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Contents

Review Article

Towards a Modified Approach to Human Security in Southeast Asia - A Perspective from Bangi

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ABSTRACT

The concept of "security" has spurred the imagination of people for as long as there has been a need to overcome fear. Traditionally in the field of International Relations, the issue of security has been discussed from the "realist" perspective. With the end of the Cold War, security has been recast to include issues such obvious threats as organized criminal activities, (including trafficking in humans, drugs, and weapons), plus threats to human rights, health and safety, and opportunities for education and economic well-being. Concurrently, this shifting paradigm has signalled an increasing interdependence and the importance of non-military issues; it also demonstrates the influence of a "neo-liberal" approach, in which security concerns are increasingly focused on human well-being and less on the state. Human security literature can be traced way back at least to 1994, when the United Nations Development Programme (UNDP) published the "Human Security Framework." It had seven dimensions, namely, environmental, economic, health, personal, community, political and food. Three years later, the dimension of "cultural security" was added in a refined version created by the United Nations Educational Scientific and Cultural Organization (UNESCO). In this article, the authors provide a critique of that resulting model. The models emanating from the UN agencies are useful and comprehensive, but since they are intended to be universally applicable to all countries, they need to be modified when applied to specific regions or countries by taking into account the specificities of the region. Thus, we offer the rationale for a modified and extended model based on UNDP and UNESCO models, which we call, "The Bangi Approach to Human Security," or "BAGHUS." We analyzed that human security issues fell

into two major categories, namely, "man-made issues" and "natural disasters." In this article, the focus is on the former. Preliminary findings suggest that BAGHUS provides a complementary platform that is useful for analyzing the security needs of a country. It involves two new dimensions, social security, other than it recognizes the link between personal security and community security. It is hoped that, as a new approach, BAGHUS will contribute to a better understanding of human security issues in the SE Asian region and elsewhere.

Keywords: BAGHUS, human security, Southeast Asia, realist, neo-liberal

INTRODUCTION

The notion of Human Security stems partly from the development theory put forward by Amartya Sen, the Indian-born Nobel Laureate in Economics and a Cambridge University professor (HDR, 1994). His research led to the United Nations Development Programme's (UNDP) promotion of "human security" as a new approach to human development problems. Among other things, Sen listed threats to sustainable development, including population explosion, economic inequities, population movements (e.g., refugees), environmental deterioration, as well as illicit drug trafficking and international terrorism. Consequently, in order to counter these threats, the UN grouped seven kinds of human security as priority target areas, namely, Economic, Environmental, Political, Food, Personal, Health and Community.

Although human security as an approach to general security was originally intended to be considered as universally applicable, both uneven development in different parts of the world and the variances of different cultures contribute to the variety of human security issues that have emerged (UNDP, 2005, 2010). The models emanating from the UN agencies are useful and comprehensive, but since they are intended to be universally applicable to all countries, they need to be modified when applied to specific regions or countries, by taking into account the specificities of the region. Thus, we offer the rationale for a modified and extended model based on UNDP and UNESCO models. It is the purpose of this article to offer a complementary framework, an approach that is tailored to conditions on human security of South East Asia (SE Asia) by taking into account the specificities of the region. The framework will provide a modified and extended model based on UNDP and UNESCO models to better explain human security. The UNESCO model, for instance, added cultural security, signalling the importance of culture in a globalized world (UNESCO, 2008, 2003). This article will address the specificities of human security in the Southeast Asian Archipelago,[1] and the reasons that the nature and circumstances of this region calls for a local approach, to security in general and to human security in particular. This modified and extended model is called "the Bangi

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[1]SE Asia archipelago is made up of eleven sovereign states, namely, Brunei, Cambodia, Laos, Indonesia, Malaysia, Myanmar, the Philippines, Thailand, Timur Leste, Singapore and Vietnam.

Approach to Human Security" or BAGHUS (see reasons below).

We suggest nine core elements of BAGHUS, and intend to highlight the practical usage of the model as human security issues over the past two decades have been beset with controversy regarding conceptions of peace and human security once thought to be universal. This controversy has been further complicated by the fact that so many of these concepts have been applied along with the related issues. The imposition of such conceptions of human security is often rejected in the local communities of the Southeast Asian archipelago, whose beliefs and day-to-day practices differ in so many ways from those of the West. Nevertheless, the differences are sometimes accommodated through various forms of structural and institutional assimilation or integration.[2] The ultimate aim of this article is to contribute to a better understanding of human security issues that are specifically associated with this region of the world.

WHY BAGHUS?

The creation of BAGHUS was based on specific characteristics associated with SE Asia. First, all countries that make up the region, except Thailand, were once colonies of either the British, the Dutch, the Portuguese or the Americans (the Philippines were initially colonized by

Spain before being "won" by the Americans in a war). The legacy of colonization can be seen in many of the institutions of these countries, particularly in laws and legislative procedures, the education systems, land ownership policies, and labour policies, among others. Therefore, it is imperative to consider both the native heritage and the later history of these peoples, especially in terms of culture, since both have been reshaped by these countries' periods of colonization and other key episodes in their history.

Second, one has to acknowledge the fact that the UN models of human security implies a rather universal view of the peoples of the world, and the issue of universality versus specificity is usually a contentious matter. Thus, the UN model needs to be modified when applied to specific regions or countries by taking into account the specificities of the region. Third, the idea of a Bangi "school of thought" has been mooted and debated by scholars of Social Science since early 1990s, especially under the leadership of Professor Sham Sani when he was the Deputy Vice Chancellor (academic) and subsequently as the Vice Chancellor. In the editorial of *Akademika* Vol. 53, 1998, Abdul Rahman Embong said that Bangi (a small town about 40 km south of Kuala Lumpur and where Universiti Kebangsaan Malaysia is located) has been blessed with many scholars who had their academic roots fully planted in the fertile ground of Bangi and through interactions and dialogue with academe from other parts of the country and elsewhere in the

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[2]For the significance of the SE Asian region, please refer to Solvay Gerke, Hans-Dieter Evers and Anna-Katharina Hornidge (eds.). (The Straits of Malacca: Knowledge and Diversity. Berlin: LIT VERLAG, 2008).

region and the world. The works of the late Ishak Shari (1999) were on poverty and development, whereas the late H. M. Dahlan (1997) on a multi-disciplinary approach in Development Science, Sham Sani on the environment (1990, 1987), Anuwar Ali (1998, 1995) on industrialisation, Samad Hadi (1989) on urbanisation and liveable cities, Hood Salleh (2004) on the orang Asli, and Shamsul A. B. (1993) on identity. For the works of Rahman (2010, 2006, 2005, 1998) the big corpus he engaged in is development, while the works on the middle class and integrity were a reflection of that focus - all are some of the pioneering works in the development of what has become known as "the Bangi school of thought." Similarly, collective work by well-known research institutes have made a name for themselves; these are the works of a group of scholars around the Institute of Malaysian and International Studies (IKMAS) who focus on globalisation and social transformation, the Institute for Environment and Development (LESTARI) on environment and development, the Institute of Ethnic Studies (KITA) on ethnic studies, and the Institute of the Malay World and Civilisation (ATMA)[3] on the Malay world and civilisation.

Human security is not only from international relations but very importantly from the field of development (namely human-centred development), which is

a distinctive contribution of the Bangi school to the corpus of knowledge and policy. Up to now, however, no one has purposely used the word "Bangi" in these intellectual enterprises. In our humble offering here, following the tradition set by our mentors, the Bangi Approach to Human Security embodies the collective effort of a group of researchers who profess-to a constructivist leaning in their understanding of international politics. This group believes that the emergence of the concept of human security, as a broad, multifaceted, and evolving concept of security, reflects the impact of values and norms on international relations. Human security also embraces a range of actors, alliances, and agendas that have taken us beyond the traditional scope of international politics. As a demonstration of change in international politics of evolving identities and interests, this seems to be best explained with reference to a "social constructivist" perspective, in contrast to the traditional "realist" mainstream. Clearly, structural realism would not be sympathetic to the concept of human security. Human security relies upon key agent-oriented processes, the emergence of non-state forces, and the impact of ideas and values. Constructivism, however, helps to explain these phenomena and the emergence of human security as an ideational force (Newman, 2001; Sweney, 1999).

The underlying argument of constructivism is that behaviour, interests, and relationships are socially constructed, and can therefore change. Meanwhile, values and ideas can have an impact

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[3]For an indirect insight about works by Malaysian scholars, including those from Bangi, please see Abdul Rahman Embong. Research in the Social Sciences and Humanities in Malaysia: A Historical Overview (UKM: IKMAS Keynote Series, 2010).

upon international relations, and norms, systems, and relationships can change. Constructivism thus helps explain a phenomenon in which realism is blind or indifferent. Moreover, constructivism shares fundamental assumptions with human security approaches – the assumption, for example, that threats are constructed, not inevitable, and can be altered or mitigated (Nor Azizan *et al.,* 2011). The acknowledgements by states that certain forms of economic and political organization facilitate domestic peace and stability, and that domestic condition affects the international system, are characteristically constructivist insights (Hampson, 2008, p. 241-242). Constructivism highlights the critical subjective and intersubjective dimensions of security. Cosmopolitanism, as exemplified in the human security or critical security approaches, is essential for reminding us the sufferings of the poor, the excluded and the marginalized, and the multiple ways in which state behaviour has often been a principal source of global insecurity (Dannreuther, 2007, p. 36). Similarly, by focusing on human rather than on state, exemplified the strong influence of the neoliberal idea, in particular, on how the non-military threats and the non-state actors have negative implication on people (Sity & Zarina, 2005).

The BAGHUS Research Group has recognized that human security and national security must complement one another, not just for short-term survival but for a quality of life leading to long-term survival and thriving as well. They believe that each person should be "free from fear" and "free from want." Moreover, embedded in this perspective is the understanding that the local context must be taken into consideration--that identity and culture should be part and parcel of the people's survival (Rashila & Nor Azizan, 2008; Rashila, 2009).

Fourth, the security dimension in BAGHUS focuses on man-made problems or "disasters," rather than "natural disasters" (Zarina, 2006). Natural disasters are important as they affect human security directly. At the same time, man-made problems are also very critical at times, and more important in terms of consequences, and that both should be taken together. While it is acknowledged that natural disasters can bring about initial chaos, the possibility of violent conflict is usually less. It is thought that which is caused by human has a better chance of being understood and brought under control by humans.

Fifth, while human security proponents believe in centring on the individual, BAGHUS recognizes that for SE Asia, the individual is intricately linked to the community (or communities) where they live in, work for, and socialize, etc. This is because an individual is considered as a member of a community." Thus, the personal security of an individual is usually intricately linked to the community security. That link is strengthened by the influences of religion and culture in the daily lives of the people. Therefore, in reformulating the dimensions of human security, this personal-community dimension is given a special

consideration by treating it as one integrated dimension of security. This is also closely related to the Islamic concept of *ummah,* in which community is seen as a group or a society as a whole. This is significant in a region where more than 50% of the people are Muslims (Zarina, 2007).

