range from 4 to 28, where higher scores refer to a higher level of marital quality among the mothers (Cronbach alpha, α = 0.95). As for cultural adjustment, a 20-item scale, adapted from Rozumah, Rumaya and Tan's report on interethnic marriage in Malaysia (Rozumah, et al., 2003), was used to assess the adjustments or interethnic exchange experience and practice in the family. The mothers were asked to indicate their degree of agreement on day-to-day and cultural aspects with their spouse (i.e. family relations, religious practice, child-rearing, friends, taboo, ethnic identity, festivals and diet) on a five-point Likert scale, ranging from 1, 'Never/Rarely' to 5, 'Always'. A score was summed up from the total responses with higher scores reflecting couples with better adjustment to the cultural heterogeneity in their families (Cronbach alpha, α = 0.94).

Categorization of the Family Context

Children were asked to report the ethnicity of both of their parents: Malay or Chinese. Based on this information, the respondents were classified into two groups: (a) ethnically-mixed families were those in which child respondents reported their mothers and fathers were of different ethnicities; and (b) ethnically-matched families were those in which child respondents reported both of their parents were of similar ethnicity. All the sampled inter-ethnic and Malay-Chinese families were Muslim families;

while mono-ethnic families could be either Muslim, Christian, Buddhist families, or reported other traditional religion practices. The inter-ethnic families were the reference group.

Data Analysis

Independent sample t-tests were computed to examine family context differences in parenting behaviour and children's adjustment. Next, the multivariate regression analysis method was used to assess the links between the correlates and the outcome measures, where predictor variables were entered sequentially in blocks into the regression model. In the first step, the socio-demographic characteristics of the parents (both parents' education levels, household income), the child (age, sex, parity) and the indicators for relationship quality (the mother's perception on marital quality and cultural adjustment) were entered. The second step included family context and mother's ethnicity. Finally in the forth step, the variables related to parenting behaviour (warmth and control) were also added. Examinations of all the independent and dependent variables met the assumptions for the multivariate analysis. In particular, examinations for *normality, linearity* and *homoscedasticity* were carried out before further multivariate analysis (Foster *et al.,* 2006; Tabachnick & Fidell, 2007). Tests of the assumptions of the multivariate analysis were also carried out, with residuals scatter plots show normality, linearity and homoscedastity; there is sufficient sample, and there is no evidence of multicollinearity. Besides, the statistics of skewness and kurtosis of all the independent and dependent variables show reasonable normal distributions.

RESULTS

Descriptive Statistics

All participating adult samples were mothers, whereby about half of them were from ethnically-mixed families (50.5%), and the rest were from ethnically-matched Malay (25.0%) and Chinese (24.5%) families. All the parents in the inter-ethnic and mono-ethnic Malay

families were Muslim, while almost 50% of the mono-ethnic Chinese parents practiced ancestral worship, followed by 45.3% Buddhist and 11.3% Christian. In addition, all the Chinese parents in the ethnically-mixed families were Muslim converts and this contributed to a high percentage (75.5%) of Muslims mothers in the study. A majority (71.1%) of the families were residing in the urban settlements and almost half (43.7%) of them reported a monthly household income that is higher than the national average household income (MYR3000 or USD857) (Department of Statistics, 2004). About 30% of the mothers and 40% of the fathers had achieved tertiary qualifications (i.e. up to college or university level). Overall, almost 60% of the mothers were not working, while majority of the fathers (>90%) were in employment. These mothers were in their early 40s with the averages of 40 and 42 years for mothers from ethnically-mixed and -matched families, respectively. The average length of marriage for both the inter-ethnic and matched couples was 17 years and on average had 3 children at the time of the study. Among the child respondents, 47.7% were male and 52.3% were female. The average age of the target child was 13 years, where mixed- and mono-parentage children were averaged at 14 and 13 years, respectively.

Family Context and Parenting Behaviour

Table 1 presents the mean and standard deviations for parenting behaviour of the total sample, ethnically-mixed and ethnically-matched families. As shown in Table 2, for the total sample, the children's score for parental warmth and dominating-control averaged at 27.58 (SD = 4.08) and 26.75 (SD = 5.69), respectively. The result from the comparative analysis showed that the significant differences were detected between children from the ethnically-mixed and ethnically-matched family contexts in relation to their scores on parental warmth, t (423) = 2.45, p<.05. In more specific, results showed that children from the ethnically-matched families experienced a lower level of parental warmth as compared to children from the ethnically-

TABLE 1
A Descriptive Statistics of Demographic Variables (N=432)

| Variables | Mean (SD) | | | No. of item (Range) |
	Overall sample	Inter-ethnic (n=214)	Mono-ethnic (n=218)	
Descriptive variables				
Child's age	13.65 (3.39)	14.39 (3.27)	14.49 (3.11)	
Child's gender[a] (Male)	47.7%	44.0%	51.4%	0 -1
Child's parity (Eldest)	50.9%	59.2%	42.5%	
Mother's age	41.82 (6.36)	42.72 (7.06)	40.90 (7.06)	
Mother's educational level[+]	3.03 (1.39)	3.57 (1.10)	3.00 (0.91)	1 – 6
Father's educational level[+]	3.31 (1.45)	3.79 (1.09)	3.22 (1.03)	1 – 6
Mother's employment status (Working)	41.2%	44.5%	37.9%	0 – 1
Family total income[b]	2.60 (1.09)	2.61 (1.09)	2.51 (0.89)	1 – 5
Length of marriage	17.77 (6.26)	17.68 (6.47)	17.86 (6.06)	
Number of children	3.44 (1.52)	3.34 (1.60)	3.53 (1.44)	
Family locality[c] (Urban)	71.1%	72.9%	69.2%	0 – 1

[a] Child's gender: 0 = female, 1 = male. [b] Family's income level: Higher score refers to higher level of economical earning. [c] Family's locality: 0 = rural, 1 = urban.
[+] Parent's education: Higher score refers to higher educational qualifications (ranged from no qualifications to graduate degree)

mixed families. Nevertheless, the result failed to detect any significant differences in the parental dominating control between the two types of family.

Child Adjustment

Goodman (1997) suggested that the cut-off points of clinical range of the SDQ scores are 80% of the children in the community are normal, 10% are borderline and 10% are abnormal. In the total sample, 74.3% of the children were within the range of normal adjustment (Mixed = 79.8%; Matched = 68.7%). However, the proportions of the children at risk of total difficulties were slightly higher than what had been expected: 25.7% borderline and abnormal cases (Mixed = 20.2%, Matched = 31.3%). As for the averaged score, significant differences in the total difficulties score were detected between children from the ethnically-mixed and ethnically-matched family background, t (430) = 4.24, p<.001. In more specific, it was found that the children from ethnically-matched

families reported a significantly higher score for the total difficulties behaviour as compared to children from the inter-ethnic families. The multivariate regression models were estimated to further examine the contributions of various ecological factors on child adjustment.

Relationship between Parenting Behaviour and Child Adjustment

As shown in Table 3, the socio-demographics characteristics of children and parents and, the indicators for parental relationship quality were entered as controls for child adjustment (Model 1). The results showed that cultural adjustment was significantly associated with the emotional and behavioral problems among children, after controlling for the variation in other demographical characteristics. Controlling for the preceding factors, it was shown that children raised in ethnically-mixed families had fewer emotional and behavioural problems than those from ethnically-matched families in the sample (see Model 2). In addition, children

TABLE 2
Family Process Variables and Child Emotional and Behavioural Adjustment (N = 432)

Variables	Mean (SD)			No. of item (Range)
	Overall sample	Inter-ethnic (n=214)	Mono-ethnic (n=218)	
Family Processes				
Marital satisfaction	22.06 (4.46)	22.35 (4.55)	21.77 (4.34)	4 (7-28)
Cultural adjustment	72.55 (16.64)	72.67 (16.37)	72.44 (16.97)	20 (20-100)
Parenting practice (Warmth)	26.32 (4.68)	26.86 (4.65)	25.75 (4.64)	6 (6-36)
Parenting practice (Control)	27.48 (5.99)	27.63 (6.30)	27.34 (5.86)	8 (8-48)
Child emotional and behavioural adjustment	12.53 (5.77)	11.40 (5.46)	13.69 (5.84)	20 (0-40)

with a mother of Malay ethnicity also reported lower level of total difficulties as compared to those whose mother is of Chinese ethnicity. The inclusion of family context and mother's ethnicity further added to the fit of the model, accounting for an additional 10% of the total variability of adjustment among children.

In the final model, the aspects of the parenting behaviour contributed substantially to the prediction of emotional and behavioral adjustment among children, and detected unique contribution from both parental warmth and dominating-control behaviour, controlling for the preceding variables (see Model 3). The inclusion of parenting behaviour increased the fit of the model, accounted for an additional 6% of the total variability of children adjustment. In this final model, the results showed that higher levels of parental warmth and lower levels of parental dominating control were associated with lesser emotional and behavioural problems among children. In addition, the familial ethnicity status remained essentially unchanged by the inclusion of parenting dimensions. In this series of models, the final regression model (Model 3) explained the most variance for children emotional and behavioral adjustment - predicting a total of 18% of the variation in children adjustment. Overall, controlling for

the socio-demographical characteristics and parental relationship quality, mother's ethnicity explained the largest share of variance in children adjustment, followed by familial ethnicity status and parenting behaviour (parental warmth and dominating-control).

DISCUSSION

The aims of the study were to explore parenting behaviour and children's psychological adjustment among ethnically-mixed and matched families. The current findings demonstrated that parents from ethnically-mixed families were more likely to be warm and accepting in parent-child interactions than those parents from the ethnically-matched families. These results could be explained by the parental concern about the social discrimination against children of mixed-parentage (Cheng & Powell, 2007; Radina & Cooney, 2000). This responsive parenting behaviour was also found to link with greater emphasis among parents from ethnically-mixed families on providing the appropriate guidance and assisting their children in understanding their multiracial identity (Barn *et al.,* 2005; Kerwin *et al.,* 1993). Family dynamics play a significant role in the identity development of their mixed-parentage children (Crawford & Alaggia, 2008).

TABLE 3
Regression coefficients (βs) predicting child's emotional and behavioral adjustments

Predictors	Children's Emotional and Behavioral Adjustment		
	Model 1	Model 2	Model 3
Background variables			
Child's age	.09	.07	.10
Child's sex (Male)	-.02	-.04	-.06
Child's parity (Eldest)	-.06	.00	.00
Mother's education	-.04	.00	.02
Father's education	-.03	.02	.04
Household income	-.07	-.13*	-.10
Relationship quality			
Cultural adjustment	-.14**	-.13**	-.08
Marital satisfaction	.06	.09	.07
Family context (Mixed)		-.23***	-.22***
Mother's ethnicity (Malay)		-.25***	-.24***
Parenting dimensions			
Parental warmth			-.16**
Parental dominating-control			.16**
Adjusted R^2	.027	.119	.175
F	2.436*	6.505***	8.224***
F-change	2.436*	21.772***	14.599***
df1, df2	8,401	10,399	12,397

Note: Reference category is in parentheses. p+<.10, p*<.05, p*<.01, p***<.001.

Meanwhile, parents from ethnically-mixed families endeavour to secure a healthy family environment and provide appropriate guidance for the positive psychological functioning of their children.

Another important finding of this study is the emotional and behavioural development among mixed-parentage children is more positive than those of children with ethnically-matched parents. This result contradicts the traditional assumption that a mixed-parentage family background is likely to have a negative effect on a child's emotional and behavioral adjustment. This is supported, however, by recent studies on the psychological adjustment among mixed-parentage children from the general population (Field, 1996; Shih & Sanchez, 2005). It is essential to point out that negative psychological outcome among mixed-parentage children are more often reported among studies sampling from looked-after or clinical population as compared to those from general population

(as indicated in this study). Thus, the different characteristics of the studies, such as the type of population sampled (i.e. the general population), may account for the positive outcomes in this study.

An additional argument for a better psychological adjustment among children from the ethnically-mixed families is the more responsive, sensitive parenting style adopted by these families as compared to those from ethnically-matched families. In particular, among the ethnically-mixed families, the emphasis on parental responsiveness and greater sensitivity to children's needs may create not only stronger parent-child relationships and a supportive family environment for the mixed-parentage children (Beckwith & Cohen, 1989), but also contribute significantly to their positive psychological adjustment. These valuable and effective parenting efforts are likely to promote resilient behaviour in mixed-parentage children. As suggested by Okagaki and Luster (2005),

the benefits associated with effective parenting may buffer hardship and account for positive psychological outcomes, and thus cannot be discounted.

This study has provided an indication that children's emotional and behavioral adjustment is based on multiple determinants; namely, the family context (Inter-ethnic and Mono-ethnic), the mother's ethnicity (Malay and Chinese) and parenting behaviour. It was found that children's emotional and behavioral adjustment is strongly associated with the family context and the mother's ethnic background in comparison to other predictor variables. This finding also indicates that, in addition to family context, ethnicity of the mothers also plays a role as determining predictor for children psychological outcome. In addition, the parents' responsiveness to their children and the reduced dominance the parents have on their children are also likely to have a positive impact on the children's emotional and behavioral adjustment. Therefore, in accordance to the ecological framework (Bronfenbrenner, 1979), the experience and characteristics of both child and parents are essential elements for understanding child psychological outcome. In the current study, parenting behaviour, which is moderated by the ethnic backgrounds of the parents within a family, has played a significant role in predicting child outcome.

LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The study included only children's assessment of their psychological adjustment. Although the child's self-reported assessment cannot be substituted for the reports from other informants, other perspectives should be included in future research, such as those of the parents' and teachers'. Meanwhile, the multi-resource approach is acknowledged as the best approach (Piacentini *et al.,* 1992).

The descriptive statistics has shown that ethnically-mixed and -matched families have distinctive socio-demographic backgrounds. Thus, it is acknowledged that mixed parents tend to have higher educational qualifications compared to the general population of the households in Malaysia, especially among the ethnically-matched families. The hierarchical regression analysis also revealed a significant effect of family context for children's psychological adjustment after controlling for the variations in the family factors, parent's and child's characteristics. When parental and child background characteristics were controlled for, this statistical procedure reduces and rectifies the differences between these two types of family (Kerlinger & Lee, 2000). In most of the models, the regression co-efficient also demonstrated that none of the socio-demographical factors was a significant predictor of child adjustment. Therefore, the findings from the multivariate regression analyses strongly support the positive effect of the inter-ethnic families on child adjustment. Nevertheless, the effects of the socio-economic status, resulting from the demographical variation, should not be discounted as a possible explanatory context when investigating the differences in psychological outcomes among children from the two family groups.

Another limitation is that the current study is not a representative of the ethnically-mixed and -matched families because it was only based on the experiences of children and adolescents with parents associated with Malay and Chinese ethnic backgrounds from the central zone of Peninsular Malaysia. Besides, only mothers were sampled in the study, and thus, there is a lack of paternal/father perspective on the characteristics on parenting behaviour within the mixed-and matched ethnicity families. Future studies can include a qualitative approach to further explore and examine the interactions of the family context, mother's ethnicity and parenting behaviour in relations to children psychological adjustment. In addition, this study was also based on a cross-sectional design and therefore, the directions of the associations between variables could not be determined.

CONCLUSIONS

The present study has provides empirical evidence for the positive adjustment amongst the mixed-parentage children growing up in a multicultural community in comparison to their monoethnic peers. It is important to note that ethnically-mixed marriages, with changes in their parenting strategies and the concurrent psychological adjustment of their offspring, will have impacts on the social development of the country in the long run.

Therefore, interventions which emphasize on the interactions within a family may prove to be valuable for encouraging psychological functioning among children. The current findings imply that parents need to be sensitive to the various ways their children experience their mixed-parentage backgrounds, and that they should actively monitor, be responsive to and intervene in situations and social relationships in order to identify potential problem areas to the child's well-being. These findings also suggest that interventions utilizing parental skills to develop positive self-perception, and to monitor and be sensitive towards their children's experiences on their psychological development are crucial for promoting positive children's adjustments. Just as important, possible strategies for promoting positive parenting strategies and parental consensus on day-to-day matters have the potential to reduce psychological distress not only amongst this particular group but also among children from the wider population. Based on this evidence, practitioners should take into consideration that differences in the family context, parental expectations and parent-child interaction have important implications on child behaviour and these must be acknowledged in the study of psychological outcomes among mixed-parentage children. This is important both for the children and parents, and also serves as a basis for designing family-specific interventions in Malaysia and other multicultural societies.

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Does Self-Esteem Mediate the Relationship between Loneliness and Depression among Malaysian Teenagers?

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ABSTRACT

The current study examined the mediating role of self-esteem in the relationship between loneliness and depression among teenagers. The participants of the study were 242 teenagers (119 males and 123 females) aged 13 to16 years, from selected secondary schools in the central zone (Selangor) of Malaysia (mean age = 14.67 years; SD = 1.27). Teenage depression was measured using Children Depression Inventory, while loneliness was measured using the Revised UCLA Loneliness Scale, and self esteem was measured using the Rosenberg Self-Esteem Scale. The study discovered that self-esteem had negative and medium correlation with loneliness (r = -.380, p <.01) and depression (r = -.497, p <.01). The study further found a positive and medium correlation between loneliness and depression (r = .493, p <.01). Self-esteem was found to be both the unique predictor of depression and a partial mediator of the relationship between loneliness and depression. Thus, the findings of the study filled the gap in the existing literature on the relationship between loneliness and depression. Recommendations of the study centre on the need for counsellors and psychologists to educate parents on the need to aid the development of self-esteem among their teens.

Keywords: Self-esteem, loneliness, teenagers, depression

INTRODUCTION

Depression has become one of the most common mental disorders with high prevalence throughout a lifetime. About 50-75% of those diagnosed experience recurrent episodes within 10 years (American Psychiatric Association, 2000). Murray and Lopez (1996) indicated that depression is the leading cause of disability among individuals aged 18-44 years, and it will become the second foremost source of disease related disability among folks of all ages by the year 2020. In line with the above projections, scholars have advanced a number of behavioural paradigms to model depression.

However, most of these paradigms treat the disorder as a singular phenomenon. Diagnostic

and Statistical Manual of Mental Disorders (DSM-IVR) (American Psychiatric Association, 1994) has reflected multiple ways in which depressive syndromes may be expressed. For instance, major depression is characterized by anhedonia, coupled with four additional symptoms that are related to weight changes (decrease or increase), sleep disturbances (insomnia or hypersomnia), psychomotor retardation, fatigue, guilt, diminished cognitive functioning, and recurrent thoughts of death.

Nevertheless, not all teenagers exhibit all the symptoms, and the constellations of symptoms presented above. In line with Teasdale and Russell's (1983) differential activation theory, a depression-prone teenager's harmful self-

schema is latent until it is triggered by sad mood, stressful events, or experiences that match the pessimistic schemas. Since teenagers vary in the extent to which their disinclined self-schemas are congruent with cynical mood and stressors, this difference is presumed to account for the diverse impact negative life events has on a teen's self-esteem (Franck & Raedt, 2007).

In the view of Kernis (2006), self esteem can both lead to and result from clinical depression. Studies conducted in the 90's suggest that self-esteem fluctuation is a factor in the aetiology and maintenance of depression (Butler *et al.*, 1994; Roberts & Monroe, 1994). There is therefore evidence from both earlier and more recent studies (Lewinsohn *et al.*, 1981; Pelkonen, 2003) which suggests that low self-esteem is more prevalent among depressed teenagers. Recently, there has also been interest in whether self esteem can predict a depression onset. However, a major problem exists in examining the relationship between self-esteem and depression. Self esteem may be a part of the definition of an illness and in no way a causal. This issue was discussed in earlier articles (lngham *et al.*, 1987) with the conclusion that, while low self-esteem might indeed be an early and long-lasting manifestation of depression, it is not synonymous with it and probably a sign of an enduring personality characteristic.

The findings by Franck *et al*. (2007), Simpson *et al*. (2010) reveal that low self esteem on its own does not predict future depressive episodes. Nonetheless, it may do so in interaction with other factors, such as severe stress (Brown *et al.*, 1986). Ingham *et al*. (1987) discovered that prior psychiatric problem was another of such interactive factor. Though low self-esteem is regarded only as a psychiatric symptom, some adverse circumstances are necessary before the transition from dysphoria to outright clinical illness.

In the last 50 years, researchers have been interested in studying the relationship and consequences of loneliness (Heinrich & Gullone, 2006). From these studies, there have been divergent opinions on the notion of loneliness. However, most scholars agree that loneliness represents a distressing situation that is occasioned by limited social relationships and the perception of being isolated (Savikko *et al.*, 2005; Victor *et al*., 2000). Research has equally shown that loneliness can lead to the onset of anxiety and depression (Cacioppo & Hawkley, 2003). In the view of Wiseman *et al.* (2006), the early attachment types of teenagers serve as a working model of the level of relationship with others in their later life (Bowlby, 1982).

According to Bowlby (1982), safe attachment models reflect the relationships with caregivers which emphasize warmth, respect for autonomy, sense of trust in the self, and the caregivers (Shaver & Mikulincer, 2002). Secure teenagers tend to form intimate and close relationships with others, social groups and are therefore less lonely compared to insecure ones (Wiseman *et al*., 2006). Recently emerging studies indicated that attachment insecurity is correlated and linked with loneliness (Wiseman *et al.*, 2006).

Moreover, numerous scholars have sought to establish the complex relationships between self-esteem and depression (Kernis, 2006; Teasdale & Russell, 1983; Roberts & Monroe, 1994) and between loneliness and depression (Cacioppo & Hawkley, 2003; Heinrich & Gullone, 2006). It was suggested that self-esteem variation is a factor in both the aetiology and maintenance of depression (Butler *et al*., 1994; Roberts & Monroe, 1994). Therefore, in the present study, it was hypothesized that loneliness could affect depression through self-esteem (see *Fig. 1*).
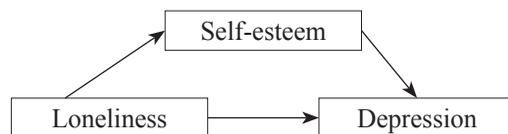

Fig. 1: The mediator role of self-esteem in the relationship between loneliness and depression

Although there have been studies on the unique predictor of teenage depression, none has sought to identify the sole predictor of teenage depression from self-esteem and loneliness.

Emerging studies from Malaysia indicate that self-esteem development may be attributed to the participation in theatre performance. According to Yee *et al.* (2005), youths who participated in theatre performances exhibited higher levels of self-esteem than their colleagues who were not.

In a recent study by Cheng and Yusooff (2010) on self-esteem among 522 adolescents in the Klang Valley, Malaysia, the scholars revealed a moderated predictive relationship between social support and depression. However, despite the fact that some of these studies were conducted within the Malaysian hemisphere (Yee *et al.*, 2005; Cheng & Yusooff, 2010), none has examined the mediating effects of self-esteem in the relationship between loneliness and depression, either within the country or globally. Hence, there is a need to respond to the research questions highlighted below.

Research Question

In line with the above, the current study therefore, responded to the following research concerns:

1. What uniquely predicts teenage depression, self-esteem, or loneliness?

2. Does self-esteem mediate the relationship between loneliness and depression?

MATERIALS AND METHODS

Participants

Two hundred and eighty teenage respondents were eligible for the study. Of this number, 38 were dropped due to incomplete responses. Therefore, the final analysis comprised of 242 teenagers (119 males, 123 females) from the rural and urban schools in the central zone of Selangor, Malaysia. The participants were given a booklet each. The booklets contained all the instruments used in the study. The respondents were Malays (88.84%), Chinese (4.13%), Indians (6.20%) and of other races (0.83%). Their ages ranged from 13 to 16 years (M=14.67; SD=1.27). The specific age choice was made because emerging studies from other parts of the globe highlight the importance of these periods in the life course of adolescents (Newman & Newman, 2009).