Sixth, BAGHUS emphasizes protection and empowerment. In this case, the community is seen as agents of change and not as passive receivers of fate. While the state has a responsibility to protect its citizens from internal and external harm, it also has a responsibility to provide strategies and programmes that would empower all its citizens. This will strengthen the state from within. This acts as a deterrent to man–made issues (Zarina & Sity, 2009). Seventh, recognition of diverse identities gives special mention to the rights of the very old and the very young (children), thus giving a new dimension in examining cultural security. Moreover, cultural security gives prominence to gender as a category of analysis, highlighting the importance of the previously peripheral group, mainly the elderly, children, women, and the disadvantage group, such as the handicapped.

Eighth, like the UNDP model, 'freedom from fear' and 'freedom from want,' remain the cornerstones of BAGHUS. This premise remains essential in the formulation of BAGHUS because there is a need to recognize the fundamentals underlying all models of human security. In BAGHUS, it is assumed that human security precedes peace. This is because states need to be strong enough to provide security for their people in order for their country to develop, and development is necessary in order to protect the state and the people against both internal and external threats to the peace.

Finally, the inclusion of social security is the most important element. In SE Asia, there is a high expectation placed upon their children by the elders, for old age care and especially financial support. The informal support network is very much prevalent in the region. As such, the informal support system is given due recognition in BAGHUS, unlike in the other models of human security, in which informal social safety nets are taken for granted. This informal support system is indeed complementary to what have already been provided by the state, particularly social assistance to displaced groups in society (Sity, 2004; Sity & Zarina, 2005).

THE NINE SECURITY DIMENSIONS OF BAGHUS

There are nine dimensions of BAGHUS, as follows:

Social Security

Social security refers to having access to economic and social safety nets that provide for basic survival needs via public programmes. These programmes are designed to provide some help in the forms of financial, physical or social resources to those who are unable to provide for themselves. The recipients may need help to cope with economic crisis or losses, forced retirement or unemployment, serious

illness and chronic disease, temporary or permanent injury or disability, pregnancy, childbirth and child care, general health, medical and dental care, food, shelter, and clothing subsidies for families and children, life transitions such as a death in the family, widowhood or divorce, as well as parks and recreational facilities which serve health, fitness and social needs. From the BAGHUS perspective, social security can be defined as having reasonable assurance of being helped by the society to live on, when faced with any circumstances of dire need. The concept is often used interchangeably with economic security, but social security in BAGHUS takes into account not only an organized support system provided by the government and NGOs, but also the informal support systems that exist within a community.

Economic Security

Economic security may be addressed in the following ways. One is through ideological disputation, and the other is through examining theoretical considerations. Ideological disputation includes debates about the international political economy and the relationship between the presumed political structure of anarchy and the economic structure of the market. There are questions concerning whether politics or the market should receive priority attention in international relations, about which economic theory and practices should be allowed to dominate, and what consequences for security theory and policy

will be hoped for or expected to occur as a result of our choices. Other topics concern what limits we may encounter in our attempts to relate security to the economic and social aspects of life, and what ethical issues arise as we seek economic security, and what its links are with other aspects of human security (Sity *et al.,* 2011).

Food Security

Food security may be envisioned as a state of affairs in which all people have sufficient access to safe and nutritious food at all times, and sufficient to maintain a healthy and active life. Food security also means that all people have ongoing, sustainable, and adequate food supplies at all times, sufficient not only to be healthy and active, but also to ultimately not have to live in fear that the situation could change for the worse at any time. Food security is related to food availability - sources of food supplies, distribution systems, general access, and affordability of the food. It also is concerned with the quality of the food—including safety and sanitation standards, such as quality of the soil, use of pesticides and fertilizers, sources and quality of water, uses of safe and healthy chemicals and additives, adequate storage and transportation facilities, and adequate "shelf life" for some food. In contrast, food insecurity usually correlates with poverty, large-scale health problems, high mortality rates, and stagnant economic growth, due in part to a labour force that is not able to be sufficiently strong and productive.

Health Security

Health security is the core aspect of human security; it is the backbone of the peace and sustainability of our planet and all life living on it, which is the ultimate security. Health security may be defined as the conditions necessary for human survival and overall well-being, including having adequate means of livelihood, human dignity and self-respect, and an assurance of adequate care when there is illness or injury, as well as the means to prevent illness, disease and injury as much as possible. Poor health, in contrast, may result from any critical threats to one's security, including threats to the environment or community in which one lives. In addition, the most urgent threats are often those that arise out of widespread conflicts or natural disasters and other emergencies. Humanitarian crises threaten the conditions considered most vital to human health, such as infectious diseases, hunger, malnutrition, and lack of sanitation, safe water, and shelter. More insidious threats may be those that persist over the long term, such as the health problems resulting from entrenched poverty and inequities in one's society. In this article, health security is defined as the conditions necessary to counter all the threats to general public health and well-being, as well as to reduce or deal with threats that arise from the impact of events causing humanitarian crises. Recognizing the long-run negative effects that poor health security can have on all other components of human security, it is imperative to put a high priority on maintaining as high a level of health security as possible.

Environmental Security

Environmental security refers to the preventing, countering, controlling, or eliminating a variety of human activities that adversely impact the environment, and thereby threaten the survival of future generations. Specific effects of environmental degradation may include conflicts and instability among peoples, caused by scarcity or reduced quality of the resources required for life. Other negative effects may block sustainable development or cause extinction of species, which may in turn impact on other aspects of human security. In short, environmental security exists when human individuals and systems interact with ecological systems in sustainable ways; when individuals and nations have fair and reasonable access to environmental resources; when there are systems in place to peacefully address the inevitable environmental conflicts and crises that arise; and when there is an ongoing effective effort to educate everyone about, and enforce, sustainable practices that maintain security (Zarina, 2009).

Personal-Community Security

Personal-community security aims to protect people who are identifiable members of a particular group from physical violence, crime, manipulation, torture, domestic abuse and harassment, from both state and non-state actors. In particular, personal-

community security involves protecting members of the society who are especially vulnerable—including women, children, people who are frail, elderly, disabled, and/or suffering from disease or illness, or any other state/condition that places them in some kind of at-risk minority group, regardless of the cause. It also includes people in any community who are suffering from the negative impacts of uneven development, discrimination and inequitable treatment, modernization, globalization, corruption, and organized criminal activity.

Political Security

Political security is protection against threats originate from state authorities and are applied against the people in general, or against particular groups. Political security is based on the premise that people should be able to live in a society that honours their basic human rights. It involves a relationship between the state (government) on one hand, as the coordinator of the state's activities, and the citizens as stakeholders who benefit (or not) from the state's actions and policies on the other. Thus, political security is concerned with the right of individuals and groups to participate in the political life of the society, and in the governance of the country, the right for power to be shared among the existing ethnic groups. At the same time, individuals should also be free from harassment and threats by non-state actors who profess different ideologies/political beliefs, and that the state should protect individuals from threats by such groups.
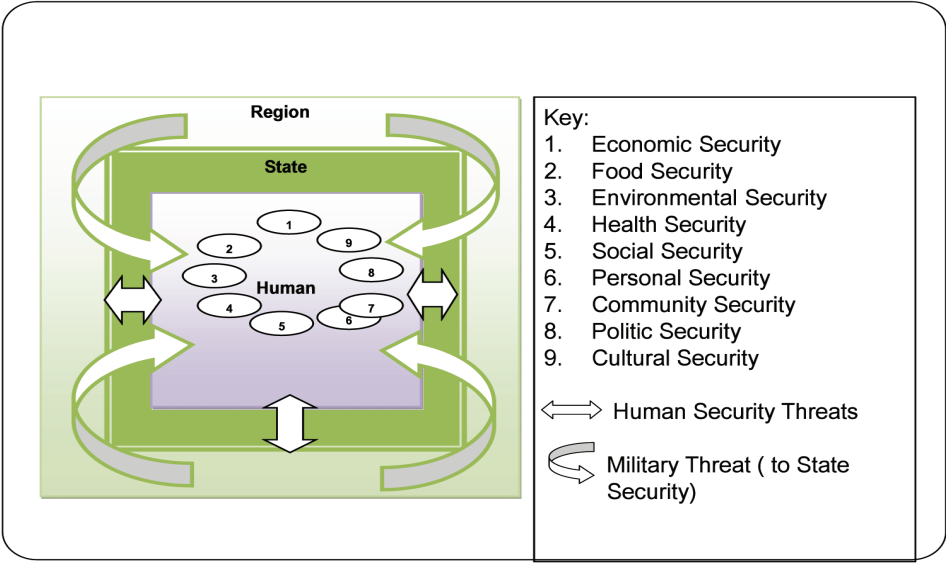
(Source: Adapted from Sity Daud & Zarina Othman, 2005; Keselamatan insan dan jaringan keselamatan sosial. In Sity Daud and Zarina Othman (Eds.). *Politik dan Keselamatan.* Bangi: UKM Publishers)

Fig.1: The BAGHUS model demonstrates the nine security dimensions

Cultural Security

In the countries of the Southeast Asian Archipelago, cultural security focuses on the need for respect in life, equality between women and men, and the celebration of diversity in terms of belief systems, language, lifestyle, tradition, value systems and religion. Cultural security is not only about protecting certain ethnic groups or minorities, but also protecting gender equality. Gender equality and equity are central to sustainable development, in which each member of the society respects others and plays a role in which they can fulfil their potential.

CONCLUSION

BAGHUS encompasses economic development, social justice, environmental protection, democratization, and respect for human and community rights, norms and the rule of law. It places importance on governance within a civil society in ensuring that each individual has opportunities and choices to fulfil his or her potential, within his or her community or beyond. In other words, human security for the SE Asian Archipelago encompasses security from within (freedom from fear) and the needs for human development (freedom from want). Thus, BAGHUS provides a complementary model for the analysis of human security in Southeast Asia. Although it was designed based on the case of SE Asia, BAGHUS is not a model just for SE Asia but for any developing regions, including the Middle East, Central America and others. In the Southeast Asian Archipelago, BAGHUS assumes that human security and peace can only be achieved and maintained when there is a high level of security in all the nine dimensions. All the nine elements are integral within all dimensions in the sense that they all complement one another. Each element provides a possible focus of analysis for a researcher. Meanwhile, a combination of the elements will allow for a more holistic analysis of human security, as well as an explanation for the presence, absence, or continuance of peace. As the models emanating from the UN Agencies tend to be universal, BAGHUS argues that these models have to be modified by taking into account the specificities of the region. Other regions may have different conditions than SE Asia, so the model has to be applied creatively by taking into account their specificities. In short, BAGHUS was designed to be a living framework that can be further refined in the future.

ENDNOTE

REFERENCES

Abdul Rahman, E. (2010). *Research in the social sciences and humanities in Malaysia. A historical overview.* UKM: IKMAS Keynote Series.

Abdul Rahman, E. (2006). *Peranan dan orientasi sains sosial Malaysia.* Bangi: UKM Publishers.

Abdul Rahman, E. (2005). *Pembangunan dan kesejahteraan: Agenda kemanusiaan pada abad ke 21.* Bangi: UKM Publishers (Syarahan Perdana).

Abdul Rahman, E. (1998). Editorial Note. *Akademika,* 53.

Anuwar Ali, Nor Aini Hj Idris, & Hasnah Ali. (1998). *Pensejagatan dan pembangunan industri di Malaysia.* Bangi: UKM Publishers.

Anuwar Ali. (1995). *Globalisasi pembangunan industri dan peranan pemerintah di Malaysia.* Bangi: UKM Publishers (Syarahan perdana).

Dannreuther, R. (2007). *International security: The contemporary agenda.* Cambridge: Polity Press.

Gerke, S., Hans-Dieter E., & Anna-Katharina H. (Eds.). (2008). *The Straits of Malacca: Knowledge and diversity.* Berlin: LIT VERLAG.

Hampson, O. (2008). Human Security. In P.D. Williams (Ed.), *Security studies: An introduction.* London and New York: Routledge.

H. M. Dahlan. (1997). *Urbanisasi, alam kejiwaan sosial dan pembangunan.* Bangi: UKM Publishers.

Hood Salleh. (2004). *Dunia pribumi dan alam sekitar: Langkah ke hadapan.* Bangi: UKM Publishers.

Ishak, S. (1999). *Bumi Semua manusia: Menangani ketidaksetaraan ekonomi dalam arus globalisasi.* Bangi: UKM Publishers (Syarahan Perdana).

Newman, E. (2001). Human security and constructivism. *International Studies Perspectives,* 2, 239-251.

Nor Azizan, I., Zarina, O., & Rashila, R. (2011). Konstruktivisme sosial dan hubungan antarabangsa Malaysia, *Akademika: Journal of Southeast Asia Social Sciences and Humanities, 8,* 1, 39-50.

Rashila, R., & Nor Azizan, I. (2007). Keselamatan insan dan keselamatan negara: Isu dan cabaran dalam membina index keselamatan insan Malaysia. Paper presented at the Seminar Keselamatan Negara dalam Abad ke 21. Kuala Lumpur, Nov. 20, 2007.

Rashila, R. (2009). The development of Malaysian human security index. Paper presented at the regional conference on Rural Participation and Community Development, Manila, the Philippines. 6-8 August 2009.

Samad, H. (1989). *Evolusi dan kedinamikan ruang.* Bangi: UKM Publishers.

Sham, S. (1990). *Perbandaran dan iklim: Implikasinya terhadap perancangan bandar di rantau tropika rendah.* Bangi: UKM Publishers.

Sham, S. (1987). *Urbanization and the atmospheric environment in the low tropics: experiences from the Klang valley region Malaysia.* Bangi: UKM Publishers.

Shamsul, A. B. (2001). *Essays on social anthropology of the Malays.* Bangi: UKM Publishers.

Shamsul A. B. (1993). *Antropologi dan modenisasi: Mengungkap pengalaman Malaysia.* Bangi: UKM Publishers.

Sity, D. (2004). Negara pembangunan Malaysia dalam era globlisasi *Akademika,* 64, 27-41.

Sity, D., & Zarina, O. (2005). Keselamatan insan dan jaringan keselamatan sosial. In Sity, D., & Zarina, O. (Eds.). *Politik dan Keselamatan.* Bangi: Penerbit UKM.

Sity, D., Zarina, O., & Rashila, R. (2011). *Human security and peace in Archipelagic Southeast Asia.* Bangi: Penerbit UKM (Forthcoming).

Sweeney, B. Mc. (1999). *Security, identity and interests: A sociology of international relations.* Cambridge: Cambridge University Press.

UNDP. (1995). *Human Development Report 1994.* New York: Oxford University Press.

UNDP. (2005). *Human Security Report 2005, War and Peace in the 21ˢᵗ Century*. Oxford: Oxford

UNDP. (2010). *Human Development Report 2009.* Basingstoke: Palgrave Macmillan. Retrieved from http://hdr.undp.org/en/university.

UNESCO: Commission on human security. (2003). *Human security now.* Paris: UNESCO. Retrieved from http://www.humansecurity-chs.org/finalreport/English/FinalReport.pdf.

UNESCO. (2008). *Human security: Approaches and challenges*. Paris: UNESCO. Retrieved from http://unesdoc.unesco.org/images/0015/001593/159307e.pdf.

Zarina, O. (2006). Transnational human trafficking from Indonesia to Malaysia: The unknown journey of human (in) security. Paper presented at the International Conference on "Advancing Human Security" 13-14 June 2006, Kuala Lumpur.

Zarina, O., & Sity, D. (2009). Reassessing the discourse of human security and human development in Southeast Asia. In Norhashimah Jalaludin, Kalthum Ibrahim, Misran Rokimin and Sity Daud. *Keselamatan insan: Aspirasi serantau dan nasional*. Bangi: FSSK, UKM.

Zarina, O. (2009). Human security concepts, debates and approaches in Southeast Asia. In H. G. Braunch *et al.*, *Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts* (Vol. 4). Germany: Springer Press.

Zarina, O. (2007). Human Security in Islam. Paper presented at the International Conference on Human Security: Asian Contributions, University of Chulalongkorn, Bangkok, Thailand.

Short Communication

Managerial Accountability: A Review through Orphanages' Financial Record Practices

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ABSTRACT

The most significant role of non-for-profit (NFP) is to alleviate or to provide remedy to discrepancies in the delivery of social benefits by the private or the public sector. Thus, the accountability rendered by particular management group has become a crucial element to all stakeholders, particularly the donors (contributors). The purpose of this study was to examine the practices of accounting record of a few orphanages located in the district of Hulu Langat, Selangor. Through systematic and proper accounting records, the orphanage management could prove its accountability and satisfy the custodial role. This study employed survey to the orphanage management which had been selected through convenience sampling technique. From the analysis, it was concluded that the orphanage management has maintained their book-keeping which comprises of a simple list of income and expenses. However, the reporting standard requires for improvement so as to increase its usefulness and to allow accurate judgement on donation decision-making. In addition, an improved financial record will lead to a higher level of custodianship of the entrusted resources.

Keywords: Accountability, ethics, agency relationship, financial, non-profit organization

INTRODUCTION

Three main sectors in economic structure consist of the private, public and non-for-profit (NFP) organizations. Each sector has their own role in satisfying the nation's development needs. In conjunction with developing countries, NFP has far more important role in terms of complementing or remedying the weaknesses of social good delivery of its private and public sectors.

Orphanage is one of the NFP which renders unique services in terms of promoting the well-being and interest of the orphans.

Orphanage is not a new concept to the world. According to Jacobi (2009, p. 57), a large group of orphanages was founded in Europe during the sixteenth or early seventeenth century to provide education and assist the orphans in their transition into adulthood. Orphanages have been recognized as successful institutions in relation to orphans' upbringing since the early modern years. They have offered majority of the needy children with the opportunities to grow and to cope successfully with the norms and expectations of the world around them (Jacobi, 2009, p. 64). Meanwhile, the philanthropic-based effort has been receiving various aids and financial supports from the public now and then. Hence, the purpose of this study was to identify orphanages' practices of book-keeping and financial reporting as issues related to the accountability of the orphanages management.

PROBLEM STATEMENT

Accountability in financial management is indeed important for all types of organizations. Business entities are not the only type of organization which accumulates resources from its community (known as investors and lender groups). The non-profit oriented entities, such as the public and the non-for-profit (NFP) organizations, have also been similarly entrusted with valuable resources which are required for the disposition of management accountability as well. NFP accountability, as well as its governance, has recently received attention from the public (Nag, 2010; Leong, 2010). This is because the resources are limited, and thus, an efficient use of resources is compulsory to achieve the organizations' goals. In addition, the donors have made their contributions with specific expectations and beliefs regarding the uses. As a result, it must be managed in the best interest of the expected targeted groups. Furthermore, there are circumstances in which the orphans have been exploited as the collecting agents for the sake of particular groups/individuals (Syed Ahmad Zulkarnain, 2010). This has raised concerns over the management accountability as the responsible custodian of the entrusted resources. As a result, this study was conducted to accomplish the following objectives:

1. To describe accountability of the orphanages' management through description of its financial record practices; and,

2. To explore the relevancy of accountability and governance issues within the scope of orphanage organizations.

LITERATURE REVIEW

Charitable giving is a form of well-institutionalized culture which plays a role in alleviating problems of capitalism (Hur, 2006, p. 661; Saunah *et al.,* 2009, p. 176). Furthermore, according to Saunah *et al.* (2010, p. 177), the not-for-profit (NFP) is one of the three main sectors in today's

economy which has grown its economic importance, as reflected in the European System of Accounts (ESA-1995). The other two are the private and public sectors. According to Wang and Graddy (2008), the level of giving in a particular society serves as an indicator of the civil society's strength. Competition for obtaining financial support is currently intense among the non-profit or charitable organizations (Hsu, Liang, & Tien 2005). The management has to adopt certain strategies in order to secure the long-term fund availability of their organizations. Thus, it is important to understand the factors that will affect the intention and behaviour for charitable donations and supports, as raised by Hsu *et al*. (2005). According to Hsu *et al.* (2005), reputations of charities and types of recipients are critical in determining donors' trust to continuously support charitable organizations.

Resource development efforts can benefit from the well-established relationships that an entity has with their key-constituent groups and influential individual members in their communities (Hall, 2002, p. 47). As a result, preserving and maintaining good relationships with key stakeholders is crucial for the survival of non-profit organizations. The relationship inevitably secures the short-term and long-term resource availability of the particular entities. Thus, trust is an important element to build a good relationship and to encourage giving activities among members of the society. Wang and Graddy (2008, p. 29) found that social trust is one of the factors that increases the amount of charitable

giving either for religious or secular cases. According to Wang and Graddy (2008), social capital has been increasingly applied as an analytical tool to explain variances in the performance of individuals and organizations. It refers to network, norms and social trust as the facilitating engines. Trust is developed through evaluation and perception towards the exercise of stewardship and accountability of the management. The donor requires the management to provide assurance that the contributed resources have been properly managed and able to achieve its purpose. In their study, Hsu *et al.* (2005) proposed that intentions to give donation could be increased if more relevant information was made available to potential donors. Although Hsu *et al.* (2005) found that information regarding financial management of the charity organization is of less concern when it comes to determining donors' supports, Saunah *et al.* (2010) reiterated that financial reporting has its importance in describing delivery of management accountability, as well as in enabling evaluation of management efficiency and effectiveness. Moreover, according to Saunah *et al.* (2010, p. 177), the means to understand the performance of charitable organizations in Malaysia is still limited due to unavailable or restricted sources of information, including the financial statements. Within the perspective of governance, Skousen (2005, p. 53) suggested that the fundamental aim of effective corporate governance is to produce fair and true financial report. Meanwhile, the role of true financial report

is crucial due to the asymmetric situation between organization's stakeholders and its management, which eventually threatens the interest of the absentee stakeholders (namely, the shareholders). As in the case of NFP organizations, the absentee stakeholders can be referred to the donor groups who have contributed their resources altruistically.