Procedure

A trained research assistant administered the battery of instruments which included the measures for self-esteem, loneliness, and depression. The data were collected in classrooms during a two-hour period. The participants were given information regarding the research and the voluntary nature of their contribution after meeting the research sample criteria. The permission to collect the necessary data was granted by the Malaysian Ministry of Education.

Due to the difficulty or impossibility of listing all the members of the target population and to select a sample from among them, the country was clustered into five zones and one state was randomly selected from each of the zones. The selected states were Kedah (North zone), Selangor (Central zone), Johor (South zone), Pahang (East zone) and Sarawak (East Malaysia zone). From each state (zones), schools were selected based on the classification of the Malaysian Ministry of Education (2007) for either rural or urban schools.

Hence the schools were chosen randomly for all the zones from a list of schools with all the students within the age bracket of the study in the selected schools included in the sample. From the central zone of Malaysia, Selangor was selected. Within the state, two rural and three urban schools were randomly selected. These schools therefore served as the sample for the central zone of Malaysia. The total number of schools sampled amounted to five. The data for the study were collected within the schools using the cluster sampling technique. The current study was a part of a larger study which was conducted in selected urban and rural daily secondary schools in Malaysia.

Measures

Each booklet contained a number of validated scales and demographic questions. The respondents were asked to provide details of their age, gender, number of siblings and other statistical information.

Depression

Children Depression Inventory (CDI: Kovacs, 1985) is a 27-item Likert-type measure that assesses children's perceptions of the severity of specific cognitive, affective, behavioural, and depressive symptoms which they experienced in the past two weeks, was used to measure depression. A score of 0, 1, or 2 was given to each item, with a score of 2 representing the most severe choice. The CDI has been used with school-age children and is the most widely used measure of childhood depression (Kazdin, 1990). The 27-items of the CDI range from 0 to 54, with higher scores associated with higher depressive symptoms. Some examples of the questions in the instrument include "I am sad", "Nothing will ever work out for me", and "I do everything wrong". Kovac (1985) set a score of 20 as the cut-point for the identification of depressive symptoms in a normal population. Some psychometric studies of the CDI have shown high degrees of internal consistency, test–retest reliability, and construct validity in non-clinical populations (Cole *et al.*, 2000). According to Kovac (1983), the CDI has acceptable internal consistency, with a Cronbach alpha (α) coefficient of 0.71. In the current study, the Cronbach alpha (α) was 0.77.

Loneliness

Loneliness was assessed using the Revised UCLA Loneliness Scale (Russell *et al.*, 1980). Each item on the 20-item scale was rated on a 4-point Likert scale ranging from never to often. Ten items were reverse scored, and the total scores ranged from 20 to 80. Higher scores indicate greater loneliness. Some examples of the questions in the scale include: "I lack companionship", "There is no one I can turn to", and "I am no longer close to anyone". Evidence of reliability and validity of the scale are presented in numerous studies (Russell, 1996). The internal consistency of the scale in the present study was 0.76.

Self-esteem

Self-esteem was measured using the Rosenberg Self-Esteem Scale, which has been shown to be a valid and reliable instrument. The 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965) assesses self-esteem globally. Some examples of the questions included: "At times I think I am no good at all" "I feel I do not have much to be proud of" and "I certainly feel useless at times". Each item is rated on a 4-point scale ranging from strongly disagree to strongly agree. The higher the score obtained in the RSE, the greater the levels of self-esteem. The scale has been widely used in several studies. The internal consistency in the present study was 0.67.

Data Analysis

The data for all the three research instruments were numerically scored and quantified. Each of the quantitative scores was entered into SPSS version 17 for analysis. Inferential and descriptive statistical tests were also performed. In more specific, regression analysis was applied to determine the mediating role of self-esteem in the relationship between loneliness and depression and the unique predictor of teenage depression. Descriptive statistics were used to calculate means, standard deviation (SD), and range. The interpretation of correlation was based on Cohen's (1988, pp. 79-81) guideline that stipulates $r = .10$ to $.29$ as a small correlation, $r = .30$ to $.49$ as a medium correlation and $r = .50$ to 1.0 as a large correlation.

RESULTS AND DISCUSSION

The participants for the current study were from 13 to 16 years (M = 14.67 years, S.D = 1.27) of age, and they comprised 49.2% males and 50.8% females. Most of the respondents for the study

(95; 39.26%) have between four to five siblings in their families. Table 1 reveals the correlation between measures of self-esteem, loneliness, depression, and demographic factors. The table suggests that there is a negative and medium correlation between self-esteem and loneliness (r = -.380, $p < .01$) with low self-esteem associated with high loneliness.

In addition, the table further illustrates a negative and medium correlation between self-esteem and depression (r = -.497, $p < .01$), with low self-esteem associated with a high level of depression. Furthermore, the table suggests a positive and medium correlation between loneliness and depression (r = .493, $p < .01$), implying that the higher the level of loneliness, the level of depression will be higher as well. More so, the table also reveals a positive and small correlation between the number of siblings and depression (r = .180, $p < .01$), with a high number of siblings associated with a high level of depression.

In line with the first objective of the study, a two-predictor multiple linear regression model was proposed to explain the variation of depression. The two predictors were loneliness (x1) and self-esteem (x2). The equation of the proposed multiple linear regression model is as follows:

$$Y \text{ (outcome)} = b0 + b1(X1) + b2(X2) + e$$

Where:

Y   = Teenage Depression
b0   = Constant (Intercept)
b1-2= Estimates (Regression coefficients)
X1 = Loneliness,
X2 = Self-esteem, and
e   = Error

To test the extent to which the research data supported the MLR model of teenage depression, the enter regression method was used. The two predictor variables, namely, loneliness (β = .355, $p \leq .05$) and self-esteem (β = -.362, $p \leq .0001$), fully supported the proposed two predictor multiple linear regression model, as depicted in the coefficient table (see Table 2). The estimate of the model coefficients for b0 was 18.812, b1 was .263, and b2 was -.585. Therefore, the estimated model is as shown below:

$$Y \text{ (Teenage Depression)} = 18.812 + .263 (X1) + -.585 (X2) + e$$

The R-squared of 0.36 implied that the two-predictor variables explained about 36% of the variance in depression. The ANOVA table reveals that the F-statistics (F=65.683) is large and the corresponding p-value is significant ($p \leq .05$), indicating that the slope of the estimated linear regression model line is not equal to zero and confirming that there is a linear relationship

TABLE 1
The correlations between measures of self-esteem, loneliness, depression and demographic factors

Measures	1	2	3	4
1. Self esteem	-			
2. Loneliness	-.380**	-		
3. Depression	-.497**	.493**	-	
4. Number of Siblings	-.079	.071	.180**	-
M	28.34	42.07	13.29	4.47
SD	3.68	8.03	5.95	1.96
Min	18.00	28.00	0	1
Max	38.00	68.00	31	12
α.	.67	.76	.77	

Correlation is significant at the 0.01 level (2 tailed)

TABLE 2
Multiple Regression Analysis on the Predictor of Depression

Variables	B	Std. Error	Beta	t value	p value
Constant	18.812	3.637		5.173	.000
Loneliness	.263	.042	.355	6.318	.000
Self-esteem	-.585	.091	-.362	-6.440	.000

Note: R= 0.59, R2= 0.36, Adj. R2= 0.35.

TABLE 3
The Multi-Collinearity Diagnostic for the of Predictor of Depression

	Eigen value	Condition Index	Variance Proportions		
			Constant	Loneliness	Self esteem
1	2.959	1.000	.00	.00	.00
2	.036	9.076	.00	.49	.15
3	.005	25.216	1.00	.50	.85

Note: Dependent variable is teenage depression

between teenage depression and the two-predictor variables.

As depicted in Table 2, the largest beta coefficient was for self-esteem, i.e. -.362. This means that the variable made the strongest unique contribution in explaining the dependent variable (depression), when the variance explained by the other predictor variable in the model was controlled for. The finding also suggests that one standard deviation decrease in self-esteem is followed by -.362 standard deviation increase in depression. The Beta value for loneliness is second (.355).

The above findings indicate that loneliness and self-esteem are important in explaining the variations of depression. Based on the collinearity diagnostic table obtained (Table 3), none of the model dimensions had a condition index above the threshold of 30.0, and none had a tolerance value smaller than 0.10, and a variance inflation factor (VIF) statistics less than 10.0. These indicated that there was no multi-collinearity problem among the predictor variables of the model. Since no multi-collinearity problem existed between the predictors included in the model and the assumptions of normality, the equality of

variance and linearity were all met, and it was reasonable to conclude that the final estimated multiple regression models to explain depression was proper.

In consonance with the second objective, Baron and Kenny (1986) argued that three conditions must exist for mediation to occur. First, the independent variable (loneliness) must be significantly related to the dependent variable (depression), in the absence of the mediator (self-esteem). Second, the independent variable (loneliness) must be significantly related to the mediator (self-esteem). Finally, the mediator (self-esteem) must be significantly related to the dependent variable (depression). Furthermore, the addition of the mediator (self-esteem) into the regression model must reduce (partial mediation) or eliminate (full mediation) the initial effect of the independent variable (loneliness) on the dependent variable (depression). In the present study, zero-order correlations (see Table 1) indicated that the first three criteria for mediation effects had been met.

The functional measure of loneliness was correlated with depression ($r = .49$, $p < .01$) (Table 1). In addition, loneliness was significantly correlated with the mediator

self esteem ($r = -.38$, $p < .01$). More so, the mediator self esteem was equally and significantly correlated with the dependent variable depression ($r = -.51$, $p < .01$). The hierarchical regression analyses were used to examine the relations between self-esteem and depression, after controlling for the effects of loneliness. As the outliers can considerably distort relationships between the predictor and outcome variables, it is necessary to identify and evaluate the influence outliers may have on regression equations (Neter *et al.*, 1989). Cook's distance measure was used to examine the influence the outlines might have on the model. However, after the examination, Cook's distance measure did not identify any problem with the model (Cook & Weisberg, 1982).

The results indicated that the variance explained by loneliness was 24%, F (1, 240) = 76.92, p <.001. The total variance explained by the model as a whole was 36%, F (2, 239) = 65.68, p <.001. After controlling for the effect of self-esteem on depression, the relationship between loneliness and depression ($\beta = .49$, $p < .000$) was significantly reduced ($\beta = .35$, $p < .000$). The true value of self-esteem was estimated to lie between the lower value of -.764 and the upper value of -.406, with 95% confidence. This was mainly because zero was not included in the 95% confidence interval. The finding suggested that the effect of loneliness through self-esteem was considerably different from zero at p<.000 (Table 4). Therefore, self-esteem was found to partially mediate the

relationship between loneliness and depression in the sample.

CONCLUSION

This study is the first to critically examine the mediating role of self-esteem in the relationship between loneliness and depression. Although ome previous studies (Simpson *et al.*, 2010) have used self-esteem as a mediator, none examined the concept in the above regard. The major finding of this study was that self-esteem could partially mediate the relationship between loneliness and depression. The contribution of the finding of this study to the existing theories lies in the fact that both loneliness and self-esteem can predict depression. Conversely, the combination of both constructs could have deleterious consequences on teenagers. The study revealed that self-esteem contributed more to the prediction of teenage depression.

Following the devastating and dilapidating consequences of low self-esteem on teenage psycho-social health, parents worldwide are enjoined to extol their teenager's accomplishments, even small ones, show interest in their behaviour, schemes, or troubles and react tenderly when their teens behave well. These measures will allow the parents to gain the trust and confidence of their teens, which increases their self-esteem. Essentially, parents should avoid behaviour that could lower their teen's self-esteem, such as shouting or criticizing them, particularly in front of other teenagers or

TABLE 4
Hierarchical regression of loneliness and self-esteem on depression

Model	R2	F	B	95% CI	
				Lower	Upper
Step 1 Loneliness	.24	76.92	.493	.283	.447
Step 2 Loneliness Self-esteem	.36	65.68	.355 -.362	.181 -764	.345 -.406

Note: Beta weights are from the final step of the regression equations and represent the unique contribution of each variable. p<.10; p<.05; p<.01.

referring to them, as dull or sluggish. Statements such as these may become counterproductive, and therefore trigger the feelings of low self worth in their teens.

In line with the existing literatures, this study revealed that self-esteem is significantly related to depression, indicating that self esteem is associated with high levels of depression (Butler *et al*., 1994; Kernis 2006; Pelkonen, 2003; Roberts & Monroe, 1994). Contemporary literature reveals that mental health may be closely associated with high self-esteem considered a mental health safety factor (Ni *et al.*, 2009). The current finding has extended the previous studies by supporting the notion that high self-esteem serves as a safety factor associated with lower levels of depression among teenagers. In considering the results of this study, several issues are clear.

The present findings provide promising empirical support for the proposed model in this study, although the researchers acknowledge some limitations. First, the data in this study were gathered at one point in time. The subjects' perception may have been influenced by covariate factors. Thus, the interpretation of the results is constrained by the cross-sectional nature of the data. Second, given that the entire instrument used in the study were self-reports, the respondents might have answered according to their own opinion. However, despite these limitations, this study demonstrated that teenage self-esteem was very important in their successful passage from childhood to adulthood.

Finally, the inference from the study suggests a need for counsellors and psychologists to educate parents on the need to encourage high self-esteem among teenagers. The development of self-esteem is highly necessary, particularly within the context of the current study to prevent adolescents from dangerous affiliations which may hamper their aspirations in life. Future research may solicit information from parents and teachers to enhance results. Ultimately, more questions about this relationship were left unanswered. This provides fruitful avenues for

upcoming investigation. Overall, there is an evident need to carry out further inquiries on the role of self-esteem among young teenagers in dealing with a variety of transition and interpersonal issues.

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Contribution of Attachment in Children's Separation Anxiety

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ABSTRACT

Literature suggests that child attachment and anxiety symptoms are related. The purpose of the present study was to assess whether attachment patterns related differently to separation anxiety symptoms (fear of being alone, and fear of abandonment). Three attachment patterns assessed were secure, avoidant and ambivalent attachment. The findings indicated that ambivalent attachment was related with higher separation anxiety symptoms (r=.57) compared to avoidant attachment (r=.53). More so, ambivalent attachment was also related to the fear of abandonment (r=.52), while avoidant attachment was related with the fear of being alone (r=.63). In conclusion, consistently responsive mothers are always receptive and supportive of their children's mental health.

Key words: Attachment, separation anxiety, avoidance, ambivalence

INTRODUCTION

Separation anxiety is defined as a negative emotion or feeling like loneliness, lose or sadness experienced when children are separated from their attachment figure (APA, 2000; Cassidy & Shaver, 1999). The concept also refers to a developmental stage when children experience anxiety due to separation from a primary caregiver, usually the mother (Spencer, 2006). Theoretically, separation anxiety in infants is a natural process in development, which helps their survival (Bowlby, 1969). Bowlby (1969) proposed that those infants who experienced separation from a caregiver demonstrated some behaviour characteristics like crying, chasing, calling and protesting. The goal of these tantrums is to end separation and permit a return to close proximity with the caregiver.

Bowlby (1973) further explained that insecure attachment could often result when an attachment relationship was threatened, or the attachment figure was not consistently available. Bowlby (1969) proposed that children's level of anxiety might be affected by their level of attachment with their caregivers. Ambivalently attached children were constantly afraid of being alone and in danger, because their caregivers were unreliable concerning their needs (Bowlby, 1973; Cassidy & Shaver, 1999; Kerns, Abraham, Schlegelmilch & Morgan, 2007), whereas avoidant children learned not to expect comfort from their caregivers, thereby internalizing their distress, conflicting feeling, and confusion about their relationship (Goldberg, 1997; Greenberg, 1999; Manassis, 2001; Manassis & Bradley, 1994). Pursuant to inconsistent and conflicting dyadic interaction, ambivalent children were usually overwhelmed by the constant anxiety of getting their needs met (Cassidy & Shaver, 1999).

On the other hand, according to etiological models of anxiety (Chorpita & Barlow, 1998), children with ambivalent attachment are assumed to develop perception of autonomy that is impeded by parental difficulty in times of separation. These types of children may perceive the environment as uncontrollable, based on their parents' unpredictable behaviours. In other words, parents' dismissive behaviours are the causes of avoidant attachment which leads to the development of negative self evaluation among children (Cassidy, 1999; Rohner, 2004).

Studies indicate that sense of security consists of a set of expectations about availability and responsiveness to others in times of stress (Bar-Haim, Dan, Eshel & Sagi-Schwartz, 2007; Bohlin, Hagekull & Rydell, 2000; Dallaire & Weinraub, 2005). Secure attachment in infancy is considered to be a protective factor for later mental health, while insecure attachment is considered to a risk factor for the development of psychopathology (Brown & Whiteside, 2008; Wenar & Kerig, 2000). Although ambivalent attachment has been theoretically implicated in setting the stage for the later development of anxiety disorders (Bowlby, 1973; Van-Emmichoven, Van-Ijzendoorn, DeRuiter & Brosschot, 2003), supportive research data are surprisingly limited (Greenberg, 1999). The study by Bar-Haim *et al*. (2007) revealed that ambivalent attachment was not related to anxiety levels in a normal sample of children.

The study focused on two dimensions of separation anxiety, namely, the fear of being alone and the fear of abandonment. The main objective was to discover the symptoms of separation anxiety are associated with avoidant and/or ambivalent attachment.

METHODOLOGY

Research Design

The study is a correlation research which investigated the pattern of the relationship between variables. In particular, the study examined the relationship between separation anxiety symptoms and attachment patterns amongst Iranian children.

Sample and Procedure

A sample of 120 children (54% boys and 55% girls) was randomly selected from public schools in Bushehr, Iran, to participate in the study. The age of the children, as reported by the respondents, ranged from 6 to 8 years. All the children were interviewed individually in a private classroom for the purpose of completing the instruments. The interviewer read out the questionnaire items loudly and had each response recorded. This was to ensure that the reading ability of the children would not affect their capacity to understand the questions.

Measures

Attachment Questionnaire - Child version (AQC): The AQC (Muris, Meesters, Merckelbach & Hulsenbeck, 2000) is an instrument for measuring attachment patterns. The AQC is based on the assumption that attachment to a considerable extent defines affectionate relationships. This implies that one can infer attachment style from children's perception of close relationships. The respondents determine that each item fits their characteristic style in their relationship. The AQC consists of three descriptions that correspond with three basic patterns of attachment: (1) "I find it easy to become close friends with other children. I trust them and I am comfortable depending on them. I do not worry about being abandoned or about another child getting too close friends with me" (secure attachment); (2) "I am uncomfortable to be close friends with other children. I find it difficult to trust them completely and difficult to depend on them. I get nervous when another child wants to become close friends with me. Friends often come more close to me than I want them to" (avoidant attachment); and (3) "I often find that other children do not want to get as close as I would like them to be. I am often worried that my best friend doesn't really like me and wants to end our friendship. I prefer to do everything together with my best friend; however this desire sometimes scares other children away" (ambivalent attachment).

A previous study by Muris, Merckelbach, Kindt, Bogels, Dreessen and Dorp (2001) provided support for the validity of the AQC. In the present study, the scales yielded high internal consistencies of 0.89 (secure), 0.93 (avoidant) and 0.89 (ambivalent). The mean alpha for the six sub-scales was 0.90. Separation Anxiety Assessment Scale-Child version (SAAS-C) is a 34-item measure designed to assess separation anxiety and related anxiety symptoms (Hahn, Hajinlian, Eisen, Winder & Pincus, 2003). SAAS-C was designed to assess the four key dimensions of separation anxiety, which include fear of being alone (FBA; e.g., "How often are you afraid to sleep alone at night?"), fear of abandonment (FAB; e.g., "How often are you afraid to go on a play date at a new friend's home?"), fear of physical illness (FPI; e.g., "How often are you afraid to go to school if you feel sick?") and worry about calamitous events (WCE; e.g., "How often do you worry that bad things will happen to you?") (Eisen & Schaefer, 2005). FBA and FAB are considered the avoidance dimension for separation anxiety.

Meanwhile, FPI and WCE are considered as the maintenance dimensions of the SAAS-C. For example, children may fear the physical sensation of nausea because of the potential consequence of vomiting. Children with separation anxiety experience frequent and intense somatic complaints (Last, 1991). The Cronbach's alpha of the SAAS-C for each subscale of FBA, FAB, FPI, and WCE was 0.93, 0.90, 0.83, and 0.82, respectively. In the current study, the mean alpha for the four sub-scales was 0.86.

RESULTS

The mean and standard deviation for separation anxiety scale were 75.6 and 12.6, respectively; this is followed by secure attachment (M=1.5, SD=.14), avoidant (M=1.2, SD=.25) and ambivalent (M=1.2, SD=.29). When the final distribution of the children attachment classification was calculated, the findings revealed that the children fell into three attachment categories, namely, secure (57%), avoidant (15%), and ambivalent (28%). Based on the SAAS-C cut-off point score, the children were classified into two groups. The results indicated that only 35% of the children displayed the symptoms of separation anxiety. In addition, 59.5% of the children who showed separation anxiety symptom were ambivalent, 26.5% were avoidant, and 14 % were securely attached.

Pearson Product correlation was conducted to test this relationship. As depicted in Table 1, there is a negative correlation between children separation anxiety and securely attached children

TABLE 1
Correlations among the variables

Variables	M	SD	1	2	3	4	5	6	7	8
1. SAASc	75.57	12.64	1.000	.894**	.850**	.459**	.904**	-.658**	.528**	.566**
2. FBA	12.56	3.27		1.000	.779**	.229*	.788**	-.643**	.626**	.535**
3. FAB	11.46	2.99			1.000	.237**	.653**	-.527**	.466**	.516**
4. FPI	10.19	1.51				1.000	.425**	-.150	.068	.200*
5. WCE	12.00	2.97					1.000	-.637**	.611**	.596**
6. Secure	1.46	.14						1.000	-.855**	-.839**
7. Avoidant	1.19	.25							1.000	.604**
8. Ambivalent	1.24	.29								1.000

Note: FBA (fear of being alone); FAB (fear of abandonment); FPI (fear of physical illness); WCE (worry about calamitous events).
** Correlation is significant at 0.01 level;
* Correlation is significant at 0.05 level.

($r = -0.66$, $p<.01$), as well as between positive correlation with avoidant ($r = 0.61$, $p<.01$) and ambivalently attached children ($r = 0.57$, $p<.01$).

To determine the contributions of both avoidant and ambivalent attachments to the two dimensions of separation anxiety, the multiple regression analysis was conducted with SAAS-C score as a dependent variable and two attachment patterns (avoidant and ambivalent) as the predictors. Both the P-P plots (expected cumulative probability by observed cumulative probability) showed no significant deviation from the fitted line. This finding indicated that the relationship between the dependent variable and the predictors is linear, and that the residual variances are about equal or constant.

The findings on regression analysis for the Fear of Being Alone (FBA) symptom indicated that the two predictor models are able to account for 43% of the variance in the FBA symptom ($R^2 = 0.43$, $F_{(2,117)} = 44.3$, $p<.001$). The results also revealed that avoidant attachment ($\beta=.48$, $p<.01$) and ambivalent attachment ($\beta=.25$, $p<.05$) explained modest but significant and unique proportions of the variance in the FBA symptom.

In terms of Fear of Abandonment (FAB) symptom, the findings indicated that the model accounted for 30% of the variance in the FAB symptom ($R^2=.30$, $F_{(2,117)} = 25.51$, $p<.001$). Once again, both avoidant attachment ($\beta=.24$, $p<.05$) and ambivalent attachment ($\beta=.37$, $p<.01$) explained significant and unique proportions of the variance in the FAB symptom. The results presented in Table 2 reveal that the strong predictor for FBA is avoidant attachment, while that for FAB is ambivalent attachment.

DISCUSSION

Conceivably, the most interesting result of this study is the relationship between attachment classification and separation anxiety symptoms in children. Avoidant and ambivalently attached children significantly reported separation anxiety symptoms, but securely attached children showed significantly negative correlation with separation anxiety symptoms. The finding is in line with the hypothesis that children classified as insecurely attached would report more separation anxiety symptoms compared to those classified as secured (Brown & Whiteside, 2008). This result was expected based on attachment theory, with securely attached children exhibiting less anxious behaviour, while insecurely attached children displayed more symptoms of separation anxiety.

Furthermore, a link between insecure attachment and separation anxiety revealed that insecure attachment constituted a general risk factor in the development of anxiety (Bowlby, 1973). The findings of the current study have extended the previous findings by distinguishing the types of insecure attachment (avoidant and ambivalent) and anxiety in children. The relationship between insecure attachment and separation anxiety symptoms is consistent with that of the previous findings which suggest that secure attachment is negatively associated with childhood anxiety (Brown & Whiteside, 2008; Muris, Meesters & Brakel, 2003; Muris *et al*., 2001).

The results also revealed that the unique predictor for the fear of abandonment is ambivalent attachment and this is avoidant

TABLE 2
Results of the Regression Analysis with Two Dimensions of Separation Anxiety as the
Dependent Variable and Attachment Patterns as the Predictors

Dependent	Predictors	R	R^2	F	p	B (SE)	β	p
FBA	Avoidant	.66	.43	44.30	.000	6.22(1.14)	.477	.000
	Ambivalent					2.69(.96)	.247	.006
FAB	Avoidant	.55	.30	25.51	.000	2.89(1.15)	.242	.014
	Ambivalent					3.69(.97)	.370	.000

Note: FBA (fear of being alone); FAB (fear of abandonment)

attachment for the fear of being alone. According to the attachment theory, ambivalently attached infants are particularly prone to developing chronic levels of anxiety later in life because ambivalent attachment has been associated with patterns of unpredictable and irregular responsiveness to the caregiver; it is believed that ambivalently attached infants live with the constant fear of being left vulnerable and alone. This fear of separation or abandonment is thought to give rise to a coping strategy centred on chronic vigilance, which may continue throughout childhood and adulthood and lead to the development of anxiety disorders (Bowlby, 1973).

The finding supported the current theoretical conceptualizations that a child with ambivalent attachment may be more relevant when examining outcomes linked to the types of insecurity. Studies have also shown that infants classified as ambivalent are more susceptible to later problems than those in other categories, and are also more likely to suffer from internalizing behaviour (Brown & Whiteside, 2008; Hudson & Rapee, 2001). According to Van-Emmichoven *et al*. (2003), insecure individuals may be more prone to anxious feelings because they attend more to anxiety-provoking cues in the environment.

In addition, this finding also revealed that avoidant children showed more distress in term of the fear of being alone. In the case of avoidant attachment, Manassis (2001) proposed that children feel rejected by their parent at times of distress, resulting in excessive self-reliance, and a decreased desire for social contact. Avoidance of social contacts impairs the development of coping strategies for effective arousal in social situations (e.g. entering school) and prevents the exposure to perceived threats which, together with temperamental vulnerability to sympathetic arousal, increase the risk for anxiety, especially for social phobia (Manassis & Bradley, 1994). Similarly, Goldberg (1997) proposed that avoidant children, who learn to repress their feelings and needs, appear to display internalizing problems in which they experience pain and

distress but rarely disturb others (e.g. depression, anxiety, or social withdrawal). Research has also indicated that close relationships serve as a defence against existential anxiety for people with secure attachment styles. Developmentally and functionally, insecure attachment keeps the child physically and psychologically yearning to be close to their parents. However, hyper-anxiety and throwing of tantrums paradoxically separate the child from the caregivers.

CONCLUSION

The findings from this study have revealed that secure attachment is associated with lower separation anxiety. The more responsive a mother is to the child's needs, the more likely the child is to develop secure attachment. Securely attached children do not often worry about being abandoned or being alone. According to Cassidy (1999), infants are completely dependent on their caregivers, and they frequently signal their distress. The overall findings of this research have highlighted the importance of examining children's separation anxiety symptoms within the confines of their attachment relationships. Separation anxiety symptoms were found to be highest among ambivalent as compared with avoidantly attached children.

Nonetheless, the results should be interpreted cautiously due to some limitations. The age of the children assessed in the current study was 6 to 8 years, which is the most common age of the onset for separation anxiety (APA, 2000). It was assumed that these children were able to get or bring back information about the behaviours of their parents. In the case that it may not be true, this may lead to prejudgment. A further limitation for this research was the size of the sample. Although the total sample size that completed the questionnaires was reasonable, the overall sample size for a factor analysis was less than ideal. More so, the respondents in any study come with their own opinions, attitudes or perceptions.

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Perceived Barriers to Recreation Sport Participation in University Students: A Comparison between International and Local Students in the United States

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ABSTRACT

It is generally known that sport participation promotes greater social interactions. For students in a foreign and a new country, a positive social interaction can be translated into a positive social adjustment process and a greater psychological well-being. Despite its benefits, participation in sports activities is low among university students, especially the international students. The present study, therefore, sought to examine the barriers that would likely hinder international and local college students from participating in sport activities in one of the colleges in Springfield, United States. Using purposive sampling, 64 college students participated in this cross sectional survey study. Data were collected using a modified Leisure Barriers Scale developed by Raymore, Godbey, Crawford and Von Eye (1993). Using descriptive statistics and independent group t-test, the results revealed 'convenient facilities', 'time' and 'information regarding available activities' as the most hindering factors for international students from participating in campus sport activities. The results of the independent group t-test revealed that intrapersonal barriers ($p < 0.04$) and interpersonal barriers ($p < 0.02$) were significantly higher among international students compared to the local students. No difference was found between the two groups with regard to Structural Barriers. Parallel with the results, greater efforts may be made to promote greater awareness with regard to facilities convenience, such as facilities operating hours, and availability of campus activities to the students. For international students, activities that promote the elements of social interaction and are sensitive to cultural and individual differences may encourage greater participation in campus sporting activities.

Keywords: Sport participation, perceived barriers; international students

INTRODUCTION

The enrollment rate of international students in the United States increases each year. During the 2001/02 academic year, the Institute of International Education (IIE) reported a total international students' enrollment of 582,996, i.e. with an increase of 30% as compared to the 1990/91 academic year. The current statistics revealed a total enrollment of 690,923 in the 2009/2010 academic year, an 18 percents increase from the 2001/2002 academic year (IIE, 2010). Inherent in these environmental, social, and academic changes faced by the new international students, the adjustment they have to make can be overwhelming (Heikinheimo & Shute, 1986; Lacina, 2002; Luzzo & Henao, 1996; Tseng & Newton, 2002). Indeed, poor adjustment may result in heightened stress levels experienced by these students (Iwata & Higuchi, 2000). Even more worrying, if

this stress is not properly managed, it could potentially lead to depression. In fact, in a study involving local and international students in Australia, Oei and Notowidjojo (1990) revealed that international students were more likely to experience moderate to severe stress when compared to the local students. Given the negative outcomes associated with poor adjustment coping strategies, it is critical for the universities to assist these students in their adjustment process.

Successful adjustment to the new environment has the potential to contribute not only to better academic performance and life functions, but also to students' general psychological well-being. Indeed, it has been shown that higher level of life stress and low social support are predictors of academic stress. In turn, higher level of academic stress is likely to cause an increase in the level of reaction to general everyday life stressors (Misra, Christ, & Burant, 2003). Meanwhile, adequate social support may benefit students in managing stress as well as in their social adjustment process (Heikinheimo & Shute, 1986). In ensuring smooth adjustment to the new environment, efforts should be made by the institutions to assist international students in coping with these adjustment processes. Although a variety of strategies can be applied, it has been suggested that activities which promote greater social interactions may be effective in helping the students in their adjustment process (Heikinheimo & Shute, 1986; Lacina, 2002; Luzzo & Henao, 1996; Tseng & Newton, 2002).

A setting with potentially rich social interaction is sport. In fact, in a qualitative study conducted to examine the academic and social needs of international students, Luzzo and Henao (1996) revealed that academic responsibilities, participation in campus activities, and social networks were among the major concerns of international students. More importantly, the participants believe that the participation in campus sport activities is an essential component towards forming social networks. Despite perceived benefits of participating in the activities, the participants also perceived that

the opportunity to participate in various campus sport activities was limited (Luzzo & Henao, 1996).

Sport activity is a common component of campus extracurricular activities (Weese, 1997). However, merely offering the opportunity to participate does not always lead to actual participation. For instance, Suminski, Petosa, Utter and Zhang (2002) revealed a higher percentage of college students who did not participate in sport. More significantly, the numbers of non-participants were higher among the minority and international students (Suminski *et al*., 2002).

International students' non-participation in campus activities, such as sports, is often due to perceived, rather than actual barriers they are confronting. To further understand individuals' perception of barriers of sport participation, Crawford and Godbey (1987) proposed three types of barriers, namely, intrapersonal, interpersonal and structural barriers. Firstly, intrapersonal barriers refer to the psychological states and attributes of individuals that influence the decision to engage in any given activity. Some examples of intrapersonal barriers are motivation, perceived self skills, availability and appropriateness of activities, and the religious aspects of their life. Secondly, interpersonal barriers refer to the barriers that result from low social interactions with significant others. The lack of social contact is an example of interpersonal barriers. Finally, structural barriers refer to external barriers such as the lack of time, facilities, financial resources, opportunities and transportation (Crawford & Godbey, 1987). As both interpersonal and structural factors represent the circumstances where the institutions can intervene, this information provides the institution with the opportunities to remove these barriers. In turn, removal of these barriers may facilitate greater sport participation.

In summary, participating in sport activities, such as those available on campus, may encourage greater social interaction among the students, international and local. Increased social interaction, in turn, can be translated into positive social adjustment process and

consequently greater psychological well-being for the international students. However, it was shown that their participation in campus sporting activities, especially among this group of students, is low. Thus, the primary objective of this study was to examine the factors that were likely to hinder the participation of international students in the campus sport activities. Secondly, this study also sought to compare the levels of perceived barriers between the local and international students in a small size college in Springfield, United States. Such comparison will allow the institution to gauge whether the perceived barriers are group specific or more general. This knowledge will undoubtedly be useful in guiding the intervention strategies in promoting greater sport participation for the students, local and international.

METHOD

Using cross sectional study design, this study examined the barriers that prevent the participation of international students in campus sport activities. The differences in the levels of perceived barriers between American and international students with regard to the three types of barriers proposed by Crawford and Godbey (1987) were also examined.

Participants

Undergraduate and graduate students involving 32 local students and 28 international students enrolled at one of the colleges in Springfield, United States, participated in this study. This number represented 100 percents response rate. The mean age of the participants was 22.65 ± 4.03. Permission to conduct the study was obtained from the relevant authorities and participants provided informed consent.

Instrument

Modified Leisure Barrier Scale (Raymore, Godbey, Crawford, & Von Eye, 1993) was used to measure sport participation barriers in this study. The questionnaire consists of 21 items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The items represent three types of barriers, as proposed by Crawford and Godbey (1987), which are intrapersonal, interpersonal and structural barriers. The questionnaire was scored by summing up the scores of each item. The total possible point for each specific type of barriers ranged from 7 to 35 and the total possible points for general constraints ranged from 21 to 105. Detailed descriptions of the validity and reliability of this questionnaire have been reported elsewhere (see Raymore *et al.*, 1993). Raymore *et al.* (1993) reported the alpha coefficients of .57, .64, and .79 for the intrapersonal, interpersonal, and structural barriers, respectively. In the present sample, the reliability coefficients for the intrapersonal, interpersonal, and structural barriers were .74, .65, and .65, respectively.

Procedure

The questionnaires were distributed to the participants in person. International students completed the questionnaire during a social gathering, which was held at the end of the spring semester. Local students were encountered at several venues on campus, such as the library, dining hall and gymnasium. They were requested to take part in the survey and the objective of the survey was explained to them. It was reinforced to them that the information might help the institution to enhance its sport related services. Those who were willing to participate were given the questionnaire to be completed. The participants were asked to respond to all the questions in the questionnaire and to provide honest responses. The respondents took about five minutes to complete the questionnaire.

Statistical Analysis

Descriptive statistics were used to analyze each item. Independent groups t–test was used to analyze the differences between the international and local students with regard to the three types of barriers. The citizen status was used as the

dependent variable. A total of four independent groups t-tests were calculated to measure the differences in the levels of barriers, as perceived by both the groups.

RESULTS

The data were analyzed in two stages. The descriptive statistics were performed on each of the items in the questionnaire. The results of this analysis are presented in Table 1. The breakdown in the number of the international students were Asian (n = 19), European (n = 3), African (n = 3), South American (n = 1) and West Asian (n = 2). The numbers of sports participants and non-participants were 40 and 24, respectively.

As shown in Table 1, international students rated convenient facilities (Mean = 4.00 ± 0.76), time (Mean = 3.84 ± 0.96), and information regarding available activities (Mean = 3.69 ± 0.93), as the three factors that would likely influence their decision to participate in campus sport activities. Shyness (Mean = 2.00 ± 0.92) and friend not having money to participate (Mean = 2.19 ± 0.90) were regarded as the least likely factors that would influence their decision to participate in campus sport activities.

To compare the differences in the level of specific constraints (intrapersonal, interpersonal and structural) and global constraints between the American and international students, four separate independent groups t-tests were calculated. The international students reported

TABLE 1
Descriptive statistic of sport participation barriers of international and American students

Items	American Students		International Students	
	Mean	SD	Mean	SD
Convenient facilities	4.00	0.76	3.85	1.15
Time	3.48	0.95	3.36	1.14
Know what activity is available	3.69	0.93	3.82	1.01
Personal transportation	3.66	1.13	3.79	0.90
Facilities are crowded	3.41	0.88	3.09	1.18
Activities make one feels uncomfortable	3.37	1.16	3.00	1.23
Activities make one feels awkward	3.34	0.94	3.12	1.11
Peers approval	3.25	1.20	2.64	1.05
Self commitments	3.19	1.03	2.82	1.18
Friends do not have time	3.03	1.29	2.67	1.11
Friends have other commitments	2.91	1.03	2.73	1.13
Friends do not have transportation	2.81	1.15	2.27	0.77
Friends do not know what activity's available	2.75	0.92	2.24	1.03
Activities require a lot of skills	2.69	0.93	2.33	1.19
Friends live too far	2.69	1.10	1.67	.86
Family s approval	2.62	1.27	2.64	1.17
Friend do not have skill	2.56	1.05	2.18	0.92
Religious restrictions	2.44	1.37	2.12	1.08
Lack of money	2.34	1.07	2.27	1.21
Friends not having money	2.19	0.90	2.12	1.00
Shyness	2.00	0.92	1.52	0.97

significantly higher scores in the intrapersonal constraints ($p = 0.04$) and interpersonal constraints ($p = 0.01$) than the American students. No significant ($p = 0.32$) difference was found between the international and American students with regard to structural barriers. Furthermore, the international students reported significantly higher ($p = 0.02$) perception of the global barriers than the American students. The mean and SD for each type of barriers are presented in Table 2.

DISCUSSION

The present study sought to examine the factors that might influence international students' decision to engage in campus sport activities. The results of the descriptive analysis indicated that 'convenient facilities', 'knowledge of available activities' and 'personal transportation' were the most likely reasons that would influence international students' participation in sport activities. Conversely, 'shyness', 'friend not having money to participate', and 'religiosity' were the least likely reasons that would influence their decisions to participate in campus recreational activities. The results of the independent group t-test indicated that the international students displayed higher levels of intrapersonal and interpersonal barriers compared to the American students. International students also indicated higher levels of global barriers.

Based on these results, it seems that factors within the structural barriers were the most influential factors that would encourage or discourage both the international and local

students from participating in campus sports. The practical value of the present finding is that it corresponds to situation where relevant authorities can intervene. In more specific, greater efforts should be made to promote greater awareness towards facilities convenience, such as the facilities operating hours and the availability of the campus activities to students. More importantly, this information should be made available and the authorities should ensure that it reaches the intended audience (Weese, 1997).

Karlis and Dawson (1995) argued that although the knowledge of the participation *rate* is essential, the *reasons* that lead to participation and non-participation are equally imperative. In line with Karlis and Dawson's (1995) view, the present study offers some understanding of that reasons that could discourage international students from participating in campus sport activities. In this regard, the results of the present study highlighted the importance of intrapersonal factors in influencing students' decision to participate in campus sport activities. The practical value in these findings is related to the design of the sport programmes. In specific, intrapersonal factors, such as ethnicity, gender, as well as religiosity, should be taken into consideration when offering sport programmes to students (Carr & William, 1993).

Related to these intrapersonal factors is the issue of activity appropriateness. In fact, the appropriateness of an activity was cited as one of the factors that stimulates participation in recreation and physical activities (Briggs,

TABLE 2
Descriptive statistics for the intrapersonal, interpersonal and structural barriers for specific and total respondents

Student status	Intrapersonal barriers	Interpersonal barriers	Structural barriers	Global barriers
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
International	25.03 (4.44)	26.35 (4.66)	19.23 (3.96)	47.16 (7.79)
Local	22.39 (4.17)	22.84 (4.54)	17.94 (4.42)	42.90 (7.46)
Total sample	23.71 (4.47)	24.60 (4.89)	18.58 (4.21)	45.03 (7.86)

1994; Wankel, 1985). Nakamura (2002), for example, revealed that appropriateness of the activity is one of the reasons that facilitates individuals' desire to continue their participation. For instance, in term of activity scheduling, some religious obligations and celebrations may limit the possibilities for participation on a particular day or at a particular time that may render some activity as inappropriate (Kahan, 2003). Additionally, there are also opportunities for the authorities to enhance their programme inclusivity for women, such as offering 'women's only' sessions for particular sports and/or gym sessions. Such initiatives can encourage women from particular backgrounds, who may feel restricted from participation for some intrapersonal reasons, such as cultural and religious reasons to participate in the activities (Nakamura, 2002). Various methodologies can be utilized to assess the extent to which the activities are appropriate for the intended audience. Luzzo and Henao (1996) suggested using an interview as a mean to gather the information; however, as this technique can be time–consuming, the instruments of leisure barriers (Crawford & Godbey, 1987; Raymore *et al*., 1991) could be used as a mean to gather the data.

In pursuing their academic goals away from their home country, international students are exposed to the challenges that could negatively influence their general well-being and academic success (Tseng & Newton, 2002). Various coping techniques has been recommended to help international students to adapt to the new environment in which they live. Central to these recommended techniques is initiating social interaction. Luzzo and Henao (1996) suggested that participating in campus sports and recreation is an appropriate platform for international students to establish social contacts. In fact, the benefits of participation in campus sport and recreation activities are not only limited to establishing social contact, but it also serves as a stress coping mechanism associated with daily stress (Coleman & Iso-Ahola, 1993).

To summarize, the results of the present study provide a general understanding on the factors that influence the students' decision to engage in campus recreational activities. The present study, however, is limited by the small size of the sample. As the institution in which the study was conducted is rather small in size, the sample of the international students was not randomly selected. Future studies may address this limitation by surveying a larger number of international students. In the wake of conflict in many parts of the globe, efforts should be made to promote greater understanding between students from different nationalities. Although there are various ways to promote intercultural understanding, sport can be utilized as a mean to encourage greater social interaction between students of different nationalities. Not only would it foster greater understanding, it also helps international students to adjust to the new environment emotionally and socially.

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Critical Literacy and Diversity in Higher Education: A Case Study of a Multilingual Learner

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ABSTRACT

UNESCO (2004a) speaks of the importance of critical literacy (Street, 1995; Wagner, Venezky, & Street., 1999; Robinson, 2003) in an age where symbolic violence and oppression of diverse views threaten democratic civic life. This paper reports the findings of a post-modern qualitative research which examined a postgraduate student's voice and experiences in terms of a pedagogy committed to building critical literacy for multilingual students through a Critical Literacy Awareness (CLA) Perspective and Method. The paper qualitatively examined the postgraduate student's talk and reflective logs as a point of entry into her negotiations of plural, intersecting and/or conflicting identities and discourses and in relation to ideological perspectives on literacy and contested ways of knowing (Wallace, 1988; Lankshear & McLaren, 1993; Kress, 2003; Koo, 2008a). The findings indicate that for it to be empowering of learner diversity, teacher talk and interventions have to engage with student's unequally valued language and multicultural resources in context and to work with the competing and dominant discourses which are recognised as legitimate in education and the workplace (Luke, 1993).

Keywords: Critical literacy awareness, multilingual learners, qualitative research, cultural diversity, higher education, student voices, language education, literacy practices

INTRODUCTION

Paulo Freire (1970) describes literacy as political phenomenon in terms of how the conditions of 'illiteracy' are constructed by dominant and/or oppressive socio-political and economic structures that engender and maintain illiteracy. With rising awareness of the dominant social and economic oppression by hegemonic and privileged systems of power, the urgent need for political awareness and sensitivity to the learner's diversity is highly valued for inclusive higher education. The grounding of reading in terms of the broad context of critical literacy requires reading about the world and understanding a text's purpose and contexts so that a reader would not be manipulated by it (Freire, 1970).

This paper investigates a multilingual Malaysian student's negotiation of plurality and ambiguity in terms of various intersecting and/or conflicting voices, experiences and discourses in relation to broader ideological perspectives on English language literacy and ways of knowing (Wallace, 1988; Lankshear & McLaren, 1993; Kress, 2003; Koo, 2004, 2009). These ideological systems and ways of knowing are subject to the politics of power and of recognition. Meaning-making, including critical literacy, is underpinned by ideological

and economic, material and political systems. It is in this regard that the teaching of critical literacy will engage students in participatory democracy where they are directly involved in meaning-making themselves, entering the fray of cultural politics. The representation of diverse meaning-making positions will counter symbolic violence and oppression of hegemonic views which threaten democratic civic life.

I believe that democracy can only be fostered in the environment where diversity is encouraged through inclusive institutions and where the classroom teacher is allowed the autonomy to socialise individuals into the processes of participatory democracy, and into being critical meaning-makers who create and construct meanings through their reading-writing-speaking-listening. The classroom is itself a contested space for diverse meanings and values, and it is subjected to the cultural politics of recognition.

Statement of the Problem

At the risk of essentialising, the majority of postgraduate students do not seem to articulate what they are thinking, perhaps reflecting some of their socialisation experiences in schooling and higher education (Freire & Macedo, 1987; Koo, 2003, 2004, 2008; Pandian, 2007). Some have attributed a lack of critical literacy of Malaysian students to the examination system (Molly Lee, 1999; Koo, 2004), the dominant schooling and higher education system privileging rote learning, a hierarchic position-oriented social structure (Koo, 2008), and a history of self-censorship (Wan Abdul Manan, 2008). There are various reasons for the lack of critical literacy as a dominant social practice in Malaysia. Learners should not be unduly blamed for this situation as the case tends to be especially in popular media and in the discourse of some politicians. It is argued that a lack of critical literacy is embedded in the structural sociopolitical and cultural contexts including institutional ones (Koo, 2003). This phenomenon has been widely reported in Malaysian media and is a concern of the

Ministries of Education who have articulated the need for critical thinking, especially citing this as a requirement of the global knowledge economy (MoHE, 2007a, 2007b). However, I think more is at stake as critical literacy is considered to be the core attribute of an engaged citizen of a democratic society (UNESCO, 2004b). In this regard, this paper reports a study committing to examine the CLA perspective and method which would arguably provide the needed intervention for inculcating critical literacy.

THEORETICAL ASSUMPTIONS: CRITICAL LITERACY AWARENESS (CLA)

The current paper asserts that there is a need to challenge meaning-makers to strive for critical literacy in order to improve the social life for the majority in terms of greater access and equity. The paper was based on the recognition of diversity to enhance the democratization of education which would assure greater access and equity, especially to those who are disempowered or marginalized (Street, 1995), admittedly fraught with risks and sometimes, adverse consequences on the risk-takers who come from diverse political and socio-cultural environments, where there may be different meanings and values attached to particular practices (Koo, 2009). Critical Literacy practices have been attributed to Freire (1970) who conceived of it as a means of empowering the oppressed and marginalised populations against coercion and intimidation by dominant systems of political, bureaucratic, and economic power. Freirean critical literacy involves examining, analyzing, and deconstructing texts and contexts. To Freire (1970), critical teaching is a process driven by mutuality through the process of "conscientisation', not something imposed by the 'all-knowing' teacher against on 'ignorant' students. Matthews (2006, p. 14) sees "conscientization" as an integral and holistic learning process "where one learns to perceive the social, political and economic contradictions in society and community and take action against oppressive elements and reality". Serious

attention is given to empowering learners through critical reflection and the development of dialogue, voice and praxis (action) based on student language and cultural funds of knowledge.