As far as the financial report is concern, the ability to produce such a report requires proper accounting records. The study by Saunah *et al.* (2010) revealed that there are variations in reporting practices among the Malaysian tax-exempt charitable organizations. This is due to the minimum regulatory requirement and the absence of reporting standards, which were established for the NFP financial reporting in Malaysia. As explained by Saunah *et al.* (2010, p. 181), according to Section 14(d) of the Societies Act 1966 (Act 335) and Regulations, the organizations registered under the Registrar of Societies (ROS) must submit Form 9 that consists of the Statement of Receipts and Payments of the previous financial year and a balance sheet of the respective year to the ROS within 60 days after its annual general meeting. However, the accounts are not necessarily be audited by the external auditors. Other statements which supplement the financial statement, such as the cash flow statement, statement of changes in general fund and notes to accounts (containing significant accounting policies and other explanatory notes) are also not required to be submitted by ROS. Moreover, Saunah *et al.* (2010) found that

only 18/37 or 49% of the NFPs submitted their Statement of Receipts and Payments, together with the Balance Sheet to ROS, as required by the Societies Act 1966 (Act 335) and Regulations. The contributions of this study lie on its' emphasis on the orphanage institutions, whereby Saunah *et al.* (2010) had focused on various tax-exempt charitable organizations in Selangor. Furthermore, this study involved the primary data which were obtained through surveys that had been carried out with selected orphanages' management. Thus, the use of primary data contributes to an understanding of orphanages operations and its financial aspect, as well as the practices of accounting record/reporting processes.

METHOD

This study falls in the category of exploratory study. As explained in Babbie (2004, p. 87), there are three common purposes in research; these are exploration, description and explanation. According to Babbie (2004, p. 87-89), exploratory study is suitable if the researcher wants to explore a new topic and become familiarize with the relatively unattended topic. In specific, there are three reasons for conducting an exploratory study, as stated below:

1. To satisfy researchers' curiosity and desire for better understanding;

2. To test the feasibility of undertaking more extensive study; and,

3. To develop the methods to be employed in subsequent study.

Thus, exploratory study is very much close to the inductive type of reasoning, rather than the deductive (Babbie, 2004, p. 52-53). As explained by Babbie, constructing a theory through inductive method requires researchers to observe the aspects of social life and to discover patterns that may point to relatively new ideas. This is significantly different from the deductive approach, in which all the key variables must be clearly identified and precisely measured using specific established measurements, and when testing of the specified relationship models is required. Nonetheless, exploratory studies possess some weaknesses, which include lacking of rigorous theory or precise expectations and rarely providing satisfactory answers to the research questions. Despite these weaknesses, exploratory studies are valuable in social scientific research, especially when the researchers attempt to yield new insights into topic for research (Babbie, 2004, p. 88-89).

This study involved orphanages in Hulu Langat Selangor. The selection of these orphanages was done through convenience sampling due to the difficulty in obtaining

co-operation from their management. Seven (7) orphanages finally agreed to participate in this study. Table 1 shows a summary of some of the involved orphanages' particulars.

There are two sections in the questionnaire. The first section comprises of the sources of income and the second section contains 14 questions on handling of accounting records. Short interviews were also conducted with a few orphanages in order to get detailed explanations on certain issues. The interviews were informally and simultaneously conducted to the administration of the questionnaires to obtain clarification for unclear matters, such as in the case of deficit, i.e. how did the management handle such a critical situation. The field work was done between August and September, 2010. The data were descriptively analyzed.

ANALYSIS

Table 2 shows a summary of the information about the selected orphanages.

As shown in Table 2, all the orphanages stated that their main source of income

TABLE 1
A summary of the details of the orphanage homes which participated in the current study

Orphanage homes	Year of establishment	Founder background
A	2007	Local NGO
B	2006	Individual
C	1966	NGO
D	2008	Individual
E	2005	Individual
F	-	Individual
G	1990	NGO (religion-base)

TABLE 2
A Summary of Orphanages' Sources of Income (Asset) and Expenses

No.	Orphanage	Sources of Income	Building/ premises	Average of Monthly Expenses (RM)
1.	A	Founder, society, NGO and sales of unused perishable donated items.	Contributed by NGO.	RM 8,536.24
2.	B	Tithe (*Zakat*), society, sponsorship, nursery, and café projects.	Rental and there are also orphans who are staying with their relatives, but their expenses are financed/ sponsored by orphanage B.	RM 28,986.00
3.	C	Society, corporate entities, and government.	Endowed land by state government.	No information
4.	D	Society	2 houses – one house is rented and the other house is an individual endowment (*waqaf*).	RM 11,078.00
5.	E	Society and corporate entities.	Rental	RM 8,485.00
6.	F	Society, NGO, founder's friends & relatives, and the local people	Individual private endowment (*waqaf*) of a house and a piece of land.	RM 10,335.00
7.	G	Government, society, special fund-raising project, and corporate entities.	Purchased self-own building.	No information

came from public donations. The donors comprised of individuals and corporate entities. Most of the corporate entities make their donations as parts of their CSR or as ways to reduce their business taxation. The types of donation received are usually in the form of cash, as well as in kind, such as groceries and clothes. The management also reported that the groceries items received are sometimes in bulk, which cannot be entirely used within their useful periods. As a result, the perishable items donated are sold to obtain additional funds for the orphanages and to avoid wastage. In addition to the cash and in kind, there are few orphanages which have received donation in terms of building (premises) and lands for operating the homes, such as in cases A, C, D and F. This finding has further highlighted the importance of maintaining proper book-keeping and recording due to obligations owed towards various types of donors and contributors.

Meanwhile, a majority of the orphanages encounter income deficit in relation to their expenses. The incurred costs bore the orphanages vary in the range of RM8,536 to RM28,986 per month. The expenses items consist of utility, house-maintenance (including the rental), orphans' welfare (including the expenses for clothing and medication), transportation, schools and

groceries/food expenditures. Due to the deficit, some of the orphanage operators have to use their personal sources to overcome it, especially to cover certain fixed expenses, such as the rent and food/groceries. One orphanage has conducted business activities such as operating a nursery and a café business to generate additional income. However, the management reported that the income from these business activities is still insufficient to cover the overall operating expenses. Meanwhile, one orphanage has received fixed aid from the government, specifically from the Ministry of Welfare.

EVALUATION OF ACCOUNTING RECORD PRACTICES

Table 3 shows the frequencies of the managerial responses to the 14 items in the questionnaire.

All the orphanage homes admitted to have prepared their annual financial reports and maintained their account records and book-keeping. From the observation,

TABLE 3
A Summary of the Management Responses on Financial Record Practices

No.	Items	N	Yes	No	Sometimes
1	Prepare the financial report annually.	7	7	-	-
2	Keep and maintain financial documents/ records systematically.	7	7	-	-
3	Have a specific unit/ an individual to handle organization's accounting record.	7	7	-	-
4.	Hire individual with book-keeping skills to manage organization financial records.	7	4	2	1
5	Every year, the organization submits its financial report to the registrar of association.	7	3	4	-
6	Every year the organization sends its financial report to the donors (contributors).	7	2	5	-
7	Every year, the organization sends its financial report to the main/ significant donors (contributors).	7	2	5	-
8	Accounting records are kept properly and available for verification at any point of time.	7	7	-	-
9	Financial report has been audited by external auditors.	7	3	4	-
10	The organization has established its internal audit committee.	7	4	3	
11	Accounting records and operational procedures are monitored by the internal audit committee.	7	4	3	
12	The organization has recorded the income according to its specific purpose/ use of the raised-fund (e.g. operation fund, orphanage development fund, education fund).	7	7	-	-
13	Obtain any tax exemption.	7	4	2	1
14	Receive fix government aids consistently.	6	1	5	-

however, it was found that the records have been maintained at the minimum level, without specifically complying with any accounting standards and procedures. Book keeping involves a simple list of the sources of income and expenses. There is a situation in which the disbursement is not recorded due to unavailability of relevant documents. Furthermore, most of the orphanages did not prepare balance sheets to show their financial positions for the reported year. As a result, the organizations' fixed assets and liabilities are not traceable throughout the record.

All the orphanages reported that they hired specific individuals to handle their accounting records. In particular, four of the orphanages hired workers with book-keeping skills to manage their records, while three others reported that they did not hire skilled workers to do the said task.

In terms of communication of the financial report, only three orphanages had sent their annual financial reports to the Registrar of Association. Meanwhile, only two orphanages sent their financial reports to their donors, and five others reported that they did not send any financial report to its donors or contributors.

Three orphanages claimed that their accounts were audited by external auditors. Four orphanages reported that they have their internal audit committee and two obtained financial statement verification from external auditors. Four of the orphanages claimed that the audit committee also monitored their accounting records and operations. All the orphanages claimed that

they established specific funds to record fund obligation for the specified purposes.

DISCUSSION

The most critical challenge faced by the orphanage management is to maintain the availability of fund. This requires continuous relationship between the donors and orphanage management founded on trust basis. The donors have contributed to the organization and such condition lead to the agent-principal relationship between the orphanage management and the donors. The agent (which refer to the orphanage management in this context) have the obligations to fulfil the expectations of its donors in terms of the entrusted resources. One of the methods that can be used to maintain orphanage-donors trust-based relationship is through the presentation and communication of the orphanage's financial report. The financial report allows the stakeholders to evaluate the orphanage's performance, form trust in the management accountability and finally increase the level of donation intention. The requirement for maintaining a systematic accounting record and producing a proper financial report is also in line with Section 29(a) and (b) of the Societies Act 1966, which state that:

> "Every registered society shall supply free of charge to every member or subscriber or person having an interest in its funds on his application either:
>
> a. A copy of the last annual return of the society; or

b. A balance sheet or other documents duly audited containing the same particulars as to the receipt and expenditure, funds and effects of the society as are contained in the annual return".

As a result, through a systematic and proper accounting record, the orphanage management can prove its accountability. Although the orphanages have prepared their financial statements, these could have done in various presentations and the level of comparability is relatively low. Thus, these distort the ability to evaluate the efficiency and effectiveness of the entrusted management. Furthermore, it is relatively difficult for the stakeholders to gain standard information about the performance of the orphanage due to the variation in their financial reporting.

A systematic record also serves as a control mechanism to assure an efficient and effective use of an organization's resources. The efficient use of resources is essential to minimize the occurrence of deficits. Meanwhile, the absence of a systematic record will lead to inefficiency and hinder improvement to the organization's financial management. Based on the informal interview conducted, for example, there is one orphanage which allows any of its employees to access and make disbursement from its petty-cash and this is merely based on the sense of trust. The employees who have made the disbursement from the petty cash are supposed to give the expenses receipts based on self-trust. The

management stated that such a practice is being implemented due to reasons as follows:

1. Necessities to make immediate expenses whenever the person in-charge is not around; and,

2. The amount of the petty cash is relatively small.

However, such practice may potentially lead to inefficiency and abuse of fund by irresponsible individuals. Furthermore, the practice will also hinder the management from tracking any inefficiency or abuse and distort the presentation of a true and fair view of the financial position for the particular orphanage. Moreover, the unavailability of auditor verification has further increased the ambiguity of the information provided in such practice. The absent of auditor's verification on some of the orphanage accounts is also against the rule of Sections 26(1) and (2). The sections require the registered entity to submit its accounts for audit at least once a year and the auditor should have the access to all books and accounts as well to examine the accuracy of the reported annual return.

In conclusion, although the orphanage homes have been established on virtuous and philanthropic motive, it is still necessary to adopt systematic financial management and records in the operations. This is because the community would appreciate the philanthropists more and to give more collective support (financially and non-financially) in return, if the management could visibly manifest their utmost integrity

and accountability. One of the important means to deliver such accountability and integrity is through the practices of a systematic financial record and reporting.