Critical literacy focuses on the issues of power that exist between the reader and the writer of a text or context. These include the reader's prerogative to question the content of the text or context and the ways of seeing and assumptions of the writer (Freire & Macedo, 1987; Wallace, 1988; Baynham, 1995; Kress, 2003; Gee, 2004). The reader may reflect about the missing and marginalised voices of the text or context. And, s/he may come up with an alternative view, perhaps an enriched view of a dominant practice which may widen perspectives and lead to new knowledge and innovation. The critical reader would certainly be engaged in "problematizing" the concept, perspective or issue in a text or context. In this regard, the teacher of critical literacy would encourage students to raise questions and examine the problems from multiple perspectives, challenge students to expand their thinking, and help them discover diverse beliefs and understandings (Luke, 1993, 2005, 2009; Gee, 2004). The dialogue is active and represents a cycle of reflection and action upon the world in order to transform it. Freire (1970) terms the process as 'praxis'. However, it is important to note that a key factor in the learning of literacy is acquiring of particular abilities to work within the required discourses (Luke, 1993) of education and the workplace.

Recognising this, Koo (2008a) argues for a CLA in higher education, where students learn the ways of coping with the politics of recognition of discourses in various social and communications contexts. Koo's CLA (ibid) is a theoretical and pedagogic perspective concerned with exploring "the complex social and discursive requirements of institutions (such as those of the workplace) as well as the needed mediation of meanings, signs, and languages between the secondary and primary life-worlds of the learners. CLA is concerned with exploring the necessary transitions needed in the linguistic and literate markings and border crossings between different languages, discourses and cultures. Such intercultural crossings are required as meaning-makers move between life-worlds that of their own and across those of others (Koo, 2008b).

The CLA method, as the current paper explored, engenders greater awareness of the complexities of the sociopolitical and cultural which are often taken for granted, and/or are invisible in the working out of different literacy practices in context. It is hoped that through CLA, there would be greater consciousness of the differences and tensions between the bi/multilingual meaning-makers' diverse life worlds and the dominant language and cultural literacy that are valued in social, academic or workplace communities of practice.

Further, CLA includes exploring the lived experiences, radical experimentations with the writing of theory and interpretation by the meaning-makers which include voices, performance texts, and multi-media 'mystories' (Ulmer, 1989, Part 3; also Richardson, 1990a, as cited in Denzin, 1991, p. 27) through the use of various languages (e.g., national, vernacular languages/dialects and international languages), including those related to primary life-worlds which are often marginalized and not recognized as 'worthwhile' in mainstream literacy events as they are often not officially locked into formal and organized structures.

Critical literacy pedagogy encourages readers to question, critique and to reflect on text knowledge (Luke & Freebody, 1997) and to react to what is written in texts bringing the word from inside the text to the world outside the texts. The theorised critical literacy perspective in this paper moves reading practices from the relations internal to text to engage readers in "reading the word with the world" (Freire & Machedo, 1987). This moves reading "beyond traditional decoding or encoding, rooting it to the engagements in and simulations of the real and social worlds of readers" (Gee, 2001, p. 711) so that the text becomes a means and a point of departure for understanding one's own history, linguistic, cultural contexts and trajectories.

In this CLA journey, the readers, with the help of teacher talk, will ask harder questions of texts, analyse the ways in which texts may impose certain realities and interests over readers and help them to deconstruct these textual realities in terms of the broader ideological and political systems of which they are part of. Critical literacy awareness helps the readers engage with the unproblematised power of the author of text to make the reading relationship a negotiated and contested experience.

RESEARCH METHODOLOGY

This paper examined a Malaysian postgraduate student's intercultural negotiation of plurality and ambiguity at a culturally contested space through a post-modern qualitative research that describes thickly and interprets qualitatively what is happening in a formal higher education setting which is simultaneously informal. The latter involves encouraging the development of learner voice in the form of academic writing positioned alongside with 'informal and casual writing' (Barton & Hamilton, 1998), where the learner's national and or community languages are allowed.

The qualitative data discussed in this paper focus primarily on the teacher's talk and student's talk during classroom interactions over a semester. These classroom interactions were audiotaped and transcribed for analysis and coded thematically. This involved a corpus of approximately 120,000 words. Further, the paper analyzed the student's critical reflections in her written logs based on CLA teacher talk and on the recommended readings for the course, such as textual references in critical literacy from Paulo Freire (1970), Paulo Freire and Donaldo Macedo (1987), James Paul Gee (2004), and Catherine Wallace (1988). The reflections captured the student's journeys in negotiating contested languages use and cultural knowledge framed against diverse ideological perspectives on literacy and language use. Additionally, the paper sought to investigate how critical reflections of the student are worded "during moments of upheaval and epiphany" as a response to ideological texts and to "make sense of their experiences in terms of their meanings" (Denzin, 1991, p. 13). CLA pedagogy aims to reposition the multilingual meaning-makers' languages, ways of knowing and vernacular resources in relation to ideological perspectives on literacy (Lankshear & McLaren, 1993; Street, 1998; Wallace, 1988; Kress, 2003; Koo, 2009).

This paper is situated within qualitative research which may be seen as "a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world" (Denzin & Lincoln, 2003, p. 4-5). Qualitative research turns the world into a series of representations through the use of field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study individuals and communities in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them (Denzin & Lincoln, 2003, p. 4-5). Hence, the primary concern of the paper is in engaging with a multilingual actor in a CLA classroom using a variety of theoretical and empirical materials, including the teacher's and student's talk in the classroom to create a dialogic genre in which critical knowledge is created and represented at the same time (Ellis & Bochner, 2002). These multiple lens into the site of teacher-student CLA engagement aimed to capture both significant and problematic moments and meanings in an individual actor's life. Qualitative researchers deploy a wide range of interconnected interpretive practices to build a better understanding of the subject matter at hand. It is understood, however, that each practice makes the world visible in a different way. Hence, there is frequently a commitment to using more than one interpretive practice in any study (Denzin & Lincoln, 2003, p. 5). Qualitative research is primarily concerned with veridicality and resonance with readers and living subjects.

Denzin, Lincoln and Giardina (2006, p. 776) write that this is a time of the prophetic post-pragmatist, as a critical moral agent, to create greater individual freedom in the broader social order. To understand that actions are judged in terms of moral consequences and the meanings one brings to them, and that consequences are socially constructed through the politics of representation in truth seeking, they assert that "facts" about the world should be taken as facticities, as lived experiences, with effects, consequences, actions on the domination structures (Denzin *et al*., 2006, p. 777). In this phase:

> The meaning of a concept or a line of action or a representation lies in the practical, political, moral and social consequences it produces for an actor or collectivity. The meanings of these consequences are not objectively given. They are established through social interaction and the politics of representation. All representations are historically situated, shaped by the intersecting contingencies of power, gender, race and class (Seigfried, 1996; Collins, 1998, 2000, as cited in Denzin *et al*., 2006, p. 777).

The positivist, i.e. the so-called evidence based research (SBR), adheres to maintain a value-free objectivist science model and is unaware of the moral and political commitments of being a researcher. Denzin *et al.* (2006) assert that the experimental quantitative model does not critically interrogate:

> … the complex and dynamic contexts of public education in its many forms, sites, and variations, especially considering the…subtle social difference produced by gender, race, ethnicity, linguistic status or class. Indeed, multiple kinds of knowledge, produced by multiple epistemologies and methodologies, are not only worth having but also demanded if policy,

legislation and practice are to be sensitive to social needs (Lincoln & Canella, 2004a. p. 7, cited in Denzin *et al*., 2006, p. 770).

Data Analysis

In a response to the need for critical literacy, I developed a CLA method for multilingual domestic and international students undertaking a postgraduate master's course on language and literacy (cf theoretical assumptions section). The course aims to explore issues on language and knowledge production through qualitative methodology. The CLA Instruction in this research involves two main stages, with two steps in each stage:

TABLE 1
CLA Instruction

Stage 1: CLA TEACHER DIALOGUES	Stage 2: CLA STUDENT TASKS
Step 1: Overt Instruction	Step 1: Group Dialogues
Step 2: • Critical Framing • Literacy profiles • Relating profiles to key concepts • Reference texts • Literacy case-study	Step 2: • Transformed Critical Literacy Practices • Literacy profiles • Situating key concepts in relation to profiles • Literacy reflections on concepts, references and case-studies

Subject

The main subject in this paper, Suzaini (not her real name) is a twenty-five year old full-time student who is working in an international bank. Born in Johor Bahru, Suzaini works as a customer service officer at an international bank in Kuala Lumpur with headquarters

in Singapore. She is currently pursuing her Master's degree in a local public university. The Malay language is her mother tongue and she is fairly fluent in English.

This paper analyzed her journeys through CLA pedagogy in a Malaysian postgraduate classroom. This included Suzaini's reflections in written logs and a research project based on her responses to teacher's talk (lectures) and to the reference texts that she has been assigned to read for the course.

Investigation into Characteristics of Student Reflections in Multilingual Contexts

The student's written reflections are communicated in a variety of codes, such as formal-informal codes, the use of academic and informal Malaysian English and code-switching. The use of the learner's diverse languages is encouraged so that she learns to negotiate her various funds of linguistic and cultural knowledge and in doing so helps in the construction of her own voice.

CLA: Teacher Intervention and Talk

During the classroom intervention, the concepts of CLA were explored in relation to language choice and meaning making. The teacher scaffolds CLA at critical moments to assist learners in a critical reflection on language use, language choice and meaning-making, particularly communities of practices in institutional context. In this regard, the teacher (the researcher herself) deconstructed the meanings that are dominantly and unproblematically accepted by the gatekeepers of texts (see extracts of teacher's talk).

CLA helps to build awareness on the naturalised reproductive role of language vis a vis its transformative role in meaning-making. By arguing that "*all texts are partial*" (unedited data from teacher's talk) and they capture only partial realities of social life, the teacher emphasized the subjectivity and ideological constructions in the interpretation and production of discourses. To sensitise students to the naturalised dominant values embedded in texts,

the teacher introduces to the students the concept of critical literacy as "mindfulness" in text and speech in social-cultural-political contexts. It is hoped that by bringing them into the process of re-thinking-rereading-rewriting-re-speaking of texts and speech, students will be able to present and construct social realities more deliberately and more critically and not to be unthinking in their overuse of literacy practices, routines and protocols in language education (Camnitzer, 2009), and more broadly, in social life. This is the heart of critical literacy, mindfulness of language use in speech and text in context.

FINDINGS AND DISCUSSION

The discussion is organized in terms of emergent themes from the corpus of 120,000 words. A summary of the context and the selected extracts is provided, followed by the data analysis. The followings are the emergent themes for the study:

Theme 1: Challenging Culture as an Essentialistic Construct (see extracts 1 & 2).

Theme 2: Critical Literacy: Situating voices and inhabiting agency in an institutional context (see extracts 3, 4 & 5).

In requiring Suzaini to write and to design as she reflected on her meaning-making, the teacher made attempt to help her become reflexively self aware of the ways in which her literacy as a meaning-maker has been shaped by her personal background and by her secondary life-worlds. Suzaini became conscious that languages and dialects are valued variously according to contexts. It is from this awareness ('conscientisation') that she becomes more sensitive to the ways in which meaning makers are positioned and where they may position themselves.

Challenging Culture as an Essentialistic Construct

In the following talk, the teacher drew upon her experience with the use of her mother tongue,

Hakka, to discuss the influence of cultural politics on language and literacy in society. She pointed out that any notion and understanding about language and literacy could be studied by examining dominant socio-political-economical structures and institutions which might be the causes of cultural loss and marginalization of minority languages within the society, by promoting the "superiority" of certain language use. Contestation towards such phenomenon is needed to sustain multilingualism.

Extract 1

So...they (referring to an article by Lankshear *et al.*, 1997) are saying that language and literacy is shaped by… ah… structures… uh economic structures, political structures, cultural structures. And these structures are like umm...you know like uh…uh…like for example the bank…the publishing house… the university…ah the government…ah the political party… the church…uh and so on. These these these are structures these are organized these are emm political sociocultural economic structures…and they have a large say…they determine on some extent…ah...what is language and what is literacy. For example, I gave the example of when I was a child as a Hakka, uh…dominant language was Hakka. My Hakka in the colo uh post-colonial Malaya then before independence, just after independence was considered a minority language. And when I went to church, I was supposed to speak in… the language of the church which is English. In school, I was supposed to speak the language of the school which is English and Bahasa. So…you look that at… When you talk about language and literacy, not if I were to speak in the… good Hakka… or write in Ha-Hakka, which is actually Man-Mandarin based…I was still be considered… not someone who has

uh…dominant language and literacy… alright? So in another words I'm saying that the values around what is powerful language, what is powerful literacy is always linked to the sociopolitical structures and institutions… around it or embedded in it. So this is the orientation of the course that actually… any language and literacy... could be looked at in terms of uh... these kind of structures and these kind of organizations. So, in other words, you cannot say for example English is intrinsically a superior language. Or Hakka is intrinsically. But you look at it in terms of the cultural- politics. Why is English such a privileged language uh…today. It's not because it is intrinsically superior! But it is because of its history of privilege… okay? So I look at it uh...in terms of cultural politics. Emm…I think those of you who've attended my course last year… uh I actually shared with you an article that I wrote on the cultural politics of the English language in terms of internationalization. Right? That students coming in from international environment have to…acquire the the English language...uh of a certain kind to be able to get through the system. And this is uh done both in in any kind of international site now where English is privilege. So I'm looking at the cultural politics of English and I'm saying that… uh it is not just English of any kind but it is academic English in the university environment. So you've to write in a certain way, you have to speak in a certain way uh…to gain access and to get to graduate. What then is the… what then is the role of the educationist… in in this kind of uh… context? Do we… do we not have to be critically literate… about this kind of Englishes or any kind of language for that matter. And to be able in some ways, to help our students in some way

to make the <u>transition</u>, to make the <u>shift</u> between uh languages or language varieties that are privilege and uh... have value… have prestige to those that they… are actually enter university with. How do we make the transitions? And how do we help them in the transition? It's such a terribly a difficult job? I-I-I-I don't have the answers to all of it. But I'm saying that ah if uh the educationist or the teacher is aware of that there <u>are</u>…language and language varieties and language codes that are…considered better than others, considered more privileged than others. The teacher's role is to understand <u>why</u> they are better. Alright? And to talk the students around it and I wish I had someone who had talked to me about the cultural politics of Hakka when I was much much younger. Because in some ways it built within me when I was young, a deep-seated <u>anxiety</u> about my own languages. And uh… uh psyche… about my Hakka… emm... the the the value of Hakka in my… uh in my uh… in my development as a as a meaning maker. And the value of it. And I think in some ways because there there was not so much critical literacy around that uh… in some ways I think, I suffered cultural loss… So that, English has become much stronger force in my life than <u>Hakka</u>... should actually has been maintained as much but it wasn't. Sadly. So… I find that uh if we want to sustain multilingualism in the world… I think this contestation… should be there. I mean I'm not I'm I'm not saying that we don't learn English yeah. I'm not saying that. I'm just said that we learn English alongside... other languages… maintain it alongside other languages. And and and uh have debates around cultural politics of of English... In other words, the teacher should have a critical literacy I'm saying. Around… ah… the kind

of languages that we are teaching in schools or in the universities (unedited transcript of teacher's talk, 2009, September 15, lines 6-76).

By allowing Suzaini the space to write her reflective logs using 'informal and casual writing' (Barton & Hamilton, 1998) including informal and 'unstandard' English in her written logs alongside standard languages, the researcher (who is the teacher) has provided the learner with a third space where she enters the fray of contested positions on English language use vis a vis international and community languages. For example, after attending a lecture on language and cultural process (see extract 1) and by reading a reference text by Lankshear *et al*. (1997) (see extract 2), Suzaini included her reflection on the text revealing the vexed question of essentialised plural identities and the 'naturalised' cultures of a Malaysian.

Extract 2

> When I read this article, I question myself which culture do I belong? I am Malay but what are the identities of Malay culture that I represent? The way I eat, speaks, wear or do I belong to Malay culture? Culture is not only was derived from our ancestor but as well the influence by surround us, media and many other factors. Nowadays, media play a big role to create value of culture. For example how media gives value to the entire Hollywood actor and actress, singer, and others. How we as viewer, accept the advertisement on the what beauty is? Which culture that has high prestige?

- *Who determine which culture is good compare to other cultures?*
- *What are the different between each of the cultures?*
- *Do all cultures have values? Who determines all this?*
- *Does value of culture create by media?*
- *However who version?*
- *How is the version?*
- *Whether the majority numerical compared the minority?*
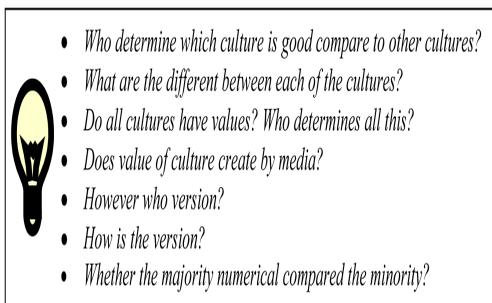
No matter which culture that we belong, we should be able to know why we choose this culture, and makes you belong to this culture or maybe you wants to create your culture (unedited student's written logs, 2009, August 4).

Here, Suzaini consciously reflected on the cultural ambiguity of being modern Malay. She attempted to explore the ambivalence of her multiple identities, situated in overlapping and competing culturally spaces with multiple languages and dialects and various cultural funds of knoweldge. Although she is a member of the majority ethnic group or the Malays, she deconstructed the seemingly 'easy description' imposed on her identity in relation to other cultural groups by articulating the following, "*Who determine which culture is good compare to other cultures?*", *"Who determines all this"*, *"However who version?"* (unedited data from her written reflective logs) whereby she was referring to the imposed and essentialised constructions of what were seen to be fixed identities. Her ambivalence and tensions on cultural ambiguity indicate how the relationship and the subjectivity of language and culture is re-interpreted and re-produced in discursive interaction.

Critical Literacy: Situating voices and inhabiting agency in an institutional context

Suzaini's experience in the global bank industry not only gives her exposure to bank products and services but also to customers from diverse backgrounds, including those from different ethnics, socioeconomic classes, languages, gender, age and lifestyles within Malaysia.

As a senior officer in an international bank (with headquarters in Singapore), she has to manage the retail & commercial banking inquiries at her workplace, especially with clients from all walks of life. She recalled that one of the more challenging experiences she has had was when she was caught in-between the bank's requirement to comply to the bank procedures that no code-switching should be used when dealing with customers, and to fulfil her customers' needs at the same time, especially in terms of non-standard English use as well as vernacular language use.

To meet the bank's general requirements and procedures in customer servicing, Suzaini is required to "*speak Standard English*" (unedited extract from her reflective logs) to convey the identity and image of the bank as an international organization following "international" standards of language use.

In the teacher's talk (cf extract 3) on the cultural politics of English language use, the teacher problematised the notion of a self-evident "Standard English", situating the discourse as one which is opened to debate:

Extract 3

And people who speak those kind of standard English…have much more… prestige. But this is not because that language has a class on its own. It's not intrinsic. But that is because people who actually spoke… the standard… had access to publish in the houses like Routledge and so on. You know. They control the BBC for a long time. Alright? So… they… this uh prestige factor is because they have had the resources. The historical cultural … resources. The economic resources to be where they are. Okay? So like uh my debate about English as a lingua franca… that is actually something that is marginalized. ELF oh you speak the ELF English it's such a…it's a pariah English. What do you want to why do you want to be associated with that.

That's because of cultural politics. Because ELF is still in the margins. It has not got uh the status that it wants to have at some point in time, that is the right of people like us multilingual to have ELF…So at the moment it still at the margins. But we want to enter into the field. We want to have a debate around it. Right? But we have unequal resources. So whether or not we make it I don't know (unedited transcript of teacher's talk, 2009, August 4, lines 747-763).

The following extract of student's talk (extract 4) illustrates the naturalized and dominant construction of Native Speaker Model as the only 'standard' permitted for English language in the bank Suzaini serves. Although she appeared to be mouthing the official discourse of the bank, she was in fact speaking against it, as shown in an ironic manner in her tone of voice.

Extract 4

Student: If you want to speak in English, do it all the way.
(*said sarcastically) (unedited transcript of student's talk, 2009, August 18, line 1707)

Many of Suzaini's customers are of Malay ethnic and Malaysian Chinese who do not speak Standard, 'Native-Speaker' English. In line with the bank's image, however, the scripts for bank products and promotion given to customer service officers are written in formal 'Standard English'. Suzaini notes that the bank officers are not allowed to code-switch when they are communicating with clients over the phone. In the Social English of multilingual Malaysians, code-switching is typical (Jacobson, 2004; Paramasivam Muthusamy, 2010). Thus, it is not surprising that the dogmatic policy of the bank in enforcing "Standard English" has caused inquiries to pile up and expressions of frustration

from the multilingual customers who are more comfortable with informal spoken English and code switching, especially in face-to-face communication (Koo, 2008).

Suzaini eventually proposed to her bank manager to translate the English language scripts into Bahasa Melayu (Malay language) to facilitate communication with Malaysian clients. Here, she was exercising praxis in terms of utilizing multilingual resources to enhance the bank services. That was eventually taken up.

Through her initiative in designing different Malay language scripts for the bank products and services, Suzaini has become more aware of her roles and responsibilities as a cultural/linguistic mediator in applying and packaging local resources and knowledge to serve the local customers who are less proficient in the 'Standard English' that the bank advocates.

Extract 5

Student: Uh… during as spoken, yes. Only now, because I, I feel like… okay uh for me to speak with those uh… Mister or Misses from Bank ABC you know, from Pahang, Bentong. I don't…I believe that….
Lecturer: STANDARD ENGLISH?
Student: Yes. And they have like, you know, "*fantastic, Sir, this is promotion"*, even a customer asked me about the internet. I mean the, the setting of the PC. I can't use like, you know, firewall everything. They might not familiar but they have to, I mean have that. So, I try to get it uh… I try to come up with a standard scripts… At the same time I try to have another script which is…okay, if you come across with this kind of customer, which language that you should use? Because you are not allowed to do a… uh code switch… (unedited transcript of teacher's and student's talk, August 18**,** 2009; lines 1672- 1684).

By engaging the student's life experiences at work, the teacher was exploring the issues of diversity in language use using CLA instruction. In this particular case, the issue of the bank's institutional power and its sole preoccupation with a single "standard English" is critically reflected by Suzaini in relation to the Malaysian client's 'othered' languages, such as spoken Malaysian English, spoken Bahasa Malaysia, Mandarin, Tamil. The student's own rising critical consciousness of such hegemonic assumptions imposed on the customers and the staff of the bank are raised through teacher's talk. Through CLA discussions, the student became even more aware of the ideologically positioning and construction of what is "standard" according to naturalized and dominant economic and media systems of meaning. In this particular case, she was able to convince the bank that Bahasa Melayu would be an appropriate means of communication. However, the use of informal English as a social variety remains elusive, at least in the minds of the bank that she works in.