IMPLICATIONS AND RECOMMENDATIONS

The existence of orphanages has complemented the government's role in providing social benefits for its citizens. The role has been in existence throughout the history of the world's modern society since the sixteenth century. Thus, the orphanages need to be transformed into credible and systematic organizations to enhance their community support capacity.

Therefore, some financial aids should be given to ease the financial burden of its operators. For instance, the government may allocate a special trust fund to cover at least half of the orphanages' basic operational expenses in the country. As far as the special fund is concerned, the government may impose strict requirements for each of the orphanages to produce and submit a standardized financial report as one of the terms for continuous fund allocation. In the long run, this will serve as a two-pronged strategy targeted at assisting the orphanages operations and promoting a higher standard of institutional accountability. In addition, the corporate sectors may also include orphanages as one of the subjects in their corporate social responsibility (CSR) programme.

In order to secure a continuous availability of funds, the operators could venture into business activities, as done by one of the orphanage in this study. Although the effort could provide income independency for the orphanages, it would require additional fund to finance the activity. Furthermore, the project also requires some entrepreneurial and business management skills in order to ensure its profitability. In relation to the financial reporting, improvement can be done by hiring skilled individuals to do book-keeping. As the orphanages also owe the public their financial support, it is highly necessary for them to produce and communicate their financial positions to the interested stakeholders. As far as the financial management and accounting skills are concerned, higher educational institutions could provide some training programmes to employees of the orphanage homes. Such effort can be made part of the varsities' community services and as an implementation of experiential-based learning approach in their teaching mode. The experiential-based learning is a contemporary approach in the teaching of business management which includes real-life consultation opportunity (Ahmad Raflis *et al.,* 2010).

As far as the implications to the body of knowledge are concerned, the current study has satisfied the three reasons underlying the venture of an exploratory study. Based on this study, the issues of accountability and governance within the scope of orphanages have satisfactorily been proven as relevant and worth studying. However, the new topic requires more qualitative and inductive approach to comprehend aspects pertaining

to orphanage entity in detail. Based on the findings of this study, it is important for the researchers to develop a trust-based relationship with the management of the orphanages. One of the possible strategies is by becoming part of the organizations' contributors. However, the strategy requires incessant commitment, financial and time, as trust evolves through a passage of understanding and also sincerity between the parties involved.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study relied on the convenience sampling technique due to the difficulty in obtaining co-operations from the management of orphanage homes. In particular, the orphanage management showed some degree of sceptic to disclose information to the outsiders. As a result, the number of orphanages involved in this study was relatively small. Though the number of the samples involved was relatively small (seven entities), this study has contributed towards exploratory of new area and creating awareness among the academicians regarding the gap in the social studies that is worth studying. Thus, future studies should involve more orphanages in order to increase the level of generalizability. As the number of respondents was relatively small, this study was constrained to performing the high-end statistical method which could provide more accurate insights into the issue. However, this limitation does not affect the contribution of this study as it is descriptive in nature and meant to promote

future exploration related to orphanages entities.

Meanwhile, the evaluation used in this study was based on management self-evaluation. Thus, it posed a threat of biasness in the evaluation of record maintenance practices. Two possible biases for the self-evaluation method comprised of the social desirability bias and management impression bias. As far as the bias is concerned, future studies should include evaluation from donors as well as directly evaluate the entities' financial statement. However, this effort can only be done if these orphanages were maintaining a proper donors' database, preparing their financial report and allowing researchers to access the relevant database.

In addition, future studies should also investigate the factors influencing donation decision-making among the donors. Such a study is particularly important to increase the level of donation as well as to secure income through adoption of accurate strategies and promotions which are able to capture the attention of prospective donors. This is due to the fact that fund-raising has evolved towards strategic and pro-active conditions, and thus requires a strategic and market-oriented fund-raiser. In addition, future studies could also explore on the factors driving the altruistic behaviour among orphanage founders/operators. This is an area which is interesting to be explored by social scientists (especially those in Psychology and Organizational Behaviour), with respect to the high commitment shown by the orphanage founders, such

as the willingness to put high efforts and sacrificing personal fund or resource in running the non-profitable entity.

CONCLUSION

This study attempted to understand the challenges encountered by philanthropic action. The study of philanthropic action could be done from various perspectives, such as the perspective of the operators, donors, and the governing body. In addition, this study also evaluated issues pertaining to the practices of accounting record in the orphanages. As indicated previously, fund-raising has evolved from a pessimistic state to a pro-active condition that requires the ability to visibly communicate the accountability of the management. One of the ways to communicate the management's accountability and performance to stakeholders is through a true and fair accounting record and reporting.

REFERENCES

Ahmad Raflis, C. O., Suraiya, I., & M. Radzuan, R. (2010). Consultation-based entrepreneurial/business learning: Malaysian experience. *African Journal of Business Management, 4*(12), 2508-2513.

Babbie, E. (2004). *The Practice of Social Research* (10th edition). Victoria: Australia.

Hall, M. R. (2002). Building on relationship: A fundraising approach for community colleges. *Community College Journal of Research and Practice, 26*, 47-60.

Hsu, J. L., Liang, G. Y., & Tien, C. P. (2005). Social concerns and willingness to support charities. *Social Behavior and Personality*, *33*(2), 189-200.

Hur, M. H. (2006). Exploring the motivation factors of charitable giving and their values structure: A case study of Seoul Korea. *Social Behavior and Personality, 34*(6), 661-680.

Jacobi, J. (2009). Between charity and education: orphans and orphanages in early modern times. Paedagogica Historica, *45*(1-2), 51-66.

Leong, P. P. (2010). Charity groups must be transparent. Letter. *The Star*, 14/9/2010. Retrieved September 29, 2010 from http://thestar.com.my/news/story.aFsp?file=/2010/9/14/focus/7031556&sec=focus.

Malaysia. *Societies Act 1966 (Act 335)*.

Nag. (2010). Be prudent in balancing the books. Letter. *The Star*, September 16, 2010: N48.

Saunah, Z., Ruhaya, A., Yap B.W., & Yeow, T. N. (2010). Financial statement analysis of tax-exempt charitable organizations in Malaysia. *Malaysia-Indonesia International Conference on Economics, Management and Accounting* 2010, 25-26 November. Bangi: Fakulti Ekonomi dan Perniagaan UKM. pp 176-192.

Skousen, K. F., Glover, S. M., & Prawitt, D. F. (2005). *An Introduction to Corporate Governance and The SEC*. Mason, Ohio: Thomson/South Western.

Syed Ahmad Zulkarnain, S. A. (2010). *Paksa Anak Yatim Cari Dana*. *Kosmo*, January 27, 2011. Retrieved 8 Tuesday 2011 from http://www.kosmo.com.my/kosmo/arkib.asp?y=2011&dt=0127&pub=Kosmo&sec=Negara.

Wang, L., & Graddy, E. (2008). Social capital, volunteering and charitable giving. *Voluntas, 19*, 43-42.

SOCIAL SCIENCES & HUMANITIES

Problems of Woman Entrepreneurship Development in Bangladesh: A Case Study of RAKUB

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ABSTRACT

This study is an attempt to analyze the constraints and problems which hinder woman entrepreneurship development in Bangladesh. The study focused on the entrepreneurs who are financed by Rajshahi Krishi Unnayan bank (RAKUB). It is notable that excellent economic and social changes have occurred in the lives of poor women with the credit of RAKUB. However, there are still major problems in the overall development of those female entrepreneurs. The study was based on analyses of both primary and secondary data. It was found that most of these entrepreneurs are illiterate and have no concept of the market. Besides, the study also described major problems like complex and critical problems in taking loans, the lack of knowledge and experience in marketing of products, poor managerial and technical skills, as well as low amounts of capital, huge interest burden, and social and cultural obstacles.

Keywords: Entrepreneurs, women entrepreneurship, Rajshahi Krishi Unnayan Bank, development

INTRODUCTION

Bangladesh is a developing country in South Asia that exists at the bottom of the development status. Approximately half of the total population of our country are women. In fact, all developments cannot be achieved without women' participations in the development sectors of the country (Sultana, 2006). A country may have resources but the problem of development is to put those resources into the process of production (Hossain & Rahman, 1999). Despite possessing natural and physical resources, machinery and capital may go underutilized or misused if rural human resources are not properly utilized (Hossain & Rahman, 1999). Thus, it is apparent that entrepreneurship development is a prerequisite of all sorts of a nation's development.

Entrepreneurship is a term which has acquired special significance in the context of economic growth in the rapidly changing socio-economic and socio-cultural climates both in developed and developing countries (Begum, 1993). It is a unique resource which is indispensable for any country's economic development. Woman entrepreneurship development is the key variable which connects socio-cultural environment with the rate of economic development. Towards this end, various governments and NGOs have been working to assist the potential of female entrepreneurs.

Rajshahi Krishi Unnayan Bank (RAKUB) provides credit to the women for alleviation of poverty, creation of self-employment opportunities and development of socio-economic condition. The bank extends collateral-free credit up to Tk 50,000 for poultry, duckery, goatery, dairy, beef fattening, sewing machine, computer and small trading. (RAKUB Annual Report, 2004-05) RAKUB encourages investment in such areas as poverty alleviation, women's empowerment through income-generating activities, environment development, and nursery development. But there are lots of barriers and obstacles in the development of woman entrepreneurship in our country. The paper critically discusses RAKUB's credit operation for woman entrepreneurship development. Again there are some other bottlenecks in our national culture and society that hinder woman entrepreneurship development as well. The paper analyzes different problems of woman entrepreneurship development

in Bangladesh based on empirical data analysis.

PURPOSE OF THE STUDY

The purpose of this study was to explore the problems in relation to woman entrepreneurship development as narrated by female entrepreneurs financed by RAKUB. Some recommendations will also be addressed in purview of the findings.

METHODOLOGY OF THE STUDY

Research Design

With a view to conducting a research study what is necessary is to design the research framework and to select the appropriate research methodology. A research design is simply a framework or a plan for a study that may be used as a guide in collecting and analyzing data. On the other hand, methodology means the underlying principles and rules of organization of a philosophical system or inquiry procedure. This study is based on ethnographic research design.

Methods of Data Collection

There are various methods of conducting socio-economic research such as interview, observation, desk-study method, case study, historical method, and statistical method. In this study, the author followed case-oriented qualitative research strategy. A descriptive and exploratory case study approach was used for the study because why, how and what questions were posed (Yin, 1994, cited in Panday, 2004). Rajshahi Krishi

Unnan Bank was chosen for the study. Case study is a comprehensive study of a social unit. RAKUB was selected due to its establishment, experience, area of operation and diversified functional coverage.

Qualitative researchers are mainly concerned with six assumptions, as follows:

1. Process; 2. Interested in meaning or how people make sense of their life experiences; 3. Researcher the is instrument for data collection and analysis; 4. It involves field work; 5. It is descriptive in that the researcher is interested in process, meaning and understanding gained through words or pictures; 5. Qualitative research is inductive in nature (Cresswell, 1994, p. 145, as cited in Ahmed, 2002, 10 as cited in Panday, 2004). The author has taken this strategy as it would suitable for meeting research objectives.

Sampling Procedure

As the study is a socio-economic research, selection of the respondents is the most significant part. For the purpose of the present study, the respondents were selected in such a way that unbiased results could be obtained as to the effect of RAKUB's expanding programme on the poor borrowers in question. Given the nature of the present study, it was required to collect data both from the primary and secondary sources. Hence, the current study was based on both the primary and secondary data. The primary data were collected through personal interview with female entrepreneurs selected purposively from RAKUB, Rajshahi branch, Rajshahi. All

the respondents took credit for almost five years. Purposive sample sizes are often on the basis of theoretical saturation (i.e. the point in data collection when new data no longer bring additional insights to the research questions).

Data Collection Techniques

The author conducted semi-structured in-depth interview with both bank personnel and female borrowers. Interview guides were carefully prepared so that comprehensive and in-depth results could be achieved for the purpose of the study. The respondents were interviewed cordially at their own houses and offices, respectively. These entrepreneurs were also invited to participate in focus group discussion (FGD), which is also very useful for qualitative research. Each group consisted of about 6-10 participants, depending on their availability. The participants were invited to suggest convenient times and places for the focus group discussion. It was important and useful for the participants to think about, discuss/ debate an issue or a set of issues related to the current research work. It was facilitated by the researcher. FGD assisted the researcher to cross check the data in order to ensure validity. The participants were also allowed to interpret each other's responses.

The data that could not be collected from the primary sources were obtained from secondary sources. Secondary data were retrieved from relevant publications, annual reports and also accounts of Rajshahi Krishi Unnayan Bank. Moreover, various

books, journals, and articles related to the research problem were used for collecting secondary data.

THEORETICAL KEY CONCEPTS

Entrepreneurship may be regarded as what entrepreneurs do. In other words, entrepreneurship is the act of being an entrepreneur. Entrepreneurship is a process of involving various actions to be undertaken to establish an enterprise, while some call entrepreneurship as risk bearing, and others view it innovating and also consider it thrill seeking (Khanka, 2002).

Entrepreneurship is the key to small business development. A country may have resources but the problem of development is to put those resources into the process of production. This can only be made possible through the initiative taken by some persons or organizations (Hossain & Rahman, 1999). Thus, entrepreneurship plays a vital role in the growth and development of any country, especially of a poverty-ridden country like Bangladesh. The development of a country depends not only on its human resources but also on the proper utilization of all the resources. Entrepreneurship development is a powerful instrument to activate the forces of the socio-economic development of a country. The development of entrepreneurship can solve acute problems like unemployment, underemployment, and disguised employment, etc. (Saha, 1995).

The Concepts of Entrepreneurs and Entrepreneurship

An entrepreneur can be defined as one who initiates and establishes an economic activity or an enterprise. Thus, entrepreneurship refers to the general trend of setting up new enterprise in a society (Begum, 1993). ILO (1984) defines an entrepreneur as supposed to have several typical characteristics as self-confidence, result oriented, risk taking, leadership, originality and future oriented.

Meanwhile, women entrepreneurs refer to those who innovate, imitate or adopt a business activity (Khanka, 2002). Entrepreneurship is a set of activities that are performed by an entrepreneur. Thus, entrepreneur precedes entrepreneurship. The definitions described above highlights risk-taking, innovating and the resource organizing aspects of entrepreneurship.

Woman Entrepreneurship Development in Bangladesh

It is important to note that nearly half of the total population in Bangladesh are females. In more specific, the female entrepreneurs deserve special attention to foster, promote, and persuade economic growth. In developing countries, the role of various NGOs like BRAC, Proshika, ASA, Swanirvar etc. on woman entrepreneurship are well-known. They provide support services mainly to the rural women in income generating activities. These organizations successfully make

arrangements for finance, training for income generating projects, assisting in marketing their products, providing educational facilities, raising consciousness and building up self-confidence among the rural womenfolk. In developing the rural woman entrepreneurship, the role of various NGOs is strongly felt in every nook and corner of the country (Pervin & Akther, 2001).

Today, we have several NGOs contributing to entrepreneurship development in the country. The major ones are the National Alliance of Young Entrepreneurs (NAYE), the World Assembly of Small and Medium Entrepreneurs (WASME) Rural Development and Self Employment Training Institute (RUDSETIs). In Bangladesh, the impact of micro credit on poverty alleviation is limited, despite its fame. Hashemi (1998) argues that although micro credit in Bangladesh through Grameen Bank, BRAC, PROSHIKA, ASA and other Governmental and Nongovernmental agencies has succeeded in reaching a quarter of all poor rural households, poverty still persists. One major reason for this may be the limits to micro credit in effectively targeting all of the poor, specifically in leaving out large sections of the hardcore poor, the distressed (Khandker, 1998; Hashemi, 1998; Kabeer, 1998; Johnson & Rogaly, 1997).

In order to build up woman entrepreneurship on a small scale in the rural areas of Bangladesh, the role of Grameen Bank (GB) is unique. It is true that GB is engaged in bringing dramatic changes and improvements in the socio-economic condition of the rural Bangladesh by providing credit through its non-traditional credit delivery system. In fact, GB has been successful in developing entrepreneurship among the women in villages. Probably, GB is the only coveted financial institution which can claim continued rate of recovery of their loan at 98%. In a free market economy, the role of commercial banks or commercial bank in developing entrepreneurship is always very important. In the case of development of woman entrepreneurship, the role of such banks is equally important. Therefore, the role played by banks and financial institutions for the development of entrepreneurship among women is still not seen in a large scale (Pervin& Akther, 2001).

Most of the literature and studies on the development of entrepreneurship among women provided credit by NGOs. There are limited studies on banks, especially for the Rajshahi region, and this has encouraged the researcher to work on RAKUB.

RAKUB Activities in Entrepreneurship Development among Women

Rajshahi Krishi Unnayan Bank (RAKUB) is a government owned specialized financial institution for financing the development of entrepreneurship among women and its backward and forward linkage industries in the Rajshahi division of the country. The bank was established on 15 March 1987 by taking over of all offices, branches, and other establishments of the Rajshahi Krishi Unnayan Bank (RAKUB) in Rajshahi division, including their assets

and liabilities. In addition to development financing, RAKUB also conducts traditional commercial banking activities. RAKUB started its operations with authorized and paid up capital of Tk 500 million and Tk 60 million, respectively. The paid up capital was enhanced to Tk 980 million in 1999-2000 (Daud, 2008). Its activities, however, increase day by day. The bank took many core programmes for entrepreneurship development among women.

RSCP is RAKUB's own group-based credit programme introduced in 1994 in all the districts of Rajshahi division, except Kurigram. The bank provides collateral-free small loans to poor women and unemployed persons for income generating activities under the programme through 129 branches. Outstanding loans under the project amounted to Tk 153.00 million on 30th May 2005.

Loan Disbursement

Against the lending target of Tk 8500.00 million for the financial years 2004-2005, the bank disbursed Tk 8,697.00 million (102 percent of the yearly target) among 340,633 borrowers.

Under the BSCIC (Bangladesh Small & Cottage Industries Corporation) assisted programme which was implemented by RAKUB since 1987, the credit facilities have been extended to the entrepreneurs of cottage industries for creating self-employment opportunities. The programme aims at economic development and uplifting the craftsmen. Outstanding loans as on 30-06-2005 amounted to Tk 97 million. RAKUB provides credit to the disabled persons for alleviation of poverty, creation of self-employment opportunities and development of socio-economic condition. The bank

TABLE 1
Sub-sector wise loan disbursement

Sub-sector	(Tk million)					
	2004-05			2003-04		
	Target	Achievement	Borrowers	Target	Achievement	Borrowers
Crops	4800.00	4357.00	214951	4200.00	3742.80	196129
Fishery	50.00	89.00	734	40.00	40.10	632
Livestock	350.00	497.00	23119	300 .00	417.00	17634
Farm machinery	60.00	71.00	785	80 00	44.60	748
Agro-based industries	250.00	341.00	641	450. 00	160. 40	691
Cash Credit	1400.00	1933.00	8329	850. 00	1368. 40	4809
Poverty Alleviation	250.00	226.00	25718	180. 00	160. 50	13909
Others	840.00	1183.00	66356	900. 00	833. 50	58116
Total	8000.00	8697.00	340633	7000. 00	6767. 30	292668

Source: RAKUB Annual Report, 2004-05.

extended collateral-free credit up to Tk 50,000 for poultry, duckery, goatery, dairy, beef fattening, sewing machine, computer and small trading. Meanwhile, Tk 4.00 million was disbursed among 395 disabled persons up to 30 June 2005 (Daud, 2008). Hence, RUKAB has provided credit to female entrepreneurs through different programmes under different conditions. However, there are some basic problems in relation to entrepreneurship development among women, as addressed by both the respondents and bank personnel. The paper mainly focuses on these crucial problems. The following findings reveal the different problems faced in relation to entrepreneurship development among women in Bangladesh.

FINDINGS OF THE STUDY

Bangladesh is a developing country that exits at the bottom of the development status. Women constitute nearly half of the total population. Nevertheless, they are not incorporated in the country's development sector on a large scale. Without their participation and contribution, all out development of a nation cannot be made possible. Thus, like many other developing countries, Bangladesh has also realized the importance of entrepreneurship development among women through public and private sectors. RAKUB is a prominent bank of the country which has been working to develop rural entrepreneurs by providing credit facilities. However, there are still some major problems which hinder

entrepreneurship development among the women in this country.

Firstly, the findings will be illustrated through the following (two) case studies. Each focuses on the problems faced in relation to entrepreneurship development among women.

Case study: 1
Rokeya was twenty-five years old. She was a rural entrepreneur of village Shampur. At first, she purchased two cows by taking up a loan from RAKUB. She started her business in a small scale. She then decided to make her farm larger, so she needed about five lakh taka at a time. For this purpose, she went to the bank but had to face a lot of complexities in reimbursing the loan. She could not fulfil her dream because of the difficulties she had faced. In particular, she lacked the knowledge about banking procedures and formalities, and also works as impediments for female entrepreneurs.

Case Study: 2
Rohima, a 28 year old woman, wanted to start a small-scale fishery firm. She wanted to get a loan from RAKUB in order to initiate her business. When she finally approached the bank, she experienced the complicated procedure of bank loan disbursement which was really difficult for an uneducated village woman like her to understand. The bank asked for many papers as well as her experience regarding this

business, while processing her request. Rohima showed all the legal papers of her business but she did not have the experience in fish farming. As a result of this, the bank refused to approve Rohima's application for the loan.

The following description will focus on other problems related to women entrepreneurship development that the researcher found from the research.

Complex Procedure in Taking Loans

The female entrepreneurs are facing great difficulty in getting bank loans. They often suffer from getting personal security. Moreover, the complex procedure imposed by banks in taking loans also creates problems for these entrepreneurs.

TABLE 2
Complex procedure in taking up loans

Complex procedure in taking up loans	No. of Entrepreneurs	Percentage
Difficulty in getting loan	35	87.5%
No difficulty in getting loan	05	12.5%
Total	40	100%

Source: Field Survey by the author

Table 2 shows that 87.5% (35 female entrepreneurs) faced difficulties in getting loans from RAKUB, while 12.5% (5 female entrepreneurs) did not face any problems in getting the loans from the bank. From the above table, it is clear that most entrepreneurs faced great difficulties in taking up loans due to the complex procedure involved.