CONCLUSION

The pedagogical framework on CLA explored in this paper sought to help multilingual and culturally diverse students to think critically through their plural identities and the possibilities in the representations of such complex identities in diverse linguistic and cultural ways. Through CLA pedagogy, meaning makers like Suzaini interrogate the use of English Language codes, registers and genres and those of their national and community languages to form what would be regarded as their multilingual repertoire of languages and more broadly, their funds of knowledge. In the very use of Standard English, Malaysian English (and its varieties), meaning-makers (like Suzaini) create a discursive space through which she becomes conscious of herself as occupying complex composite and competing subject positions, both in higher education and in the workplace. Through CLA, learners begin to systematically reflect, question and challenge the boundaries of what is unproblematically defined as 'academic' in relation to the vernacular,

or what is acceptable "standard" language, knowledge and behaviour in context and the issue of power in the institutional recognition of text and speech.

Inclusive educational policy and provisions, as well as classroom practice, are imperative to support the teaching and learning of critical literacy to sustain diversity in institutional, national and global contexts, which are increasingly subject to cultural differences and positions. Indeed, the teaching and learning of critical literacy are crucial to democratic process to sustain the inclusive participation of meaning-makers of diverse ideological, linguistic and cultural contexts.

IMPLICATION AND RECOMMENDATIONS

In the critical literacy framework drawn from the ideological perspective of literacy, students' literacy is based on the understanding of the student's extant sociocultural context and trajectories in relation to the possibilities of language and knowledge production. CLA stresses pedagogic and learning interventions and processes, where teachers create learner's awareness of knowledge gained from various life-experiences, both in the primary and secondary life-worlds through understanding learner's entry profiles (composite profiles of school, family and community contexts). CLA begins with understanding the learners' diverse language profile as a point of entry into the shaping of his/her own cultural consciousness towards praxis, an action that enlarges their worlds and by extension of that of humanity in its diversity.

Dominant gatekeeper valuations of standard practices, including that of the standard literacy practices in the workplace, tend to be normalized and fixated to decontextualised autonomous 'standards' in the name of 'international' norms or image. Gatekeepers may often be blind to the unquestioned acceptance and reproduction of dominant beliefs, norms, meanings and values embedded in the naturalised 'standards' in language use and meaning making in any

discourse. The current study and others (Koo, 2003, 2008) suggest that ideological larger structural and institutional issues are involved in any system of recognition of language use and of meaning production. For an equitable and sustainable HE policy and pedagogy, the vexed question of the diverse ways of knowing, meaning-making practices, languages should be debated as a commitment to the ethic of inclusion and democratic participation.

The qualitative findings illustrate that meaning-making in CLA education requires dialogic conversation and the processes of intercultural and interlingual negotiations at the site of learning. In this paper, the teacher's role in scaffolding learning was explored so that student's talk and writing involving critical literacy will gain increasing legitimacy. In CLA teaching and learning involving cultural production, the fact of the politics of recognition in language use and in knowledge production has to be brought to learner's awareness and action. Cultural contestations must go on especially within dominant and naturalised systems of power before other language/s, and other local discourses gain some kind of recognition. Meanwhile, minoritised or marginalized meaning-makers in language use have more convincing to do before they can enter the fray of cultural politics and win. Perhaps, one way is through entering into the relationship webs of meaning-makers (third space networks, e-networks). Perhaps increasing symbolic work required in innovation may provide opportunities for inclusive and alternative meaning-making in higher education and the workplace.

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The Relationship between Language Learning Anxiety, Self-Esteem, and Academic Level among Iranian EFL Learners

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ABSTRACT

The present study is an attempt to explore the relationship between language learning anxiety, self-esteem, and academic level among Iranian EFL learners. To this end, two self-report questionnaires were administered to a total of 108 language learners enrolled for Teaching English as a Foreign Language in two universities in Shiraz, Iran. Results indicated a negative correlation between language learning anxiety and self-esteem among the learners. Similarly, language learning anxiety and academic level were found to be negatively correlated. However, a positive correlation was seen between the learners' self-esteem and their academic level. The findings include pedagogical implications for both language learners and language teachers.

Keywords: Academic level, language learning anxiety, self-esteem

INTRODUCTION

For the past two decades, research on affective factors in language pedagogy has received considerable attention from language practitioners. Two of the most pervasive affective factors that have been widely studied in the literature are language learning anxiety and self-esteem. Research has proved that these two variables can considerably influence one's language learning process (e.g. Horwitz, E. K., Horwitz, M. B., & Cope, J. A, 1986; Brown, 2007), and that these two variables are intricately interwoven. Although everybody has experienced some degree of anxiety or self-esteem, these two terms are not easy to define in one sentence. The definition of anxiety ranges from a mixture of overt behavioral characteristics that can be studied scientifically to introspective feelings that are epistemologically inaccessible

(Casado & Dereshiwsky, 2004). Horwitz *et al.* (1986) defined anxiety as "the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system" (p. 125). In terms of self-esteem, Coopersmith (1967) defined it as a personal judgment of worthiness that is expressed in attitudes that the individual holds towards himself, and indicates the extent to which the individual believes in himself to be capable, significant and worthy. Research has shown that one's degree of self-esteem can play a crucial role in language acquisition. In fact, those individuals who benefit from a high level of self-esteem are expected to experience lower degree of anxiety and thus achieve more success in their language learning. Such being the case, the present study attempts to explore the relationship between language learning anxiety

and self-esteem among Iranian EFL learners. Moreover, it seeks to determine how learners' level of education is associated with their anxiety level and self-esteem. It is expected that the findings of the study would shed more light into this research area and help language learners and educators to be more successful in the process of language learning and teaching.

Learning Anxiety

The literature on anxiety reveals that learning anxiety affects one's performance in a negative way. It has been proven that there is a negative correlation between learning anxiety and second/foreign language achievement (Horwitz, 2001; Aida, 1994; MacIntyre & Gardner, 1991). Horwitz *et al*. (1986) contend that foreign language anxiety consists of "self-perceptions, beliefs, feelings and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (Horwitz *et al*., 1986, p. 128). Moreover, they identify three components of foreign language anxiety: a) communication apprehension, b) fear of negative evaluation, and c) test anxiety. Students who do not feel comfortable enough in communicating with others suffer from what is known as communication apprehension. The reason could be attributed to their limited knowledge of the language or the stressful situation they are placed in. Due to fear of negative evaluation, some students prefer to remain silent because they are afraid of committing mistakes. Such individuals do not see their mistakes as a natural part of the learning process, but as a threat to their reputation and dignity, or as a source of negative evaluation either from the teacher or their classmates. Such students are silent most of the time and are not willing to take part in classroom activities. Finally, students who exhibit test anxiety are afraid of speaking situations since they see them as test situations, rather than an opportunity for them to practice their speaking ability.

Anxiety can be divided into two types: *trait* anxiety and *state* anxiety. Trait anxiety is the tendency of a person to be nervous or feel anxious irrespective of the situation he/she is exposed to (Pappamihiel, 2002). Indeed, such anxiety is a part of a person's character and is a more permanent predisposition, which is difficult to get rid of. The second type of anxiety, called state (situational) anxiety arises in a particular situation and hence is not permanent. It is a state of nervousness or tension experienced at a particular moment in response to some outside stimulus (MacIntyre and Gardner, 1989). Foreign language classroom anxiety falls within this category.

In terms of the causes of language learning anxiety, Worde (2003) found that speaking activities, inability to comprehend, negative classroom experiences, fear of negative evaluation, native speakers, methodology, pedagogical practices, and the teachers themselves were the main causes of learning anxiety. Liu (2006), too, found out that students felt the most anxious when they responded to teachers or were singled out to speak English in class. The subjects in William and Andrade's (2008) study also see the teachers as the main source of anxiety. Therefore, Tsiplakides and Keramida (2009) advise teachers to identify the sources of anxiety in their classroom and take measures to remove them.

Anxiety and Self-esteem

Like learning anxiety, self-esteem is described in terms of three general levels. Firstly, general or global self-esteem is a stable quality within an individual and is an evaluation that one makes of one' worth. Secondly, situational or specific self-esteem is one's assessment of one's ability in a certain situation, such as work or education. Finally, task self-esteem refers to specific activities in particular situations (Brown, 2007). Research has established a relationship between self-esteem and learning anxiety. It has been demonstrated that anxiety is seen as a major threat to one's self-esteem. Patten (1983), for example, found a significant negative relationship between self-esteem and general anxiety among the participants of the study. Similarly, Peleg (2009) found a negative

correlation between test anxiety and self-esteem and a positive correlation between self-esteem and academic achievement.

Given the fact that affective variables, in general, and anxiety and self-esteem, in particular, can greatly influence one's learning process, investigating the relationship between the two seems plausible. Such being the case, the present study aims at investigating the relationship between EFL learners' anxiety level and their self-esteem at different academic levels. Most of the studies carried out in this area have been conducted in second language environments where the amount of exposure learners receive to the target language is not comparable to that of foreign language settings such as Iran. Such being the case, the present study aimed to fill this gap in the literature and find out if similar or different results would be obtained. Specifically, the study attempted to seek answers to the following questions:

1. What is the relationship between language learning anxiety and self-esteem among Iranian EFL learners?

2. Does the learners' academic level influence their level of anxiety?

3. Does academic level affect self-esteem in EFL learners?

METHODOLOGY

Participants

A total number of 108 EFL learners (44 males and 64 females) were recruited for the current study. They were selected based on cluster random sampling from two universities located in Shiraz, Iran. As for the sampling procedure, it is neither possible nor necessary to select a sample of individuals from the population of interest due to administrative problems or other restrictions. Moreover, it is often difficult, if not impossible, to select a random sample of individuals from the population. As a result, the researcher had to resort to groups rather than individuals. Such being the case, the present study utilized *cluster random sampling*, which

is a form of probability sampling. Fraenkel and Wallen (2009) define cluster random sampling as the selection of groups or clusters instead of selecting individuals. They see this particular technique as effective when considering large numbers of clusters. In this technique, the researcher first randomly chooses a number of clusters, followed by selecting a number of intact classes at random and then including all the individuals in those classes into the study. The students' major was Teaching English as a foreign language (TEFL). With regard to their educational level, the participants comprised 33 sophomores, 36 juniors and 39 seniors. The freshmen were excluded from the study since it was assumed that the questionnaires used might not be comprehensible to them.

Instruments

Two questionnaires were employed in the study, namely, the Foreign Language Classroom Anxiety Scale (FLCAS) and the Rosenberg Self-Esteem Scale (RSES). The FLCAS, developed by Horwitz *et al*. (1986), consists of 33 items that measure the degree to which language learners experience anxiety in language classrooms. The RSES, designed by Rosenberg (1965), comprises 10 items which measure individuals' self-esteem. Both the questionnaires use a Likert type scale. The reason for selecting the two instruments for the present study is that these two questionnaires are the most popular and most frequently used in the research in this area. Prior to data collection, a pilot study was carried out to determine the reliability of the instruments. The results of the pilot study revealed reliability values of .87 for FLCAS and .80 for RSES.

RESULTS

The data collected were analyzed using SPSS (Statistical Package for Social Sciences) version 16.0. As discussed earlier, the study investigated the relationship between language classroom anxiety and self-esteem among Iranian EFL learners. It also investigated the relationship between these variables and the learners'

academic level. In addition, Pearson Product Moment Correlation was also employed to analyze the collected data. The first objective of the study was to identify the relationship between foreign language classroom anxiety and self-esteem. The correlation results are displayed in Table 1.

TABLE 1
Correlation between FLCAS and Self-Esteem

		FLCAS	Self-Esteem Scale
FLCAS	Pearson Correlation	1	-.742[**]
	Sig. (2-tailed)		.000
	N	108	108
Self-Esteem	Pearson Correlation	-.742[**]	1
	Sig. (2-tailed)	.000	
	N	108	108

[**] Correlation is significant at 0.01 level (2-tailed).

As illustrated in Table 1, the correlation between foreign language classroom anxiety and self-esteem is - .74. This correlation coefficient is significant at the level of 0.01. This indicates a strong negative correlation between the two variables among the subjects of the study.

The second objective of the study was to explore the relationship between foreign language classroom anxiety and academic level. To this end, correlation analysis was run. The following table demonstrates the related results.

TABLE 2
Correlation between FLCAS and Academic Level

		FLCAS	Academic Level
FLCAS	Pearson Correlation	1	-.821[**]
	Sig. (2-tailed)		.000
	N	108	108

Table 2 (continued)

		FLCAS	Academic Level
Academic Level	Pearson Correlation	-.821[**]	1
	Sig. (2-tailed)	.000	
	N	108	108

[**] Correlation is significant at 0.01 level (2-tailed).

As shown in Table 2, the correlation between foreign language classroom anxiety and academic level is -.82, which is significant at 0.01. This suggests a high negative correlation between the two variables.

The third objective of the study was to uncover the relationship between the learners' self-esteem and their academic level. For this purpose, the correlation analysis was conducted to interpret the data. The obtained results are shown in Table 3 below.

TABLE 3
Correlation between Self-Esteem and Academic Level

		Self-Esteem	Academic Level
Self-Esteem	Pearson Correlation	1	.791[**]
	Sig. (2-tailed)		.000
	N	108	108
Academic Level	Pearson Correlation	.791[**]	1
	Sig. (2-tailed)	.000	
	N	108	108

[**] Correlation is significant at 0.01 level (2-tailed).

The results show that the correlation between self-esteem and academic level is .79. The correlation coefficient is significant at 0.01. This value indicates a high positive correlation between the two variables among the subjects undertaken in the study.

DISCUSSION AND CONCLUSION

The present study was an attempt to investigate the relationship between foreign language classroom anxiety and self-esteem among Iranian EFL learners. In addition, it also investigated the relationship between the two variables and the learners' academic level which was determined by the year they were in, namely, sophomore, junior, and senior. For this purpose, three research questions were reiterated and answered based on the findings of the study.

1. *What is the relationship between language learning anxiety and self-esteem among Iranian EFL learners?*

The results of the study revealed a high negative correlation ($r = -0.74$, P < .01) between language learning anxiety and self-esteem. Thus, it could be concluded that learning anxiety drops as self-esteem increases. In other words, the learners who benefit from a high degree of self-esteem experience lower anxiety. However, those who suffer from learning anxiety are considered to have lower self-esteem. Such finding is supported by previous research studies that have shown a negative correlation between learning anxiety and self-esteem (see Patten, 1983; Peleg, 2009). When learners perceive themselves to be capable of learning the language successfully, they will naturally experience less anxiety. With a high level of self-esteem, learners are able to overcome the obstacles of learning the language much better and consequently feel less anxious in the language learning process.

2. *Does the learners' academic level affect their anxiety level?*

The second research question was aimed at investigating the relationship between language learning anxiety and academic level. In other words, the study sought to determine whether learners' level of anxiety varies as they progress in their academic studies. The result derived from the correlation analysis suggests a high, negative correlation ($r = -0.82$, P <.01) between academic level and learning anxiety. This indicates that as learners move forward in their academic studies, their anxiety level decreases. In other words, sophomores experience a higher degree of anxiety in comparison with their juniors and seniors. This can be accounted for by the experience the learners gain through their studies, which dramatically lowers their anxiety level. It can also be argued that as learners progress in their studies, they can improve their language proficiency and get better oriented with their language learning environment and hence experience less anxiety.

3. *Does academic level affect self-esteem in EFL learners?*

The third research question of the study was to explore the relationship between self-esteem and academic level. Similar to the previous research question, it sought to explain if learners' self-esteem changes as they move along in their academic life. The results of the analysis prove a high positive correlation ($r = 0.79$, P <.01) between self-esteem and academic level. It can be argued that as learners move to a higher level of education, they develop a higher degree of self-esteem. In other words, seniors experience a higher level of self-esteem compared to their juniors and sophomores. When learners progress in their academic education, they gain more knowledge and experience about the target language, and hence, feel more competent and capable of learning the language. Moreover, when they compare their previous knowledge of the language with what they know now, they see themselves more proficient and thus experience a higher degree of self-esteem.

PEDAGOGICAL IMPLICATIONS

The findings of the present study can have pedagogical implications for both language learners and teachers. The results demonstrate that affective variables, such as anxiety and self-esteem, play a vital role in language learning. Meanwhile, the negative correlation found in the present study draws our attention to the important role these factors play in the

process of language learning. Such finding can have important implications for language practitioners. In particular, they must be made aware of the important influences of such variables on language learning and thus take appropriate measures to respond effectively to learners' affective variables. One important point is that improving one's self-esteem can result in a lower degree of anxiety and better performance. It is, therefore, suggested that language teachers take measures to build up the learners' self-esteem in order to help them be more successful in their language learning. Moreover, as suggested in the literature, learning anxiety can have a harmful effect on one's performance. Teachers, therefore, need to identify the sources of learners' anxiety, try to remove such sources and create a stress-free language learning environment. This, will in turn, facilitate the students' language learning to greater heights. Horwitz *et al*. (1986) state that two choices are available to language educators with students who are anxious: "1) they can help them learn to cope with the existing anxiety-provoking situations, and 2) they can make the learning context less stressful" (p.131). The researchers further contend that teachers should first get to know that anxiety exists before they try to find a remedy. As a result, it is unfair if teachers always attribute learners' failure to lack of knowledge. Chances are high that anxiety is at work, which prevents learners from displaying their full potential. As such, teachers need to resort to techniques and strategies to alleviate learners' anxiety. Casado and Dereshiwsky (2004) suggest some useful ways:

• Teachers need to inform students that speaking fluently and having a good accent in English require years of practice.

• Teachers need to provide students with positive reinforcement and create a relaxed classroom environment.

• Teachers can conduct lots of activities in pairs or groups. When in pairs or groups, students feel more relaxed than when they are being singled out to speak in class.

• Occasional use of native language put learners at ease.

Learners, too, need to be aware of the debilitating role of anxiety in their learning and make efforts to improve their proficiency to gain more self-esteem and hence experience less degree of anxiety. This can indeed be a key factor in learning the language effectively.

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Corporate Responsibility via Malaysian Contract Law: A Concern for Consumer Protection

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ABSTRACT

Corporate responsibility (CR) principles aim to make today's corporations responsible members of the community. Corporations in fulfilling their CR are anticipated to function within the framework of the laws and regulations as part of the legal responsibility. Having a good law that upholds human rights has been seen as a vital tool in promoting and improving the public image of a corporation in the eyes of their customers. In the area of consumer protection and contract law, the Malaysian contract law has not been a great champion of consumer rights *vis-à-vis* suppliers and manufacturers. Standard form contracts have come to dominate more than just routine transactions between suppliers and consumers. The increasing use of exemption clauses in consumer standard form contracts has now become a predominant feature of many consumer contracts. In view of increasing unethical conduct by manufacturers, consumer rights *vis-à-vis* manufacturers have also been a cause for concern. The absence of a contractual relationship between manufacturers and consumers has to an extent provided a good defence for escaping liability for defective goods by the manufacturers. The consumer rights, being the rights of third parties, have never been acknowledged under the Malaysian law of contract. Adopting the content analysis method, this paper aims at exploring CR *vis-à-vis* consumers in three selected areas of consumer and contract law, namely, the use of standard form contracts in consumer contracts, the exemption of liabilities for defective goods by traders and the rights of consumers against manufacturers under the Malaysian contract and consumer law regime.

Keywords: Corporate responsibility, contract law, consumer protection law, standard form contract, exemption clause, third party rights

INTRODUCTION

The concept of Corporate Responsibility (CR) has long been in practice by corporations in developed countries in gaining profits by taking into account the stakeholders' interest ethically or in a responsible manner. With the increasing awareness of consumer rights in Malaysia, corporations are required to be accountable to the relevant stakeholders, including the consumers. The growing market pressure has forced the corporations to behave reasonably and responsibly while contributing to the economic development in adherence to their CR. The increase in legal responsibility in the realm consumer protection and contract law in the marketplace are also influenced by the growing trends of CR initiatives.

According to Carroll (1991), CR is divided into four conceptual levels, which are economic, legal, ethical and philanthropic responsibilities.

'Economic responsibility' refers to the expectation of the corporations to maximise the profits; 'legal responsibility' is defined as the obligation of the corporations in compliance with laws while fulfilling their economic responsibility; 'ethical responsibility' suggests that corporations should behave ethically and morally; and 'philanthropic responsibility' refers to the 'voluntariness' of the corporation to be involved in charitable activities for the society (Carroll, 1991).

There is a strong link between CR and the law, as the law acts as a tool in regulating corporation activities in order to prevent them from abusing power (Cochius, 2006), especially in situations where there is imbalance in the bargaining power between two contracting parties; for example, the consumers and the traders in their contractual dealings. Besides that, the law also plays an important role in enforcing the formation of CR policies (McBarnet, 2009). This paper aims to explore CR in three selected areas of consumer and contract law, namely, the use of standard form contracts in consumer contracts, the exemption of traders' liabilities and the rights of consumers as third parties.

CONSUMER PROTECTION: CORPORATE RESPONSIBILITY THROUGH CONTRACT LAW

Law has to be taken into account in defining CR in the sphere of private law, as legal responsibility involves relationships between parties to a contract and in businesses, relationships between corporations to their shareholders (Taylor, 2008). For Carroll (1991), legal responsibility is a partial fulfilment of the 'social contract' between business and society, whereby corporations are expected to pursue their economic mission within the framework of the law. This legal responsibility is also considered as a reflection of the 'codified ethics' in the sense that they embody the notion of fair and just operations as established by the lawmakers (Carroll, 1991). Corporations are regulated by their contractual relationship with the parties in commercial

transactions through contract law; for example, terms on product guarantees are incorporated in the contract of supply and directly affect the consumers. These terms are legally binding on the suppliers. In this instance, CR transforms into a legally binding commitment through contract law with the intervention of legislation (Boeger, 2008).

Parties to a contract are free to enter into a contractual relationship as long as it is not a void or voidable contract under the Contracts Act 1950 (CA 1950). However, this freedom of contract is subject to abuse as many contracts are entered into with the imbalance of bargaining power or absolute absence of the bargaining power. For instance, in maximising their profits, corporations have often neglected their legal responsibility in contract law. Hence, many contracts are drafted in such a way to circumvent the clear provision of the CA 1950 to render its application irrelevant (Yusfarizal, 2009). Corporations enter into such contracts so as to avoid their obligations under contract law. In order to avoid civil litigation, these unfair contracts are drafted in a confusing manner that no clear provision of CA 1950 could be referred to render the contracts void or voidable. The existence of these unfair contracts has indeed impacted upon the rights and interests of consumers and there is no law to regulate them in Malaysia. Corporations enter into such unfair contracts based on their anticipation of the inadequacy of contract law in this area.

Growing human rights issues, consumer rights in particular, have forced corporations to directly adopt the aspects of human rights in their corporate policies as part of their CR. Corporations routinely make commitments in their code of conduct to enhance consumer protection so as to comply with law which is obviously a legal obligation (McBarnet, 2009). As discussed above, law plays a central role in defining CR in private law. Private institutions, such as Consumers International, ERA Consumers and Federation of Malaysian Consumers Associations (FOMCA), use private law to drive CR while market forces are being stimulated and facilitated by legal measures

(McBarnet, 2009). It is undeniable that some of the legal interventions have also come from the CR movement itself and from the change of practice it reflects and promotes (McBarnet, 2009). Consequently, the development of the consumer protection law is greatly influenced by CR, either by the practice of the corporations or by the pressure of the consumers' movement.

Citing Shells International reports, corporate responsibility (CR) essentially involves a shift from 'profits' to 'people, planet and profits' or to 'profits and principles'. The focus on the welfare of a certain group of people, namely the 'consumers' as the beneficiary of a product or service, has called upon corporate bodies to re-examine their objectives in the production and distribution of goods and the supply of services. The legal regime of consumer protection in Malaysia has contributed to the realignment of this focus. Thus, consumer protection laws nowadays play an increasing role in enforcing CR policies. The legal development in this area of the law is directly and indirectly fostering CR; the soft laws by way of policies and codes of ethics and the hard laws by means of legislations and regulations are being evolved to stimulate and facilitate market forces. In the area of consumer protection, much of the momentum for legal protection has come from the CR movement and the paradigm shift it introduces in the supply of goods and services.