Marketing of the Products

Marketing of the products is also a major problem for these female entrepreneurs. They sell their products mostly to the village buyers and middlemen in village-based markets and they have no chance to check the actual price of their good.

TABLE 3
Marketing problems of entrepreneurs

Marketing Problems	No. of entrepreneurs	Percentage
No Difficulty in Marketing	10	25%
Difficulty in marketing products	30	75%
Total	40	100%

Source: Field Survey by the author

The table 3 above depicts that out of total 40 rural female entrepreneurs, 75% (30 female entrepreneurs) have faced marketing problems. Among the 30 female entrepreneurs, 10 had credit sales, 12 faced pricing problems due to high production cost and 8 entrepreneurs had low demands for their products.

Supply of Raw Materials

Supply of raw materials is also another problem for these entrepreneurs. In the rural areas, it is difficult to get raw materials and storing it.

TABLE 4
Problems in supplying raw materials

Problem involved in supplying of raw materials	No. of Entrepreneurs	Percentage
Financial problem in acquiring raw materials	21	52.5%
Increased price of raw materials	05	12.5%
Scarcity of raw materials	10	25%
Unsuitable quality of raw materials	04	10%
Total	40	100%

Source: Field Survey by the author

Out of 40 female entrepreneurs 52.5% (21 female entrepreneurs) have had financial problems in acquiring raw materials, 12.5% (5 female entrepreneurs) have faced increasing raw material prices, 25% (10 female entrepreneurs) have had scarcity of raw materials, and 10% (4 entrepreneurs) have encountered unsuitable quality of raw material and legal problem.

Capital Size of Female Entrepreneurs

The rural entrepreneurs have faced initial or venture capital problem to establish or start their enterprises. The following table shows that the majority of the female entrepreneurs' businesses are too small in scale and they tend to borrow small amounts of loan to run their small enterprises. It is important to note that finance is the core problem for expansion of activities in all the categories of entrepreneurs.

TABLE 5
Capital size of female entrepreneurs

Capital Size (Tk)	No. of Entrepreneurs	Percentage
Less than 4000	10	25%
4000-6000	19	47.5%
7000-90000	07	17.5%
More than 9000	04	10%
Total	40	100%

Source: Field Survey by the author

The above figure clearly shows that the female entrepreneurs could not expand their business and this is mainly due to shortage of capital. Finance is the core problem for expansion of activities in all the entrepreneur categories. Accordingly, female entrepreneurs have to pay interest and as such, they almost have no money to reinvest in their businesses.

Female Entrepreneurs' Experience

These entrepreneurs' experience is also an acute problem in taking loan. Most of the female entrepreneurs do not have much experience in the concerned business which also acts as bottleneck to their businesses. The following table shows a clear picture of this scenario.

The authors' survey data show that nearly 87.5% of the female (35 female entrepreneurs) have entrepreneurship experience of less than four years, and only 5 female entrepreneurs have more than eight years of relevant experience. Thus, this lack of experience seriously affects the efficiency of the rural female entrepreneurs.

In addition, the lack of experience is also a problem in taking loan from RAKUB.

TABLE 6
Female entrepreneurs' experience

Female entrepreneurs' experience	No. Of Entrepreneurs	Percentage
Less than four years	35	87.5%
More than eight years	05	12.5%
Total	40	100%

Source: Field Survey by the author

Educational Status of Female Entrepreneurs

It is known that education has an important role to play in the development of entrepreneurs. Educated entrepreneurs can shoulder the entrepreneurial responsibilities effectively. The survey data depict that 62.5% (25 female entrepreneurs) were illiterate, i.e. they have acquired the ability to sign their names only, and 25% have primary education, while 12.5% have secondary education and above.

TABLE 7
Educational status of the female entrepreneurs

Level of education	No. of Entrepreneurs	Percentage
Illiterate	25	62.5%
Primary education	10	25%
Secondary education and above	05	12.5%
Total	40	100%

Source: Field Survey by the author

It is obvious that the percentage of illiteracy in rural areas of the country was generally high and therefore RAKUB was under compulsion to offer financial assistance to rural illiterates who have no formal education but have the guts to take risk and hard labour. But illiterate entrepreneurs cannot make precise use of bank facilities and often fail to make optimum use of their limited resources. There are some other constraints which hinder entrepreneurship development among women as well. These are described below:

Religious Customs and Social Norms

In rural areas, women are very much abided by cultural barriers, norms and customs (Rahman, Hossain & Miah, 2000). Female entrepreneurs constitute a vital segment of loaners of Rajshahi Krishi Unnayan Bank. From the present study, the authors found that female entrepreneurs operating in rural areas are bound to follow the cultural codes, religious customs and social norms. All these barriers are not helpful in the development of female entrepreneurs. They often don't like to discuss their problems with male bank personnel due to the restricted culture in villages. In view of this problem, it is somewhat difficult for bank personnel to perform their responsibilities smoothly specially in dealing with female entrepreneurs working under severe social constraints. Moreover, restricted societal norms do not always allow women to go outside their homes and to be involved in different entrepreneurial activities.

Lack of Infrastructural Facilities

Infrastructural facilities such as transportation, communication and supply of electricity are not at optimum level. These pose a great barrier for entrepreneurship development in the rural area. The authors found that about 75% female entrepreneurs viewed that underdeveloped infrastructure facilities affect the expansion of their businesses.

Lack of Technological Knowledge

Modern development is the development of technologies. Production cannot meet the demand unless its quality is up to the market requirement (Rahman, Hossain & Miah, 2000). The field survey revealed that 95% (38 female entrepreneurs) are practising traditional technology, which ultimately results into increasing inefficiency. The opportunities for training and also the scope of introducing new technology are increasing. Nonetheless, such opportunities are most extended in the urban areas. It is observed that technical assistances are not easily available to the rural entrepreneurs. The respondents also reported that the lack of education and training, inadequate capital and underdeveloped infrastructural facilities are the major problems for technological changes.

Poor Managerial and Technical Skills

It is obvious that production and marketing efficiency are important determinants of entrepreneurial success. Unfortunately, many entrepreneurs especially women cannot ensure their production and marketing efficiency due to their poor managerial and technical skills. Moreover, they also suffer from operational efficiency because of outdated technology, low quality raw materials and traditional production system. It was found that almost 50% (20 female entrepreneurs) could not ensure their production and marketing efficiency due to the lack of managerial and technical skills.

Problem in Identifying the Right Entrepreneurs

Sometimes identification of the right women with entrepreneurial skill is a difficult job. The responding bank personnel also stated that the problem involved in identifying the purpose of loans was more serious in the case of small female entrepreneurs engaged in agricultural activities and small business activities.

The Burden of Interest

The burden of interest in borrowing loan is very high. It affects not only on their profitability but also causes harm to their economic solvency. The study reveals that after repayment of interest, female entrepreneurs again face deficit of money. Consequently, they have to sell their family's property. Most of the rural women have almost no possibility to expand their operations unless the burden of loan interest is reduced.

Lack of Infrastructural Facilities

Infrastructures such as transport and communication also pose major barriers for entrepreneurship development in the rural areas (Hossain & Rahman, 1999). Some of the respondents opined that they could not generate employment due to infrastructural barriers. In rural areas, electricity, gas supply and other utility services are not widely provided. As a result, they cannot utilize the credit due to these infrastructural barriers.

RECOMMENDATIONS

Entrepreneurship development in the country should receive top priority and integrated effort is necessary from all quarters. The study gives the following suggestions in the light of its findings:

1. RAKUB should follow integrated and specific procedure for the identification of potential rural entrepreneurs. After the identification, the support and sustaining services must be extended to them for desired growth of rural entrepreneurship.

2. The rate of interest in loans to working capital should be reduced and in genuine cases, loans should be invited on concession rates.

3. The procedures of sanctioning loan should be simplified and loan application should be appraised as early as possible. The delay in processing loan should be reduced and specific time limit may also be fixed to dispose of the different aspects of loan processing.

4. Training programme is needed for entrepreneurs' development among women. Most of the female entrepreneurs use traditional technology based and manual skills in their businesses. Technology can play a vital role in saving money and increasing productivity and quality of output. Training should be given to female entrepreneurs so that they can use technology effectively.

5. It is very much essential to establish 'Training Institution' in each Thana to provide well-designed training programme for rural entrepreneurs. It may be pointed out that mere offering of facilities to the rural female entrepreneurs for enjoying certain amount of credit is not enough unless those entrepreneurs can be offered adequate training facilities in order to properly utilize credit.

6. Rural entrepreneurs have severe problems of the availability of raw materials in the right time and at the right price. For this purpose, both communication and transportation systems should be improved.

7. Existing credit sanctioning procedure should be changed. The field workers can help in filling up forms and other formalities.

8. The volume of work in each bank branch has been gradually increasing. In this regard, the number of bank officials should be increased to cope with the increasing volume of work.

9. It is necessary to alter social attitude towards the operation of female entrepreneurs. If the bank works closely with the social and religious leaders, the problem arising out of rigid social norms regarding female entrepreneurs may be solved.

10. The Government should take necessary actions to improve infrastructural facilities, such as communication, electricity, utility services (fuel, gas and water) etc. that will certainly help in improving the socio-economic condition of rural women entrepreneurs.

11. Entrepreneurship courses may be introduced in the informal educational institution in Bangladesh to empower men and women with entrepreneurship skills.

CONCLUSION

It is obvious that the RAKUB has been making contributions to the development of female entrepreneurship in the rural areas of Bangladesh. As the largest development partner in the northwest region, the Rajshahi Krishi Unnayan Bank aims at overall development of the women, as well as all the sectors and sub-sectors of agriculture in this particular region. Besides catering to agricultural credit, financing agro-business and agro-based industries, activities related to socio-economic development and poverty alleviation programmes, the bank performs most commercial banking functions.

Finance from RAKUB has created positive impacts on the income and standard of living of its female participants. The role of RAKUB in entrepreneurship development can be regarded as supportive despite the various operational obstacles faced in the rural areas of Bangladesh. The paper focuses on the problems and obstacles addressed by female entrepreneurs as well as service providers. Nevertheless, the author proposed some specific recommendations to solve the prevailing problems of woman entrepreneurship development. As entrepreneurship development is very important to ensure economic development of Bangladesh, it would be of utmost importance to improve the effectiveness of RAKUB's activities.

REFERENCES

Ahmed, M. (1993). Growth of Industrial Entrepreneurship in Bangladesh: A Study Of bank financed Engineering Industries. (Unpublished Doctoral Dissertation). Institute Of Bangladesh Studies, Rajshahi University, Rajshahi.

Begum, A., & Islam, Z. H. (2006). Role of NGO's in poverty alleviation in Bangladesh: An Overview. *Asian Studies, 25*, 71-75.

Begum, R. (1993). Entrepreneurship in small-scale industries: A case study of Engineering Units. *Dhaka University Journal of Business Studies, 14*(1), 159-168.

Daud, N. (2008, June 24). *Credit programs of Rajshahi Krishi Unnayan Bank*. Retrieved July 16, 2008, from www.rakub.org.bd.