CR compliance gives rise to the protection of consumer rights. Legal conformity of statutorised consumer rights equates CR compliance of a company. In the realm of consumer protection, both the developed and developing nations have adopted measures to protect consumer rights and interests by establishing institutional and regulatory framework in strengthening and enhancing consumer protection policies and legislations, encouraging international co-operations and ensuring good business practices in view of liberalisation of trade and the advancement of technology. In the implementation of CR among corporations, legal regulation is seen as one of the routes to CR. Sir Chandler (2003), for example, calls for more legal regulation, seeing voluntary CR as a 'curse' distracting from the need for effective external control. In the realm of consumer protection, the rights and interests of consumers are recognised through two forms of laws, namely, soft law and hard law.

AREA OF CONCERN I: CORPORATE RESPONSIBILITY AND EXCLUSION OF CONTRACTUAL LIABILITIES

The complexity in the trading environment with the advancement of technology has led to an increasing widespread business practices with important ramification for consumer contracts, and thus, questioning the legal and social responsibilities of corporate bodies. An area of much concern in contract law is the situation where traders attempt to exclude or limit their liability for breach of contract by including exemption or exclusion clauses in consumer contracts. Understanding the development in the area of contract law brings us to the two rivalry concepts, namely, the traditional concern for freedom of contract and the cardinal rule of contract law, while on the other hand, the concern to curb unfairness resulting from significant inequality of bargaining power, which in this context is known as the principles of consumer protection. In this context, consumer protection dictates that consumers are protected and the government is called upon to play their paternalistic role.

The mischief of exclusion clauses has been expressed by many authors. To Beale (1989), "… most customers faced with contract containing 'small print' do not know what it contains or understand the effect of the clauses, and they do not think it is worthwhile to spend the time and money necessary to find out or have the small print explained to them. Instead, they tend to ignore it and shop in terms of price." Several cases have demonstrated the court's increasing concern, particularly on the use of standard form exclusion clauses in consumer contracts. In dealing with the exclusion of liability clauses, the courts have developed and adapted formal rules. The main rules which are used are those of 'incorporation' and 'construction'. The lack

of legislative control over exclusion clauses in Malaysia has caused the courts to fall back on the common law principles in dealing with these clauses. In cases involving a consumer, however, it is difficult to ascertain the attitude of the Malaysian Courts towards exclusion clauses due to the scarcity of such cases. Nevertheless, granted that cases in this area have been very limited, the decisions in these cases have not been a great champion of consumer rights. In *Malaysian Airlines System Bhd v Malini Nathan & Anor* [1986] 1 MLJ 330, Malaysian Airlines was sued for breach of contract for failing to fly the first respondent, a fourteen year old pupil back to Kuala Lumpur. In denying liability, MAS relied on Condition 9 under the Conditions of Contract printed on the airline ticket. The Supreme Court held that MAS was entitled to rely on the clause and thus was not in breach of the contract.

However, cases involving damage due to a negligent act of one of the parties to the contract demonstrate strict attitude of the Malaysian courts towards exclusion clauses. In the case of *Chin Hooi Chan v Comprehensive Auto Restoration Service Sdn. Bhd. & Anor* [1995] 2 MLJ 100, the court took a very strict interpretation of these types of clauses in cases involving damage caused by negligence. In allowing the plaintiff's claim, Siti Norma Yaakob J states that:

> It is settled law that an exemption clause however wide and general does not exonerate the respondents from the burden of proving that the damages caused to the car were not due to their negligence and misconduct. They must show that they had exercised due diligence and care in the handling of the car.

However, the decision of Elizabeth Chapmen JC in *Premier Hotel Sdn. Bhd. v Tang Ling Seng* [1995] 4 MLJ 229 in the Kuching High Court has caused some concern as it indicates the court's readiness to give effect to a clearly worded exclusion clause in the event of negligence:

> General words of exclusion clauses would not ordinarily protect a contracting party from liability for negligence. To protect him from liability for negligence, the words used must be sufficiently clear, usually either by referring expressly to negligence or by using some such expression as 'howsoever caused'.

The legal development in the area of fundamental breach and exclusion clauses has also caused concern, particularly in consumer contracts. Cases have evidenced that exclusion clauses carefully drafted would be able to relieve traders of their liabilities even though the breach goes to the very core of the contract and as such depriving consumers of their rights. In the light of the development in the area of consumer protection, Sinnadurai (1978) opines that in cases where an ordinary consumer's transaction is involved, the courts should take a stricter view of the exclusion clause and protect the consumer against onerous terms imposed by the stronger party. He further expressed the view that the courts should recognize that the notion of freedom to contract in one's own terms in most consumer transactions is nothing more than a fiction. To Sinnadurai (1978), the court should take a more active role in protecting the weaker party and not merely taking a strict constructionist approach, nor should they abdicate their responsibility by holding that in such matters it is best left to the legislature to intervene. The role of the judges should not be perceived as mere interpreters of the law, but also as developers of law.

In Malaysia prior to 2010, the legislative development in the area of exclusion of liability appeared to be minimal. The absence of appropriate legislation to curb the use of exclusion clauses in consumer contracts in Malaysia has led to the oppression of consumers and the spread of traders' unethical conducts. In

Malaysia, it is an area much left to the creativity of the judiciary. Nevertheless, as seen above, case law development in this area of contract law has shown grave concern for consumer protection. The current law of contract has not been a great champion of the rights of consumers. The Contracts Act 1950 contains no provision on the contents of an agreement and as such, does not govern the inclusion of exclusion clause. One of the legislations in Malaysia affecting exclusion clauses is the Sale of Goods Act 1957. The Sale of Goods Act 1957 applies to contract for the sale of goods as defined in Section 4 of the Act. The Act incorporates into statutory form important principles established in case law. The Sale of Goods Act 1957, which governs dealings between business and business and business and consumers, simultaneously accords no protection to consumers as far as exclusion clauses are concerned. Instead of regulating the use of exclusion clauses in sales, the 1957 Act by virtue of section 62 allows exclusion of the implied terms and conditions by 'express agreement'.

The introduction of the Consumer Protection Act 1999 in Malaysia has to a certain extent enhanced consumer rights in contracts. However, the 1999 Act fails to address the use of exclusion clauses by traders. Although Section 6 of the 1999 Act prohibits contracting out of the provisions of the Act, it fails to cover the wide spectrum of exclusion clause which exists in consumer contracts. Despite the introduction of the 1999 Act, it nevertheless transpires that there are several major flaws. Although the 1999 Act is a long awaited statute by consumers and consumer movement groups, this hope has been set back by its very nature. The 1999 Act is very limited in its application. By virtue of Section 2(4):

> The application of this Act shall be supplemental in nature and without prejudice to any other law regulating contractual relations.

The introduction of Part IIIA of the Consumer Protection (Amendment) Act 2010 has to some extent resolved the problems associated with the use of exclusion clauses in consumer contracts in Malaysia. Under this part, when a court or the Tribunal comes to the conclusion that a contract or term is procedurally or substantively unfair or both, the court or Tribunal may declare the contract or the term as unenforceable or void. Under section 24C, "A contract or a term of a contract is procedurally unfair if it has resulted in an unjust advantage to the supplier or unjust disadvantage to the consumer on account of the conduct of the supplier or the manner in which or circumstances under which the contract or the term of the contract has been entered into or has been arrived at by the consumer and the supplier." A contract or a term of a contract is substantively unfair, under Section 24D, "if the contract or the term of the contract – (a) is in itself harsh; (b) is oppressive; (c) is unconscionable; (d) excludes or restricts liability for negligence; or (e) excludes or restricts liability for breach of express or implied terms of the contract without adequate justification." In addition to the contract or the term being held unenforceable or void, Part IIIA provides for a criminal penalty for contravention of its provisions. Under Section 24I, if a body corporate contravenes any of the provisions in Part IIIA, the corporate body shall be liable to a fine not exceeding RM250,000; and if such person is not a body corporate, to a fine not exceeding RM100,000 or to imprisonment for a term not exceeding three years or both.

The legal development in the area of exclusion clause in Malaysia, prior to the 2010 amendment, seems to lead to a conclusion that the courts in Malaysia do not seem to rise to the challenge of how such clauses could deprive the rights of a party to the contract and how such clauses, if carefully drafted, could enable one party to the contract to escape liability and leave the other party particularly the weaker and disadvantage with no recourse. Sinnadurai (1978) expresses his opinion that,

"the courts themselves have not been too bashful in expressing their contempt for such clauses." As such, a legislative control over the use of exclusion clauses in consumer contracts in Malaysia, featured in the newly introduced Part IIIA of the Consumer Protection (Amendment) Act 2010, is a very much awaited reform in this area as it seems to address CR but it has yet to be tested.

AREA OF CONCERN II: STANDARD FORM CONTRACTS AND CORPORATE RESPONSIBILITY

Standard form contract has been the practice in almost every corner of corporate business activities. Since legal compliance is a part of CR, it cannot be denied that the fact that CR in the aspect of standard form contract has not been achieved due to the absence of specific legal provisions in this matter. Although the Contracts Act 1950 remains as the superior legal provisions in any business dealings or contracts, it contains no provision either on the content of a contract or on standard form. Perhaps the reason being, as pointed out by Nik Ramlah Mahmood (1993):

> The Contracts Act 1950 attempts to codify only the basic principles of contract law. As such it does not have specific provisions dealing with contents or the terms of a contract. Hence no mention is made of clauses which limit or even exclude one party's liability, clauses which incorporate terms in other documents into the contract. It is perhaps for this reason that the Malaysian Judiciary has, hitherto, upheld the validity of clauses that seem to be unfair to consumers.

According to Parker (2006), the law is traditionally concerned with accountability – "holding people to threshold criteria of good conduct and performance". The nature of the formation and the practice of standard form contract are indeed accepted as an evidence of unequal power of bargaining between two parties. Thus, where the use of this type of contract is accompanied by inequality of bargaining power, there is a greater likelihood of them being used as an instrument of economic pressure because their terms can be weighted in favour of the interest of the stronger parties who prepared them. In this sense, the doctrine of freedom of contract is based on the premise that both parties to a contract are bargaining from position of equal strength, where each of them is free to accept or reject any term which is imposed on them in the contract. Oughton and Davis (2000) pointed out the typical features of it; a standardized, printed mode, used for all contracts of the same kind, with relatively little variation in a typical case, and with a general requirement to adhere to the terms, however one-sided, laid down by the stronger party. In Malaysia, most corporate traders use standard form contracts to dominate their routine transactions. The use of the standard form contracts, which are noticeably associated with the use of unfair terms, has, as Furmston (1991) puts it, "in the complex structure of modern society, the device of the standard form contract has become prevalent and pervasive."

In its real sense, standard form of contract stands as the kind of contract with its special features. Although not in themselves novelties, the standard form contracts, as pointed out by Lord Diplock in *Shroeder Music Publishing Co Ltd v. Macaulay* [1974] 1 WLR 308, are of two kinds, namely, those which set out the terms on which mercantile transactions of common occurrence are to be carried out, such as bills of lading and policies of insurance. "The standard clause in these contracts has been settled over the years by negotiation by representatives of the commercial interests involved and has been widely adopted because experience has shown that they facilitate the conduct of trade." On the other hand, as a result of the concentration of particular kinds of business in relatively few hands, another kind of standard form contract has emerged, "the terms of this kind of standard form of contract have not been the subject of negotiation between the parties to it, or approved by any organization representing the interests

of the weaker party. They have been dictated by that party whose bargaining power, either exercised alone or in conjunction with others providing similar goods or services, enables him to say; 'If you want these goods or services at all, these are the only terms on which they are obtainable. Take it or leave it.'" Thus, in the context of corporate dealings with the public, namely their customers by way of standard form contracts, it has been an accepted practice that the corporate body will insert standard terms into their contract with their customers without any prior negotiation. The greater bargaining power of most corporate traders or suppliers has enabled them to impose terms in contracts by the use of this kind of contracts.

It is undeniable that the use of standard form contract is extensively widespread in the era of globalisation. It has now become a predominant feature of many business contracts. The development of standard form contract in this modern society emphasises on the fact that the making of a contract is no longer a purely private act. It may be controlled or even dictated by legislative or economic pressure, and it may involve the courts in feats of construction akin to or borrowed from the technique of statutory interpretation (Phang, 1994). The use of standard form contracts undeniably has several advantages to traders engaging in numerous transactions. Standard form contracts, as Macleod (2007) explains, "First…saves the cost of individual drafting and hence time and money. … Second, the standard form contract has been used to exploit economic advantage." The widespread of the standard form contract shows that although its use has the advantages of saving time, trouble and expense in any bargaining over terms, its practice in market transaction has now become a major problem due to its characteristics. Macleod (2007) points out that the use of a standard form contract to disadvantage the weaker party is particularly the case in respect of those enterprises doing business with public at large: the terms and price are rigidly laid down, and the only choice available to the individual public is whether or not to contract at all. By looking at the nature of the

formation of this particular type of contract, the obvious disadvantage to consumers can be seen from the drafting aspect where the terms of the contract have been drafted by one party without any negotiation with consumers. Furthermore, standard form contract is known for its formality in using small print which gives difficulties for any person to read. It is undeniable that most standard form of contracts are using small print which, as one of its characteristics, gives the perception that the effect of the small print is to undermine or even to contradict the terms expressly agreed between them. Generally, the party using such standard terms does not want or intend the other to be aware of their contents, so long as they are incorporated into the contract (Thorpe & Bailey, 1999).

Although it was initially formed as an agent to facilitate market transactions, it is now seen as hindering the business process and increasing the cost of goods. Its practice in the daily business transaction has drawn attention due to its nature and characteristics. Standard form contracts are not a result of a negotiation process; they are offered on a 'take it or leave it' basis, and they do not require a meeting of minds and are usually not read by each individual public. Its contents often consist of unfair terms and exclusion clauses which usually give benefits and advantages to the one who prepares the contract. In this new era, the practice of standard form contract reflects a new dimension of oppression of the strong and powerful corporate body towards the vulnerable public at large. Therefore, since CR is part of compliance to the legal regulations, there is unfortunately no CR reflected in the area of standard form contract due to the loopholes of the law.

AREA OF CONCERN III: RIGHTS OF CONSUMERS AS THIRD PARTIES UNDER THE MALAYSIAN CONTRACT LAW

Third party rights relate to the doctrine of privity of contract. It is this very doctrine that prevents third parties from obtaining any rights under a contract. In terms of consumers as the third

parties, their rights in relation to claims against manufacturers are hampered by the doctrine of privity since there is no direct contractual relationship between them. It is this lacuna in the law of contract that the CR compliance of companies has been seen as lacking and in need of review.

The Law Commission of United Kingdom (1991) states that the doctrine of privity refers to the principle, in which:

> ...as a general rule, a contract cannot confer rights or impose obligations arising under it on any person except the parties to it. There are several different aspects of the doctrine: (i) a person cannot enforce rights under a contract to which he is not a party; (ii) a person who is not a party to the contract cannot have contractual liabilities imposed on him; (iii) contractual remedies are designed to compensate parties to the contract, not third parties.

Viscount Haldane explained the importance of this particular principle in *Dunlop Pneumatic Tyre Co. Ltd. v Selfridge* [1915] AC 847:

> …in the law of England certain principles are fundamental. One is that only a person who is a party to a contract can sue on it. Our law knows nothing of a *jus quaesitum tertio* arising by way of property, as, for example under a trust, but it cannot be conferred on a stranger to a contract as a right to enforce the contract *in personam*.

PN Leigh-Jones (1969) further explained the difference between 'vertical privity' and 'horizontal privity' in the context of trade:

> …the manufactured product descends down the chain of distribution from the maker through various middlemen (wholesalers, distributors, etc) to the retailer who sells to the public;

'vertical privity' is the privity which each of these persons has with his predecessor and successor in the chain. 'Horizontal privity' is the ensuing privity of contract between the retailer and the first domestic consumer who buys from him, and then between that consumer and any sub-consumer, if such there be.

Clearly, it can be seen here that the doctrine of privity negates recognition of third party rights in contract under common law.

It is very unfortunate that the Contracts Act 1950 does not provide for either one of these principles. Conforming to common law tradition, reference is made to cases. In Malaysia, the landmark case on privity is *Kepong Prospecting Ltd. v Schmidt* [1968] AC 810. In this case, Thomson L.P. indicated the doctrine of privity applied in Malaysia was similar to that approved in *Dunlop Pneumatic Tyre Co. Ltd. v Selfridge* [1915] AC 847. Quoting Viscount Simonds in *Scruttons Ltd. v Midlands Silicones Ltd.* [1926] AC 446, the court also agreed that any changes in the law should be left to the Legislature. In considering the application of doctrine of privity at the Privy Council, several stipulations under the Contracts Act 1950 were referred. One important section is section 2(d). This particular provision shows the possibility of a third party being given the task of providing or furnishing consideration in a contract. This is indeed ironic considering the true application of the doctrine of privity would negate such occurrence. The Privy Council held that only parties to the contract could initiate proceedings or be sued under a contract. Lord Wilberforce when delivering judgement on behalf of the Board said:

> ...Their Lordships were not referred to any statutory provision by virtue of which it could be said that the Malaysian law as to contract differs in so important a respect from English law. It is true that section 2(d) of the Contracts

(Malay States) Ordinance gives a wider definition of "consideration" than that which applies in England, particularly in that it enables consideration to move from another person than the promisee, but the appellant was unable to show how this affected the law as to the enforcement of contracts by third parties, and it was not possible to point to any other provision having this effect. On the contrary, paragraphs (a), (b), (c) and (e) support the English conception of a contract as an agreement which only the parties to it can sue.

Koh (1968) respectfully criticises the decision by the Privy Council. It was argued that sections 2(a), (b), (c) and (e) only provided definitions to offer/promise, acceptance, promisor, promisee and agreement. The relevant section that should have been referred to was section 2(i), which reads: "an agreement which is enforceable by law at the option of one or more of the parties thereto, *but not at the option of the other or others*, is a voidable contract." Another scholar who was of the same opinion was Furmston (1999) who points out that the decision of *Kepong* gives the impression that the doctrine of privity exists separately from the rule of consideration that a consideration must move from the promisee. It can also be noted here that there is a lack of paternalism and formalism by the courts. Perhaps more importantly, the courts in the subsequent cases on privity, such as *Fima Palmbulk Services Sdn. Bhd. v Suruhanjaya Pelabuhan Pulau Pinang* [1988] 1 MLJ 269, *Overseas Chinese Banking Corporation Ltd. v Woo Hing Brothers (M) Sdn. Bhd.* [1992] 2 MLJ 86 and *Sulisen Sdn. Bhd. v Kerajaan Malaysia* [2006] MLJU 341 have failed to recognise the criticisms by the two writers. The courts in these cases have embraced the application of the doctrine of privity without giving any elaboration on privity. Thus, it can clearly be seen here that the doctrine of privity prevails in Malaysia, and this is similar to the position in the United Kingdom pre-1999. In fact, the applied

principle is derived from the unforgettable case of *Tweddle v Atkinson* (1861) 1 B&S 393 that was later applied in *Dunlop Pneumatic Tyre* and *Midland Silicones.* Apparently, there is a lacuna in Malaysian law with regard to third party rights or *jus quaesitum tertio* in contract.

It was indeed fortunate that some breakthrough in this matter was achieved with the coming into force of the Consumer Protection Act 1999 in Malaysia, especially for contracts involving consumers. The issue of third party rights appears more dominantly in consumer contracts as it prevents suits against retailer and manufacturer. Sakina (2000) notes that in instances involving horizontal privity, such as that in *Donoghue v Stevenson* [1932] AC 562, *Preist v Last* [1903] 2 KB 148 and *Frost v Aylesbury Dairy* [1905] 1 KB 609, only contractual parties can claim any benefit from the contract. Other consumers, for example a guest or spouse who are not the contracting party, do not have any contractual remedy even in instances in which they suffer personal injury due to the defective products. Section 3 of the Consumer Protection Act 1999 defines 'consumer' as *inter alia*, i.e. "a person who acquires or uses goods or services for personal, domestic or household purpose, use or consumption". The same section also defines 'manufacturer' to include, "in cases where goods are manufactured outside Malaysia and the foreign manufacturer of the goods does not have an ordinary place of business in Malaysia, a person who imports or distributes those goods". Upon reading these definitions with the provisions stipulated in Part V on guarantees in respect of supply of goods, it appears that a sub-consumer or a consumer who is not a buyer can bring a claim against a supplier even if there are no contractual relations between them. With regard to consideration as an element in establishing rights under a contract, it is asserted here that the consumer is a beneficiary of the product and provides the necessary consideration upon purchasing the goods. Thus, within the chain of distribution, the consumer has provided the necessary consideration to the manufacturer when the purchase price travels indirectly to them (Suzanna *et al.*, 2008). In

terms of vertical privity, section 50 of the Act provides for consumers' rights of redress against manufacturers and section 38 on manufacturer's express guarantee, including warranty card. Nevertheless, it is most unfortunate that section 2(4) of the Act states that the application of the Act is supplemental in nature and without prejudice to any other law regulating contractual relation. Sakina (2000) opines that section 2(4) arouses the question whether the deposition of doctrine of privity in the application of implied guarantees in supplying of goods under the 1999 Act is in itself impliedly contrary to Contracts Act 1950 in light of the Privy Council's decision in *Kepong* where the court brought in the application of doctrine of privity into Malaysian contract law. In light of this observation by Sakina (2000), Malaysian legislators should give due regard to the matter. Thus, it would be a good place to begin formulating a more coherent and concrete law on the third party rights.

For Malaysia, it is argued here that perhaps the better solution would be to enact a statutory mechanism as this ensures clarity and the ability to tackle the matter head-on. In addition, it is also asserted here that two principles should be the underlying tones of the Malaysian statutory solution, which is similar to the approach taken by the Law Commission of United Kingdom (Adams *et al.*, 1997) when proposing the *Contracts (Rights of Third Parties) Act 1999*. The first principle is respect for the intention of parties to the contract and the second is respect for the reasonable expectation of the third party as regards the possible benefit. The Commission observed that it is an axiom in the law of contract that intentions of the contracting parties are of utmost importance. Therefore, in cases where they have provided for such intention to confer enforceable benefit upon a third party, such stipulation must be respected and given effect. In general, the proposed Act for Malaysia would confer rights and impose a limited liability upon a third party. Such proposal, however, does not in any way acknowledge a third party as a party to the contract, nor does it enable the third party to enforce the whole contract; only to the extend of terms conferring benefit and imposes

liability on the third party. It is hoped that this approach will reconcile the current provision under section 2(d) of the Contracts Act 1950 which provides that a third party may furnish a consideration to a contract. This section is a unique feature of the Malaysian contract law that needs to be addressed to ensure a coherent contractual regime. Naturally this will relegate the decision of *Kepong*. The Act should also provide that any other devices that are currently utilised to circumvent the strictness of privity can still be applied by the courts, such as trust, tort, indemnity or any other statutory devices. In conclusion, the current contractual regime in Malaysia still lacks a more cohesive method in addressing third party rights under contract. It is contended that a detailed statutory mechanism would be the best solution as it is more definite and lucid, thus providing better assistance to the third party in enforcing benefits conferred.

CONCLUSION

CR is a concept whereby corporations not only consider their profitability and growth, but also the interests of the society and the environment by taking responsibility for the impact of their activities on stakeholders, employees, shareholders, customers and many more interested groups. Law has been seen as a route to ensuring CR among the corporations. In the realm of consumer contracts, however, the law has not developed in a manner warranted to protect consumers against abuses by traders. In the area of exclusion of contractual liabilities of traders, standard form contracts and rights of third parties, the law of contract is not the champion of consumer rights. As such, in these areas of contract law, there is a need for a legal control of the conduct of corporations in their dealings with consumers. Nevertheless, it is not justifiable to change certain principles simply to tackle the needs of a group of people, i.e. the consumers. Therefore, the focus of amendment should be on the Consumer Protection Act 1999 being the main consumer statute in this respect.The prime object of any legal protection regime is to protect the weak from the strong.

Therefore, the law intervenes to particularly confer protection on the weak in order to provide some balance. Law, by its very nature, provides for CR among corporations. In conferring protection, a society is, by law, setting standards on how corporations should behave in upholding the tranquillity of the society. The same applies to the legal protection for the consumers through contract law. This kind of legal protection does not work in a vacuum. It must relate to the reality of the market in which it operates. In light of the current development in the market place and the importance of CR, the protection of modern consumer should focus on ensuring fair and balanced consumer legislation which protects both consumers and ethical businesses from exploitation of unscrupulous persons.

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Determinants of Income Security of Older Persons in Peninsular Malaysia

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ABSTRACT

This study explored factors determining income security of older Malaysians aged between 55 to 75 years, using a nationwide database on the economic and financial aspects of ageing. The sample comprised 1,841 older respondents in Peninsular Malaysia. Logistic regression analysis was performed (Nagelkerke R Sq. = 0.48) to test the likelihood of selected socio-demographic and economic factors contributing to income security. The results indicated that 53% of the elderly were in the income secure category, earning per capita income above the poverty level. The three strongest predictors were current work, being male and of Malay origin. The findings suggest that income security of older Malaysians can be strengthened by providing work opportunities with decent pay and self-employment opportunities to the elderly in informal urban and rural sectors. Such strategies are of paramount importance to help reduce poverty and vulnerability, increase income security and ultimately the quality of life of the elderly.

Keywords: Income security, old age, work, retirement

INTRODUCTION

Evidences from past research have revealed high incidence of old age vulnerability and poverty, especially in developing countries. Unlike the developed industrialised countries, which attain high income status before the population ageing phenomenon took place, developing countries have to face the double jeopardy of having to eradicate poverty while coping with the challenges accompanying ageing society at the same time.

Malaysia has been considered as a middle-income country with strong economic growth in the last two decades. With a rapid economic development, reduced fertility rate (2.3 in 2010) and longer life expectancy (72 for male and 77 for female in 2010), the statistics of those 60 years and older is expected to increase at a rapid rate from the current 7.4% out of 27.5 million to 15% by 2035, when the country becomes an aged nation. Unlike other developing countries, Malaysia dramatically reduced the poverty rate of its general population from a high percentage of 19.4% in 1987 to merely 3.8% in 2008 (9th Malaysia Plan Mid Term Review, 2010). From a few studies on ageing carried out in the last decade, however, there is evidence showing that poverty and economic vulnerability among older persons in Malaysia are on the increase (Hamid & Masud, 2010; Economic Planning Unit, 2001). Malaysia may have successfully reduced the poverty rate of the general population but there is lack of awareness, specifically on the increases in economic vulnerability and poverty amongst the older generations.

The economic condition of older persons in Malaysia is mainly dependent on the income earned from the formal or informal sectors of employment (as in traditional agriculture, petty trading, or self-employment). Retirees from the public sector are provided with pension payments, while those from the private sector received a lump sum of their savings from Employer Provident Fund (EPF) upon retirement. According to the Government's reports, 40% of the working population have been earning low income, i.e. at an average of MYR3000/= (USD 937/=@ exchange rate of 3.2) and below per month since 1990s (New Economic Model of Malaysia [NEM] Report, 2010). The low earnings yield inadequate savings and pension payments to support living in retirement (as mandatory retirement takes place at an early age of 55 for private sector employees and at 58 years for public sector workers beginning 2008).

The current rate of rapid ageing continues to increase the proportion of vulnerable low income retirees and the aged poor annually, particularly from informal employment in the urban as well as the agricultural sector. Furthermore, past studies on older persons born prior to World War II have shown that majority who have minimal or no education, and were formerly engaged in low paying jobs, comprised between 22% to 30% of the aged poor (Hamid & Masud, 2010; 9th Malaysia Plan Mid Term Review, 2010; Pala, 2005). A high proportion is not covered under any forms of social protection, and is therefore likely to be exposed to vulnerability risks.

Policy makers may assume that the elderly who are poor come from poor households; therefore, eradicating poverty among the poor households will eliminate poverty in old age. Furthermore, the society generally assumes that upon retirement, the adult children are responsible and economically endowed to provide supports and care for their ageing parents. It is also society's assumption that old age and retirement are a phase in life where one withdraws from active work; a phase when one will live a leisurely life and a time to focus on volunteerism for charitable work as well as on

religious activities. It is also the stand of the government to encourage families to carry out their traditional responsibility in caring and providing support to the elderly parents. It is also the expectation of elderly parents that their children will provide them old age economic security.

In reality, and with the cost of living escalating annually, however, the livelihood of the bulk of the labour force in Malaysia who retire with earnings less than RM3000/= (USD 937/=) per month is threatened by economic insecurity. This is the emerging concern that needs to be addressed by the government. Income security of the elderly is of paramount importance as it will ensure that their daily basic needs are met. Hence, a study on the extent of income security of older retirees and self-employed workers in Malaysia is certainly relevant and timely. The output of such studies will provide input for policy makers to enact on providing opportunities for older persons to be gainfully engaged after retirement, and thereby, reducing their economic burden while encouraging them to continue contributing to nation building. Hence, the objective of this paper is to highlight the characteristics and factors contributing to income security of the retirees and other older persons in Malaysia. It is important for us to explore whether income security could be enhanced by the availability of external socio-economic factors such as work rather than age as biological factors.

LITERATURE REVIEW

Economic and Income Security

Economic security provides one with a feeling of being safe and protected, a freedom from worries of loss, and a sense of protection against loss, attack, harm or environmental catastrophe. According to the International Labour Organization, the concept of economic security indicates having the means to "limit the impact of uncertainties and risks people face daily while providing a social environment in which people can belong to a range of

communities, have a fair opportunity to pursue a chosen occupation and develop their capacities via what the ILO calls decent work" (ILO, 2008). With the availability of a "decent work", one is ensured of a decent pay, an essential component of income security, which refers to "a state of income adequacy, whether actual, or perceived and/or expected current and future income, either earned or in the form of social security and other benefits."

Several authors have used monetary income and non-monetary income as a measure of income security. According to Smeeding and Sandstrom (2005), in terms of poverty and income measurement, "the best current definition is disposable cash and near-cash income (DPI) which includes all types of money income, minus direct income and payroll taxes and including all cash and near cash transfers, such as food stamps and cash housing allowances, and refundable tax credits such as the earned income tax credit (EITC)".

Findings from past research on ageing in Malaysia indicate a strong correlation between income security with a combination of economic resources, such as earned income, savings, assets and investments, accumulated during an older person's working life as well as in retirement (Masud & Haron, 2008; Hamid & Masud, 2008; Ofstedal, Reidy & Knodel, 2003). Stable, consistent and adequate income is crucial to ensure economic security and well-being, especially when health situation deteriorates with advance in old age.

Economic Resources in Old Age

The theory of life cycle perspective on earning hypothesizes that income increases with age until one reaches retirement or decides to retire; dissaving occurs during the retirement period (Schenk, 1997-1998). On the contrary, older persons in developing countries do not have the income surplus to accumulate for savings or investment for old age. This is particularly true in countries where poverty is prevalent, and a large proportion of the workers are earning meagre income to meet their daily sustenance since they are mostly engaged in informal employment in urban areas as well as in the traditional agriculture sector.

In Malaysia and other developing countries, savings and investments from the income earned earlier during one's working life are not common practices among the workers. How much the elderly have for old age depends on many factors, mainly the economic environment of the country, work availability, wages from the different sectors of employment, ageism, prior savings and investment, knowledge on financial planning, as well as remittance from children. The characteristics of the workers, which include the level of education attained, as well as the financial knowledge and behaviour of the elderly in their pre-retirement days, also influence how much they can save and invest for old age. One of the contributing factors is the low earnings of the workers as a result of low skills due to low level of education.

The main source of income of the majority of the formal sector workers is generally the monthly salary, which will be cut off at an early retirement age of 55, thereby leaving very little time to accumulate savings for old age. Income security of the public sector workers is ensured as they receive monthly pension payment, albeit at a reduced amount (40-60% less of their last salary). On the other hand, the private sector workers receive a lump sum of their Employee Provident Fund (EPF) savings on the first day of their fifty fifth birthdays. In 2007, the median savings received by the Employee Provident Fund (EPF) members on the first day of retirement was MYR 50000/= (USD 15,000/=) as 80 % of the members earned wages at USD 923/= or lower per month. Data from a research conducted by the EPF revealed that 70% of the retirees exhausted all their EPF savings within 10 years of retirement (Othman, 2010; Serigar, 2010). Only 18% of EPF members would have adequate savings (Serigar, 2010). The income security of the retirees in Malaysia is at stake, unless jobs after retirement are available to supplement their daily household expenses and savings.

For the elderly workers in the informal sector, the concept of retirement does not actually exist, except for the rich plantation owners, smallholders, land owners and entrepreneurs, who will have savings and investments for their retirement. The traditional farmers in the rural areas, the landless, and the daily waged workers in urban areas, who earn minimal income, will continue to "work till they drop" old age. Their vulnerability to poverty is inevitable, especially in light of limited coverage of government social assistance programme for the elderly.

Socio-demographic Characteristics of the Elderly

The socio-demographic variables of age, sex, ethnicity, education and stratum are important indicators in studies on income distribution in Malaysia. However, in the case of older persons, their living arrangement as co-residents or non co-residents with their children is closely correlated with their well-being. Past studies have shown evidence, whereby the economic condition of older persons living alone or with spouse only is worse than those who co-reside with their adult children. In a study carried out by Masud (2011, in press), majority of the older persons in Malaysia, especially older women, are economically better off living with their children who provide them the financial, socio-psychological care and supports. The co-resident elderly may have minimal amount of personal income, but Masud's analysis on total household income in her study (by adding older persons' income to the total earnings of other family members) indicated that their economic status improved, with the majority of them no longer living below poverty line for 2002, at MYR 529 per month (at 2002's exchange rate of MYR3.8 = USD139.21) or at MYR6348.00 (USD1670.53) per year.

Good health is imperative for an older person to be able to work, which in turn requires money and time to keep oneself healthy. It is well-acknowledged that with increased longevity, the vulnerable older persons are exposed to diseases and disabilities, which consequently increase the costs of health care and treatment. Fortunately in Malaysia, basic health care services are available for free to the poor, while others can still access the services for a minimal fee.

With regard to ethnicity, past research and government reports (9th Malaysia Plan, 2006) have shown that the ethnic Malays and other indigenous ethnic groups (called Bumiputras), who are largely located in rural areas, are socio-economically disadvantaged than the Chinese and Indians, who reside mostly in the urban areas (Ng & Tey, 2006). Meanwhile, research on ageing (Hamid & Masud, 2008; 9th Malaysia Plan, 2005-2009) has shown that a high proportion of the older Malays have minimal or no education, are engaged in the traditional agriculture, and therefore earning lower income than those of other ethnic groups. The same disadvantages were also found amongst older women, who rarely work and have no other sources of income, except from their children (Haron, Masud, & Yahaya (2011, in press).

RESEARCH METHOD

Source of Data

The dataset used in this study was taken from a research on the economic and financial aspects of ageing, a project funded under the Intensified Research Priority Areas (IRPA), Ministry of Science, Technology and Innovation, Malaysia (2004). The data collection, using a multistage random sampling approach, was conducted nationwide in May 2004 among 2327 older persons aged 55 to 75 (Masud *et al.*, 2004, 2005). A total of 3000 older persons aged 55 to 75 were systematically selected from 75 *mukims (a cluster of villages in a district)* to participate in the survey. The data were collected through personal interviews conducted by trained enumerators using the questionnaires developed in four different languages (Malay, Mandarin, Tamil, and English) to facilitate interviews with the respondents of different ethnic groups in Malaysia.

In this article, a subset of older Malaysians living in Peninsular Malaysia (n = 1841) aged between 55 to 75 years were selected. The dataset contained very rich information on socio-demographic, income and expenditure of the elderly. Variables on the socio-demographic characteristics, employment status, and income from various sources and assets held were analyzed using descriptive and logistic regression procedures.

Measurement

The dependent variable in this study was income security, which was measured by computing the total income received by the elderly from various sources of personal income in 2004/2005 (work, pensions, allowance, savings, interests and dividends, monetary transfer from children and relatives, as well as income from government social security assistance programme). These sources were grouped together into three categories: (i) work related income, (ii) investment related income, and (iii) income transfer from children and other family members. The computed total income was compared to the per capita income demarcating poverty levels for 2004. Individuals with per capita income above MYR180/= per month (or USD 47.37/= at the exchange rate of MYR 3.8) were categorised as income secured, while those receiving per capita income below the poverty line were considered as income insecure.

The work variable was taken from older persons' responses to their work status, namely, "currently working"; "used to work before" and "never worked". From the living arrangement of older persons, "co-residents" was re-coded from the responses of the elderly indicating: (1) they lived together with spouse and children, or surviving spouse living together with children and grand children; and (2) "non co-residents" status for the elderly living alone or living with spouse only. As for home ownership, an indicator of asset owned, the responses on "own home (1)", "owned by family members (2)", "rent (3)" or "owned by relatives/friends (4)"

were taken into account. The three ethnic groups in Malaysia (Malays, Chinese and Indians), as well as other demographic variables, such as age, marital status, education level, number of children, urban-rural stratum and health status (good and bad) were included and recoded as 1 or 0 in the logistic regression.

Data Analysis

A logistic regression analysis model was used to assess the extent to which the selected independent variables explained the income security of older people in Malaysia. It was hypothesized that older persons who were categorised in the income secured group were younger than 65 years old, actively engaged in work, better educated, are likely to be male, living in urban areas, married and co-reside with their children, healthy and also financially better off as they have savings and investments to finance themselves in their old age.

RESULTS

Descriptive Analysis

In this study, the sample comprised 1,841 older respondents, and they were almost equally represented by gender. The mean age of the sample was 63.7%, whereby about 28% were in the "young-old" group (64 years and below) and 72% were in the "old-old" group (27% were 65 to 70 years, while the remaining 45% were 71 – 75 years). The respondents were mostly married (66%), while the remaining were either widowed (30%), divorced (2%) or never married (2%). A higher percentage of the elderly sample are Malays (66%), whereas the Chinese, Indians and other ethnic groups comprised the remaining one third of the sample. A slightly higher percentage of the older persons were living in the rural areas (55%), and 76% others were co-residing with their children and other family members. The non co-residing elderly were those living alone (6.2%, of which a higher proportion comprised of older women) and those living with spouses only (17.8%). A significantly high proportion of the elderly (80%) had low education level (29%

with no formal education, and 51% had primary education), while 18.4% had high school and 1.2% had tertiary education.

Income Security Status of Older Persons

The findings of the current study indicated that 53% of the elderly are in the income secure category, and this is slightly higher than those in the income insecure category (47%) who are vulnerable and living relatively under uncertain financial conditions (see *Fig. 1*). This is evidenced from the relatively low annual mean and median incomes from various sources (USD2342.89 per annum, at the exchange rate of MYR3.8 to 1 USD in 2004 as seen in Table 1), which are slightly above the household poverty line of USD1953.23 per year, based on the official poverty line index for 2004. The per capita income of the general population was USD5000. It was evidenced from the data that those earning additional income during retirement are inclined to be financially secured compared to the others who are not.

Overall, based on a sub-sample of the elderly respondents who were actively engaged in work (n=900; 49%), the findings revealed that work-related income (either from the current work or pensions) is the main source of income, yielding the highest mean value (USD2184.33 per annum) compared to the other two sources of income, namely, investment and income from family members/children. A substantial proportion of the elderly (68%) received monetary contribution from children and other family members. Nonetheless, both the annual mean (USD693.28) and median (USD315.79) incomes received from these sources were found to be the lowest compared to the mean and median incomes from the other two sources. On the other hand, only 9% of the total respondents have investments but the income received from this source is merely the second highest (USD562 per annum) in value.

When analysed by sex on the three categories of sources of income (Table 1), there is a significant distinction in the distribution and the amount of income received by male and female older persons. The mean and median incomes of elderly men were found to be higher than those received by elderly women in two out of the three categories of income sources. The only category where the income of older women is higher than men is in the income received from adult children and other family members, in proportion (55%), as well as in the value with the median of USD328.95 per annum compared to the median of USD328.95 for men annually.
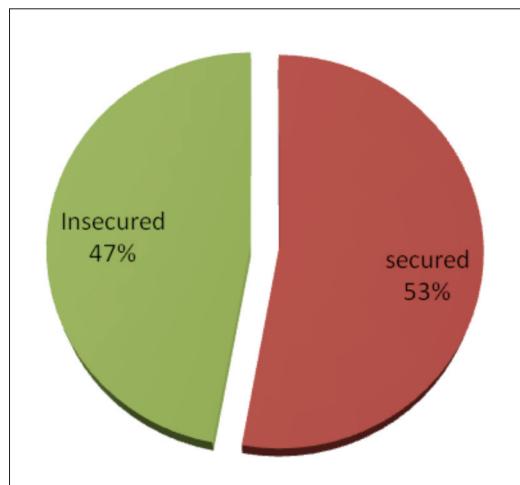
Fig. 1: Income security status of older Malaysians

TABLE 1
Distribution of the Mean and Median Income of Older Persons (USD$)

| | Income Received per annum (USD) | | | | | | | | |
| | Work–related | | | Investment | | | Children | | |
Gender	N (%)	Mean	Median	N (%)	Mean	Median	N (%)	Mean	Median
Male	631 (70%)	2547.20	1578.95	91 (54.8%)	1089.13	526.32	553 (44%)	643.49	315.79
Female	269 (29.9%)	1334.50	947.37	75 (45.2%)	843.80	394.74	702 (56%)	732.56	328.95
Total**	900 (49%)	2184.33	1326.32	166 (9%)	978.49	473.68	1255 (68%)	693.28	315.79

Note: *Total mean income for n = 1841 is RM8903 (USD2342.89 at the exchange rate of MYR 3.8 in 2004)
** Multiple sources of income received

TABLE 2
Distribution of older persons by work status and gender

| Work Status in Retirement | Male (915) | | Female (926) | | Total (1841) | |
	N	%	N	%	N	%
Still working	354	19.2	119	6.5	473	25.7
Used to work	552	30.0	447	24.3	999	54.3
Never work	9	0.4	360	19.6	369	20.0

Work Status of the Elderly

It is generally assumed that older persons will retire from active employment once they reached retirement age. In this study, slightly over half of the respondents (54.3%) were retirees (responding to the question "Yes, have worked before but not now"). However, it is important to take note on the fact that a quarter of the elderly population (25.7%) were still working after retirement, with the percentage of men (19%) who continued to work after retiring is higher than women (6.5%). Meanwhile, one fifth of the elderly (20%) reported that they had never worked before; all were women except 0.4% were men. This is consistent with the findings from the previous studies in Malaysia which indicated that older women largely were homemakers, or they did not work since they were illiterate, or suffering from some form of disability or have minimal level of schooling to qualify for work (Masud, 2011, in press).

Most of the elderly worked in the informal sector (even with minimal returns) due to the ease of entry into this sector and the nature of their work as petty traders, farmers or fishermen. Some who ventured into business worked as self-employed proprietors, entrepreneurs, or traders in micro- and small-scaled business (Labour Force Survey, 2007). Others worked in casual employment or continued to work on their farms.

Factors Determining Income Security

The main purpose of the study is to explore factors that could predict income security of the older persons. Conceptually, this study aimed to examine whether income security of older persons is mainly an outcome of older persons' capacity, due to the interaction of multiple factors such as education, availability of work, tradition (as seen in the filial obligations of adult children to their parents), or the financial factors that determine old age income security.

Logistic regression analysis was performed to assess the impact of a number of selected predictor variables on the likelihood that the elderly respondents would report that they were income secured. The results of the full model containing all the selected socio-demographic and financial predictors were statistically significant, with chi-squared =783.302 (df 11) = 76%; p<.001), and the model as a whole explained 48% (Nagelkerke R squared) of the variance in the income security, and correctly classified 78.7% of the cases.

As shown in Table 3, 9 of the variables made unique statistically significant contributions to the model. The strongest predictor of income security is work, with an odds ratio of 23.66, indicating that the sample respondents who worked were 23.66 times more likely to report having sufficient income and were income secured than those who did not work, controlling for all other predictors in the model. It is interesting to note that even the respondents who used to work before were 1.7 times more likely to report having income above the poverty level. This might be the group of retirees who received monthly pension payments from the government scheme for public sector workers. Savings and home ownership are among other economic factors predicting the odds ratio of 1.90 and 1.52 respectively, the likelihood of the elderly respondents to report having income security.

Among the demographic predictors, ethnicity emerged as a strong predictor, indicating 2.9 times more likelihood of Malays reporting to be income secured compared to non-Malays. This could be explained by the fact that a proportion of the Malays, who comprised 66% of the sample, might be from the pension receiving category, getting constant flow of income albeit low. They may have earned low income but owned assets such as land and houses (especially small traditional farmers). Another strong predictor is gender, whereby older males were found to be 2.87 times more likely than

TABLE 3
Logistic Regression results for the income security of older Malaysians.

	Variables	B	S.E.	Wald	Sig.	Exp (B (odds ratio)
Socio-demographic predictors	Gender: Male	1.055	.154	46.778	.000	2.871
	Age	-.030	.012	6.675	.010	.970
	Education: non-tertiary	-.888	.169	27.718	.000	.411
	Married	-.221	.160	1.894	.169	.802
	Ethnic Groups: Malays	1.069	.147	52.898	.000	2.913
	Non-coresidence	-.027	.155	.031	.860	.973
	No. of children	-.088	.035	6.435	.011	.916
	Location: Rural	-.051	.132	.150	.699	.950
Economic predictors	Health: poor	.084	.169	.248	.619	1.088
	Own home	.417	.140	8.841	.003	1.518
	Savings	.643	.128	25.383	.000	1.903
	Working	3.164	.250	160.664	.000	23.665
	Used to work	.533	.179	8.840	.003	1.703
	Constant	.515	.759	.459	.498	1.673

older women to have adequate income. This finding is consistent with the results from earlier studies on gender, poverty and ageing (Ofstedal, Reidy, & Knodel, 2003), which indicated that older women were the disadvantaged and the poorest among the older persons.

It is noteworthy that three very important indicators (namely, age, education, and the number of children) yielded significant and negative results, with the odds ratio value less than 1. As for age, the odds ratio value is 0.97 (with a negative co-efficient of - 0.30; p< 0.01), indicating that as older persons advance in age, they are .97 times more likely to fall into the income insecure category. As for education, the result showed the odds ratio of 0.41 times likelihood of the older persons with no education or with elementary and secondary education to fall into the income insecure group compared to those having tertiary education. The negative and significant odds ratio value for the number of children indicated 0.92 times likelihood of an older person who would fall into the income insecure group with additional child.

DISCUSSION AND POLICY IMPLICATIONS

The findings from this nationwide study revealed the extent of income insecurity comprising almost half of the total elderly respondents. This proportion is huge and it reflects the severe state of vulnerability and poverty of older persons in Malaysia. This finding reiterates the government's concern over the bottom 40% of the households who continue to have very low income levels, particularly those in the rural areas (NEM, 2010). The Malaysian National Economic Advisory Council in a special report on the New Economic Model pointed out that:

> "…the results of household income surveys over the years suggest that income growth has been strong only for the top 20% of Malaysian income earners, particularly since 1990. The bottom 40% of households have

experienced the slowest growth of average income, earning an average of MYR1,222 (USD382) in 2008."

As indicated in this study, however, "work" after retirement emerges as a powerful determinant for the income security of older persons. This important finding implies that income security can be strengthened when appropriate, flexible or part time work with decent pay and self-employment opportunities are made accessible to the elderly, particularly women who are among the poorest, and with low education and low skills.

Among other significant socio-demographic determinants, gender and age are predictors that deserve special attention as inputs for gender sensitive policies for older persons. Demographic data revealed that many or a high percentage of older women in the oldest-old group, who have outlived their husbands, are living in poverty (Hamid & Masud, 2010). Past research has also shown evidence of extreme income insecurity among older women, and this is especially highest amongst the divorced, widowed, and never-married. With advancing age, the health of these women will also continue to deteriorate and disability starts to set in. Moreover, escalating costs in health care and treatment, apart from the high cost of living, will further erode any savings they have and drive a substantial proportion into poverty. The existing social protection programme in Malaysia, known as Old Age Assistance provided by the government, needs to be reviewed and expanded in its coverage with the increase in the number of specifically frail and poor elderly women and men.

The results indicating the low percentage of older persons having low and insufficient amount in savings and investments also implied the unpreparedness of these older persons to finance their long years in retirement. This is mainly due to the low earnings of the workers during their working years, as a result of the low skills and low level of education. Hence, the Malaysian

government has launched several economic transformation programmes to increase wages and productivity of workers through the New Economic Model (2010-2020), with the aim to bring the country out of the "middle-income trap" and become a high-income developed nation by 2020. These strategies, together with programmes on personal financial literacy, are hoped to ensure the future elderly cohorts to live in comfort and dignity.

Meanwhile, input on the macro development and employment policies for older workers at this point in time are relevant and timely, and these are specifically in line with the government's 5-year development thrust on human capital investment in the 10th Malaysia Plan (2011-2015). The "inclusive for all" employment strategy should particularly take into account the stock of human capital of older persons. There should be an amendment to the current Employment Act 1955 to include elderly-friendly employment policies that offer appropriate and flexible work opportunities, training and re-training programmes to eradicate any form of discrimination against employing older persons. Investing in older workers is as important as investing in youths since such strategies will ensure increase in national productivity, with increased availability of qualified, experienced, skilled older human resources who could continue to contribute to Malaysia's economic growth. These strategies are of paramount importance to help reduce poverty and vulnerability by enhancing capacity of older persons to strengthen their income security and ultimately improve their quality of life.

CONCLUSION

Based on the study on the determinants of income security of older Malaysians, work emerged as the strongest determinant of income security, whereby almost half of the older persons (48.9%) in the study derived post-retirement income from work and other work-related activities. Although majority of the older persons in Malaysia (68%) received remittances from their children, the

median values was the lowest compared to other income sources. Gender responsive employment policy is very much desired to cater to the needs of older women whose main income derived from children may not be sufficient. They need income from work and other permanent sources, such as Old Age Assistance programme for their economic security. Hence, measures to enhance the capacity of the current and future retirees to be economically active and productive are imperative if the government is serious in its commitment to ensure that older persons live healthy, productive and independent life. Thus, it can be concluded that the income security of older persons can be strengthened by having policies that remove discriminatory barriers to work and offer opportunities to invest in the productive capacity of older persons, both male and female, who are willing to work to improve their economic well-being in their later life.

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(JSSH)

October 2011 – March 2012

The Editorial Board of the Journal of Social Sciences and Humanities wishes to thank the following for acting as referees for manuscripts published in this issue of JSSH.

Special Acknowledgement

The **JTAS Editorial Board** gratefully *acknowledges* the assistance of **Doreen Dillah**, who served as the English language editor for this issue.

Pertanika

Our goal is to bring high quality research to the widest possible audience

Journal of Social Sciences and Humanities

INSTRUCTIONS TO AUTHORS
(Manuscript Preparation & Submission Guidelines)

Revised March 2012

We aim for excellence, sustained by a responsible and professional approach to journal publishing.
We value and support our authors in the research community.

> Please read the guidelines and follow these instructions carefully; doing so will ensure that the publication of your manuscript is as rapid and efficient as possible. The Editorial Board reserves the right to return manuscripts that are not prepared in accordance with these guidelines.

About the Journal

Pertanika is an international peer-reviewed journal devoted to the publication of original papers, and it serves as a forum for practical approaches to improving quality in issues pertaining to tropical agriculture and its related fields. *Pertanika* began publication in 1978 as Journal of Tropical Agricultural Science. In 1992, a decision was made to streamline *Pertanika* into three journals to meet the need for specialised journals in areas of study aligned with the interdisciplinary strengths of the university. The revamped Journal of Social Sciences & Humanities (JSSH) 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, particularly in the Asia Pacific region. Other *Pertanika* series include Journal of Tropical Agricultural Science (JTAS); and Journal of Science and Technology (JST).

JSSH is published in **English** and it is open to authors around the world regardless of the nationality. It is currently published four times a year i.e. in **March**, **June**, **September** and **December**.

Goal of *Pertanika*
Our goal is to bring the highest quality research to the widest possible audience.

Quality
We aim for excellence, sustained by a responsible and professional approach to journal publishing. Submissions are guaranteed to receive a decision within 12 weeks. The elapsed time from submission to publication for the articles averages 5-6 months.

Indexing of *Pertanika*
Pertanika is now over 33 years old; this accumulated knowledge has resulted in Pertanika JSSH being indexed in SCOPUS (Elsevier), EBSCO, DOAJ and CABI.

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

We also have views on the future of our journals. The emergence of the online medium as the predominant vehicle for the 'consumption' and distribution of much academic research will be the ultimate instrument in the dissemination of research news to our scientists and readers.

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.

Editorial Statement

Pertanika is the official journal of Universiti Putra Malaysia. The abbreviation for *Pertanika* Journal of Social Sciences & Humanities is *Pertanika J. Soc. Sci. Hum.*

Guidelines for Authors

Publication policies

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

Editorial process

Authors are notified on receipt of a manuscript and upon the editorial decision regarding publication.

Manuscript review: Manuscripts deemed suitable for publication are sent to the Editorial Board members and/or other reviewers. We encourage authors to suggest the names of possible reviewers. Notification of the editorial decision is usually provided within to eight to ten 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.

Author approval: Authors are responsible for all statements in articles, including changes made by editors. The liaison author must be available for consultation with an editor of *The Journal* to answer questions during the editorial process and to approve the edited copy. Authors receive edited typescript (not galley proofs) for final approval. Changes **cannot** be made to the copy after the edited version has been approved.

Please direct all inquiries, manuscripts, and related correspondence to:

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or visit our website at http://www.pertanika.upm.edu.my/ for further information.

Manuscript preparation

Pertanika accepts submission of mainly four types of manuscripts. Each manuscript is classified as **regular** or **original** articles, **short communications**, **reviews**, and proposals for **special issues**. Articles must be in **English** and they must be competently written and argued in clear and concise grammatical English. Acceptable English usage and syntax are expected. Do not use slang, jargon, or obscure abbreviations or phrasing. Metric measurement is preferred; equivalent English measurement may be included in parentheses. Always provide the complete form of an acronym/abbreviation the first time it is presented in the text. Contributors are strongly recommended to have the manuscript checked by a colleague with ample experience in writing English manuscripts or an English language editor.

Linguistically hopeless manuscripts will be rejected straightaway (e.g., when the language is so poor that one cannot be sure of what the authors really mean). This process, taken by authors before submission, will greatly facilitate reviewing, and thus publication if the content is acceptable.

The instructions for authors must be followed. Manuscripts not adhering to the instructions will be returned for revision without review. Authors should prepare manuscripts according to the guidelines of *Pertanika*.

1. Regular article

Definition: Full-length original empirical investigations, consisting of introduction, materials and methods, results and discussion, conclusions. Original work must provide references and an explanation on research findings that contain new and significant findings.

Size: Should not exceed 5000 words or 8-10 printed pages (excluding the abstract, references, tables and/or figures). One printed page is roughly equivalent to 3 type-written pages.

2. Short communications

Definition: Significant new information to readers of the Journal in a short but complete form. It is suitable for the publication of technical advance, bioinformatics or insightful findings of plant and animal development and function.

Size: Should not exceed 2000 words or 4 printed pages, is intended for rapid publication. They are not intended for publishing preliminary results or to be a reduced version of Regular Papers or Rapid Papers.

3. Review article

Definition: Critical evaluation of materials about current research that had already been published by organizing, integrating, and evaluating previously published materials. Re-analyses as meta-analysis and systemic reviews are encouraged. Review articles should aim to provide systemic overviews, evaluations and interpretations of research in a given field.

Size: Should not exceed 4000 words or 7-8 printed pages.

4. Special issues

Definition: Usually papers from research presented at a conference, seminar, congress or a symposium.

Size: Should not exceed 5000 words or 8-10 printed pages.

5. Others

Definition: Brief reports, case studies, comments, Letters to the Editor, and replies on previously published articles may be considered.

Size: Should not exceed 2000 words or up to 4 printed pages.

With few exceptions, original manuscripts should not exceed the recommended length of 6 printed pages (about 18 typed pages, double-spaced and in 12-point font, tables and figures included). Printing is expensive, and, for the Journal, postage doubles when an issue exceeds 80 pages. You can understand then that there is little room for flexibility.

Long articles reduce the Journal's possibility to accept other high-quality contributions because of its 80-page restriction. We would like to publish as many good studies as possible, not only a few lengthy ones. (And, who reads overly long articles anyway?) Therefore, in our competition, short and concise manuscripts have a definite advantage.

Format

The paper should be formatted in one column format with at least 4cm margins and double spacing throughout. Authors are advised to use Times New Roman 12-point font. Be especially careful when you are inserting special characters, as those inserted in different fonts may be replaced by different characters when converted to PDF files. It is well known that 'μ' will be replaced by other characters when fonts such as 'Symbol' or 'Mincho' are used.

A maximum of eight keywords should be indicated below the abstract to describe the contents of the manuscript. Leave a blank line between each paragraph and between each entry in the list of bibliographic references. Tables should preferably be placed in the same electronic file as the text. Authors should consult a recent issue of the Journal for table layout.

Every page of the manuscript, including the title page, references, tables, etc. should be numbered. However, no reference should be made to page numbers in the text; if necessary, one may refer to sections. Underline words that should be in italics, and do not underline any other words.

We recommend that authors prepare the text as a **Microsoft Word** file.

1. Manuscripts in general should be organised in the following order:

   o **Page 1: Running title.** (Not to exceed 60 characters, counting letters and spaces). This page should **only** contain the running title of your paper. The running title is an abbreviated title used as the running head on every page of the manuscript.

     In addition, the **Subject areas** most relevant to the study must be indicated on this page. Select one or two subject areas (refer to the *Scope Form).*

   o A **list** of number of **black and white / colour figures and tables** should also be indicated on this page. Figures submitted in color will be printed in colour. See "*5. Figures & Photographs"* for details.

   o **Page 2: Author(s) and Corresponding author information**. This page should contain the **full title** of your paper with name(s) of all the authors, institutions and corresponding author's name, institution and full address (Street address, telephone number (including extension), hand phone number, fax number and e-mail address) for editorial correspondence. The names of the authors **must** be abbreviated following the international naming convention. e.g. Salleh, A.B., Tan, S.G., or Sapuan, S.M.

Authors' addresses. Multiple authors with different addresses must indicate their respective addresses separately by superscript numbers:

George Swan[1] and Nayan Kanwal[2]
[1]Department of Biology, Faculty of Science, Duke University, Durham, North Carolina, USA.
[2]Office of the Deputy Vice Chancellor (R&I), Universiti Putra Malaysia, Serdang, Malaysia.

o **Page 3**: This page should **repeat** the **full title** of your paper with only the **Abstract** (the abstract should be less than 250 words for a Regular Paper and up to 100 words for a Short Communication). **Keywords** must also be provided on this page (Not more than eight keywords in alphabetical order).

o **Page 4 and subsequent pages**: This page should begin with the **Introduction** of your article and the rest of your paper should follow from page 5 onwards.

Abbreviations. Define alphabetically, other than abbreviations that can be used without definition. Words or phrases that are abbreviated in the introduction and following text should be written out in full the first time that they appear in the text, with each abbreviated form in parenthesis. Include the common name or scientific name, or both, of animal and plant materials.

Footnotes. Current addresses of authors if different from heading.

2. **Text.** Regular Papers should be prepared with the headings **Introduction**, **Materials and Methods**, **Results and Discussion, Conclusions** in this order. Short Communications should be prepared according to "*8. Short Communications.*" below.

3. **Tables.** All tables should be prepared in a form consistent with recent issues of *Pertanika* and should be numbered consecutively with Arabic numerals. Explanatory material should be given in the table legends and footnotes. Each table should be prepared on a separate page. (Note that when a manuscript is accepted for publication, tables must be submitted as data - .doc, .rtf, Excel or PowerPoint file- because tables submitted as image data cannot be edited for publication.)

4. **Equations and Formulae.** These must be set up clearly and should be typed triple spaced. Numbers identifying equations should be in square brackets and placed on the right margin of the text.

5. **Figures & Photographs.** Submit an original figure or photograph. Line drawings must be clear, with high black and white contrast. Each figure or photograph should be prepared on a separate sheet and numbered consecutively with Arabic numerals. Appropriate sized numbers, letters and symbols should be used, no smaller than 2 mm in size after reduction to single column width (85 mm), 1.5-column width (120 mm) or full 2-column width (175 mm). Failure to comply with these specifications will require new figures and delay in publication. For electronic figures, create your figures using applications that are capable of preparing high resolution TIFF files acceptable for publication. In general, we require **300 dpi or higher resolution for coloured and half-tone artwork** and **1200 dpi or higher for line drawings.** For review, you may attach low-resolution figures, which are still clear enough for reviewing, to keep the file of the manuscript under 5 MB. Illustrations may be produced at extra cost in colour at the discretion of the Publisher; the author could be charged Malaysian Ringgit 50 for each colour page.

6. **References.** Literature citations in the text should be made by name(s) of author(s) and year. For references with more than two authors, the name of the first author followed by '*et al*.' should be used.

Swan and Kanwal (2007) reported that …
The results have been interpreted (Kanwal *et al*. 2009).

o References should be listed in alphabetical order, by the authors' last names. For the same author, or for the same set of authors, references should be arranged chronologically. If there is more than one publication in the same year for the same author(s), the letters 'a', 'b', etc., should be added to the year.

o When the authors are more than 11, list 5 authors and then et al.

o Do not use indentations in typing References. Use one line of space to separate each reference. The name of the journal should be written in full. For example:

  ▪ Mellers, B. A. (2006a). Choice and the relative pleasure of consequences. *Psychological Bulletin*, *126*, 910-924.
  ▪ Mellers, B. A. (2006b). Treatment for sexually abused children and adolescents. *American Psychologist*, *55*, 1040-1049.
  ▪ Hawe, P. (2005). Capturing the meaning of "community" in community intervention evaluation: Some contributions from community psychology. *Health Promotion International*, *9*,199-210.

- Braconier, H. and Ekholm, K. (2006). Swedish multinationals and competition from high and low wage location. *Review of International Economics*, *8*, 448-461.

  - ○ In case of citing an author(s) who has published more than one paper in the same year, the papers should be distinguished by addition of a small letter as shown above, e.g. Mellers (2006a); Mellers (2006b).

  - ○ Unpublished data and personal communications should not be cited as literature citations, but given in the text in parentheses. 'In press' articles that have been accepted for publication may be cited in References. Include in the citation the journal in which the 'in press' article will appear and the publication date, if a date is available.

7. **Examples of other reference citations**:

   Monographs: Kalimapour, Y.R. (2004). *Images of the U.S. Around the World: A Multicultural Perspective*. Albany, NY: State University of New York Press.

   Chapter in Book: Bjork, R. A. (2007). Retrieval inhibition as an adaptive mechanism in human memory. In H. L. Roediger III & F. I. M. Craik (Eds.), *Varieties of memory & consciousness* (pp. 309-330). Hull: Hull University Press.

   - *Proceedings*: Amir Awang. (2006). Counseling, human resources development and counseling services. In Sulaiman M. Yassin, Yahya Mat Hassan, Kamariah Abu Bakar, Esah Munji and Sabariah Mohd. Rashid (Eds.), *Proceedings of Asia Pacific Conference on Human Development* (p. 243-246). Serdang: Universiti Putra Malaysia.

8. **Short Communications** should include **Introduction, Materials and Methods, Results and Discussion, Conclusions** in this order. Headings should only be inserted for Materials and Methods. The abstract should be up to 100 words, as stated above. Short Communications must be 5 printed pages or less, including all references, figures and tables. References should be less than 30. A 5 page paper is usually approximately 3000 words plus four figures or tables (if each figure or table is less than 1/4 page).

   *Authors should state the total number of words (including the Abstract) in the cover letter. Manuscripts that do not fulfill these criteria will be rejected as Short Communications without review.

STYLE OF THE MANUSCRIPT

Manuscripts should follow the style of the latest version of the Publication Manual of the American Psychological Association (APA). The journal uses American or British spelling and authors may follow the latest edition of the Oxford Advanced Learner's Dictionary for British spellings.

SUBMISSION OF MANUSCRIPTS

All articles should be submitted electronically using the ScholarOne web-based system. ScholarOne, a Thomson Reuters product provides comprehensive workflow management systems for scholarly journals. For more information, go to our web page and click "**Online Submission**".

Alternatively, you may send your electronic files (manuscript, along with the **Form BR 25** comprising *Declaration*, *Referral A* and *Scope* form) together with a **cover letter** directly to the Executive Editor. If the files are too big to email, mail a CD of your files. The forms and the sample of the cover letter are available from the *Pertanika*'s home page at http://www.pertanika.upm.edu.my/ or from the Executive Editor's office upon request.

All articles submitted to the journal **must comply** with these instructions. Failure to do so will result in return of the manuscript and possible delay in publication.

Please do **not** submit manuscripts to the editor-in-chief or to UPM Press directly. All manuscripts must be **submitted through the executive editor's office** to be properly acknowledged and rapidly processed:

Cover letter

All submissions must be accompanied by a cover letter detailing what you are submitting. Papers are accepted for publication in the journal on the understanding that the article is original and the content has not been published or submitted for publication elsewhere. This must be stated in the cover letter.

The cover letter must also contain an acknowledgement that all authors have contributed significantly, and that all authors are in agreement with the content of the manuscript.

The cover letter of the paper should contain (i) the title; (ii) the full names of the authors; (iii) the addresses of the institutions at which the work was carried out together with (iv) the full postal and email address, plus facsimile and telephone numbers of the author to whom correspondence about the manuscript should be sent. The present address of any author, if different from that where the work was carried out, should be supplied in a footnote.

As articles are double-blind reviewed, material that might identify authorship of the paper should be placed on a cover sheet.

Peer review

In the peer-review process, three referees independently evaluate the scientific quality of the submitted manuscripts. The Journal uses a double-blind peer-review system. Authors are encouraged to indicate in **referral form A** the names of three potential reviewers, but the editors will make the final choice. The editors are not, however, bound by these suggestions.

Manuscripts should be written so that they are intelligible to the professional reader who is not a specialist in the particular field. They should be written in a clear, concise, direct style. Where contributions are judged as acceptable for publication on the basis of content, the Editor or the Publisher reserves the right to modify the typescripts to eliminate ambiguity and repetition and improve communication between author and reader. If extensive alterations are required, the manuscript will be returned to the author for revision.

The editorial review process

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

1. The 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 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 executive editor asks them to complete the review in three weeks and encloses two forms: (a) referral form B and (b) reviewer's comment form along with reviewer's guidelines. 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 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 Editorial Board, 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 submit a revised version of the paper to the executive editor along with specific information describing how they have answered' the concerns of the reviewers and the editor.

5. The executive editor sends the revised paper out for 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 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, the paper is sent to that Press and 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 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.

English language editing

Authors are responsible for the linguistic accuracy of their manuscripts. Authors not fully conversant with the English language should seek advice from subject specialists with a sound knowledge of English. The cost will be borne by the author, and a **copy of the certificate** issued by the service should be attached to the cover letter.

Note: When your manuscript is received at *Pertanika*, it is considered to be in its final form. Therefore, you need to check your manuscript carefully before submitting it to the executive editor.

Author material archive policy

Authors who require the return of any submitted material that is rejected for publication in the journal should indicate on the cover letter. If no indication is given, that author's material should be returned, the Editorial Office will dispose of all hardcopy and electronic material.

Copyright

Authors publishing the Journal will be asked to sign a declaration form. In signing the form, it is assumed that authors have obtained permission to use any copyrighted or previously published material. All authors must read and agree to the conditions outlined in the form, and must sign the form or agree that the corresponding author can sign on their behalf. Articles cannot be published until a signed form has been received.

Lag time

The elapsed time from submission to publication for the articles averages 5-6 months. A decision of acceptance of a manuscript is reached in 2 to 3 months (average 9 weeks).

Back issues

Single issues from current and recent volumes are available at the current single issue price from UPM Press. Earlier issues may also be obtained from UPM Press at a special discounted price. Please contact UPM Press at penerbit@putra.upm.edu.my or you may write for further details at the following address:

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Pertanika

Our goal is to bring high quality research to the widest possible audience

Pertanika is an international peer-reviewed leading journal in Malaysia which began publication in 1978. The journal publishes in three different areas — Journal of Tropical Agricultural Science (JTAS); Journal of Science and Technology (JST); and Journal of Social Sciences and Humanities (JSSH).

JTAS is devoted to the publication of original papers that serves as a forum for practical approaches to improving quality in issues pertaining to tropical agricultural research or related fields of study. It is published four times a year in **February**, **May**, **August** and **November**.

JST caters for science and engineering research or related fields of study. It is published twice a year in **January** and **July**.

JSSH deals in research or theories in social sciences and humanities research with a focus on emerging issues pertaining to the social and behavioural sciences as well as the humanities, particularly in the Asia Pacific region. It is published four times a year in **March**, **June**, **September** and **December**.

Why should you publish in Pertanika Journals?

Benefits to Authors

PROFILE: Our journals are circulated in large numbers all over Malaysia, and beyond in Southeast Asia. Recently, we have widened our circulation to other overseas countries as well. We will ensure that your work reaches the widest possible audience in print and online, through our wide publicity campaigns held frequently, and through our constantly developing electronic initiatives via *Pertanika* online submission system backed by Thomson Reuters.

QUALITY: Our journals' reputation for quality is unsurpassed ensuring that the originality, authority and accuracy of your work will be fully recognised. Each manuscript submitted to Pertanika undergoes a rigid **originality check**. Our double-blind peer refereeing procedures are fair and open, and we aim to help authors develop and improve their work. *Pertanika* JTAS is now over 33 years old; this accumulated knowledge has resulted in *Pertanika* being indexed in SCOPUS (Elsevier), EBSCO, DOAJ, CABI and AGRICOLA.

AUTHOR SERVICES: We provide a rapid response service to all our authors, with dedicated support staff for each journal, and a point of contact throughout the refereeing and production processes. Our aim is to ensure that the production process is as smooth as possible, is borne out by the high number of authors who publish with us again and again.

LAG TIME: Submissions are guaranteed to receive a decision within **14 weeks**. The elapsed time from submission to publication for the articles averages 5-6 months. A decision of acceptance of a manuscript is reached in 3 to 4 months (average 14 weeks).

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Call for Papers

Pertanika invites you to explore frontiers from all fields of science and technology to social sciences and humanities. You may contribute your scientific work for publishing in UPM's hallmark journals either as a regular article, short communication, or a review article in our forthcoming issues. Papers submitted to this journal must contain original results and must not be submitted elsewhere while being evaluated for the *Pertanika* Journals.

Submissions in English should be accompanied by an abstract not exceeding 300 words. Your manuscript should be no more than 6,000 words or 10-12 printed pages, including notes and abstract. Submissions should conform to the *Pertanika* style, which is available at www.pertanika.upm.edu.my or by mail or email upon request.

Papers should be double-spaced 12 point type (Times New Roman fonts preferred). The first page should include the title of the article but no author information. Page 2 should repeat the title of the article together with the names and contact information of the corresponding author as well as all the other authors. Page 3 should contain the title of the paper and abstract only. Page 4 and subsequent pages to have the text - Acknowledgments - References - Tables - Legends to figures – Figures, etc.

Questions regarding submissions should only be directed to the Executive Editor, *Pertanika* Journals.

Remember, *Pertanika* is the resource to support you in strengthening research and research management capacity.

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