Goswami, A. K. (1998). Empowerment of Women in Bangladesh. *Empowerment, 5*, 45-74.

Hossain, K. S., & Rahman, M. (1999). Role of Grameen Bank in Entrepreneurship Development: A study on some selected women entrepreneurs, *Islamic University Studies (Part-C),* Vol. 2, No.1, June.

Khanka, S. (2002). *Entrepreneurial Development.* S. Chand & Company LTD: Indian Press, pp. 1-6.

Pervin, S., & Akther, R. (2002). *Problem and Prospects of entrepreneurship development in Bangladesh.* University Press Ltd.

Rahaman, M., Hossain, I., & Miah, A. S. (2000). Problems of Women Entrepreneurship Development: A Study of Grameen Bank Finance on Some Selected Areas. *Islamic University Studies*, *3*, 120-133.

Rahman, H. (2001). *Entrepreneurship Development.* University Grants Commission of Bangladesh.

Rajshahi Krishi Unnayan Bank, Annual Report 2004-05.

Sultana, N. (2006). *The role of NGOs in Increasing awareness among vulnerable women in Bangladesh: A study on two selected NGOs in Rajshahi.* (Unpublished M. Phil Paper). Department of Public Administration, University of Rajshahi.

Ullah, A. (2003). Empowerment of women in Bangladesh: Do NGO Intervention Matter?" *Empowerment, 10*, 21-32.

Zareen, & Kabir. (2003). BRAC's Intervention in poverty alleviation: A Partial Profile. *Empowerment, 10*, 93-118.

Pre Service Teachers' Development of Pedagogic Content Knowledge: A Multifaceted Case Study

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ABSTRACT

One important aspect of research with regards to teacher's knowledge is explaining in detail how student teachers develop their pedagogic content knowledge. Pedagogic content knowledge is multidimensional, such research needs to be able to represent a rich picture of how pre-service teachers develop this knowledge during a teacher education programme. Therefore, research into teachers' pedagogic content knowledge requires not only multiple instruments for its exploration but also multi-method triangulation of data analysis. In this way not only are perspectives of pedagogic content knowledge explored but the practicality of focusing on and studying pedagogic content knowledge can also be estimated by corroborating the data to represent a rich picture of pedagogic content knowledge. Thus, this paper illustrates the so-called multifaceted case study that was conducted at a university Department of Educational Studies in England. Quantitative and qualitative data that resulted from the study were analysed and interpreted to measure whether the instruments and research design are adequate for constructing the judgment of the nature of pedagogic content knowledge among student teachers.

Keywords: Student teachers, pedagogic content knowledge, multifaceted case study

INTRODUCTION

Students entering teacher education programmes come from diverse backgrounds

in term of their educational experience, field of qualifications, specific knowledge, cultural background, interests, maturity, and their intelligences (Abd Rahman, 2002a). They learn in various ways and at different rates (Wisdom & Gibbs, 1994) with different needs (Stroot *et al.*, 1998). In other words, they have different learning styles and learning strategies (Abd Rahman, 2002b).

In this situation, how could a teacher educator provide pre-service teachers (PSTs) with a programme or course content without understanding what their needs are and how they learn well (Darling-Hammond & Baratz-Snowden, 2005; Darling-Hammond, Bransford & LePage, 2006).

In line with the above demand, Pedagogic Content Knowledge (PCK) is increasingly recognized as an essential component in understanding 'quality teaching' and in assessing the teaching of pre-qualified teachers. In order to teach a subject, one needs breadth and depth of PCK (Abd Rahman & Scaife, 2005), that is, a rich knowledge base with many interconnections which constitute a much more thorough understanding than is achieved purely from being a learner of the subject (Shulman, 1986a, 1987). Although PCK has come to be seen as important, details of its development, depth and quality among PSTs have remained something of mystery, as has the capability of PSTs to employ and adapt PCK in their actual teaching (Abd Rahman & Scaife, 2008). Thus, it is a challenge for researchers or teacher educators, or even STs themselves, to make explicit their espoused theories and theories-in-use and discover the inconsistencies between the two in order to increase their knowledge of teaching and of themselves as teacher inquirers.

PEDAGOGIC CONTENT KNOWLEDGE

PCK was originally conceptualised by Shulman in 1986 and developed with colleagues in the Knowledge Growth in Teaching Project (Shulman, 1986a, 1986b, 1987, 2002; Shulman & Grossman, 1988; Gudmundsdottir, 1990, 1995; Bromme, R., 1995; Halim, 1997; Halim & Meerah 2002; Veal & MaKinster, 1999; Li Xuhui,

Keys:
SMK: Subject Matter Knowledge
GPK: General Pedagogical Knowledge
KL&S: Knowledge of Learners and Self
KCC: Knowledge of Curriculum and Context
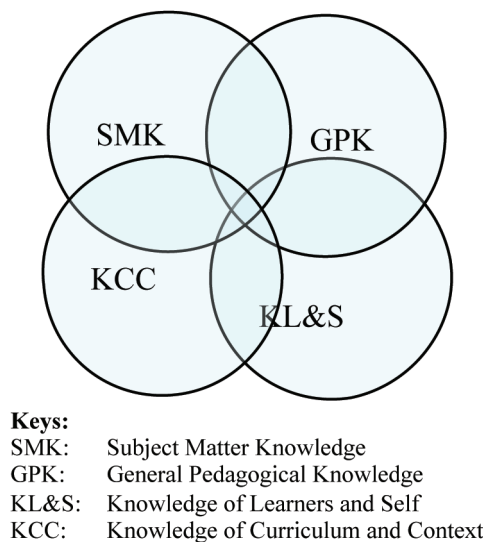
Fig.1: Concept of Pedagogic Content Knowledge (Abd Rahman & Scaife, 2005)

2001). PCK has been described as a component of the important 'know how' that PSTs should develop during their teacher education programme. It concerns what teachers should know about their subject matter and, crucially, how to transform that knowledge into classroom learning events (Carter & Gonzales, 1993). PCK can also be conceptualised as a teacher's interpretations and alterations of subject matter knowledge for the purpose of facilitating student learning (Abd Rahman & Scaife, 2005). Each is liable to influence the others and thus the whole. A static representation of this dynamic system is shown in Fig.1.

Subject Matter Knowledge (SMK) refers to academic related knowledge, which includes information and the structures, rules, and conventions for organizing and using information. General Pedagogical Knowledge (GPK) is a combination of content and pedagogy, where information helps learners to an understanding, and it includes any way of representing a subject that makes it comprehensible to others. In relation to PCK research, the multifaceted approach can be considered appropriate because of the inherent complexity of PCK. In keeping with this approach, the study is based on case study research design, with multiple methods of data gathering, such as questionnaires, non-participant observation and semi-structured interviews. Quantitative and qualitative data are triangulated in order to describe and interpret the research findings.

THE THEORY OF ACTION

The constructivist perspective on 'learners are active participants in which they construct new knowledge and understanding based on what they already know and believe' (Argyris & Schön, 1974, 1978; Argyris *et al.,* 1985) provides an idea of the Theories of Action (ToA). According to Kane *et al.* (2002, p. 182), ToA are based on a view of humans as agents acting purposely on their environment and learning from their action, as well as using this learning to plan further actions. Argyris and Schön (1974) then distinguished the ToA with two types of theory of action, namely, *espoused theories of action* and *theories in use*. Meanwhile, the *espoused theories of action* is the world view and values people believe their behaviour is based on, and the *theories in use* is the world view and values implied by their behaviour, or the maps they use to take action (Anderson, 1997).

Argyris and Schön (1974) explain that integrating action with thought is a difficult task. As cited in Anderson (1997, p. 1), Argyris and Schön assert that people hold maps in their heads about how to plan, implement and review their actions. When someone is asked how he or she would behave under certain circumstances, the answer he or she would usually give is his or her espoused theory of action for that particular situation. This is the theory of action to which he or she gives allegiance, and which, upon request, he or she communicates to others. However, the theory that actually governs their actions is his or her theory–in-use, which may or may

not be compatible with his or her espoused theory; furthermore, the individual may or may not be aware of the incompatibility of the two theories (Argyris & Schön, 1974). They further emphasise the discrepancy between what people say they believe (their 'espoused' theories) and the ways in which they act (their theories in action).

Thompson (1992, p. 134, as quoted in Kane *et al.*, 2002) signalled the need to examine theories-in-use as well as espoused theories:

> *Any serious attempt to characterise a teacher's conception of the discipline he or she teaches should not be limited to an analysis of the teacher's professed view. It should also include an examination of the instruction setting, the practices characteristic of that teacher, and the relationship between the teacher's professed views and actual practice.*

Furthermore, according to Kane *et al.* (2002), multiple methods can be used by researchers to gain access to both the espoused theories of action and the theories in use of teachers. For example, researchers studying the beliefs and conceptions or the espoused theories of action of teachers have adopted methods such as concept maps, interviews, metaphors, autobiography, narrative, and live history. In addition, direct observation, stimulated recall interviews, document analysis, and journal keeping have also been used to assess the thinking in action or the theories in use of a teacher. Thus, it is a challenge for researchers or teacher educators, or even PSTs themselves, to make explicit their espoused theories and theories-in-use and discover the inconsistencies between the two in order to increase their knowledge of teaching and of themselves as teacher inquirers.

On the other hand, a number of studies have suggested that (e.g., Putnam & Borko, 1996; Schifter & Fosnot, 1993), in general, teachers with greater subject knowledge tend to emphasise the conceptual, problem solving, and inquiry aspects of their subjects. Less knowledgeable teachers tend to emphasise facts, rules and procedures and stick closely to detailed lesson plans or the text, sometimes missing opportunities to focus on important ideas or connections among ideas. Wilson (1989, as cited in Putnam & Borko, 1996), found that PSTs with deeper knowledge of their subject placed more emphasis on conceptual explanations and more often drew connections among topics within the curriculum than did their colleagues with less deep knowledge. Grossman *et al.* (1989), in the Knowledge Growth in a Profession Project, noted that PSTs sometimes try to avoid teaching topics that they do not know well. When they cannot avoid teaching the unfamiliar topic, they may rely heavily on the textbook and stick closely to a detailed lesson plan.

RESEARCH METHOD

As an effort to contribute to the knowledge about facilitating student teachers to construct PCK during their teacher education programme, the overall purpose of this research was to construct an in-depth and coherent understanding of the development of PCK among PSTs towards the end of their teacher education programme from various perspectives. In order to achieve this objective, a variety of methods were used, including a survey questionnaire, structured observation, and semi-structured interviews (see Fig.2).

In this research, the questionnaire was administered at the very beginning of study. The questionnaire, besides gathering PSTs' backgrounds, was also aimed at eliciting the nature of PSTs' PCK through their own self-ratings. Based on the feedback from the questionnaire, three respondents were invited and agreed to participate in a further study through observation and interview. Non-participant observations were carried out during the PSTs' school placements. Observation data were recorded using a teaching checklist/chart which emphasised PCK. Interviews were carried out after the observations. During the interview sessions, PSTs were asked to reflect on their preparation and teaching practices (Fig.2). The multiple data sources analysed for this study would contribute to the trustworthiness of the emerging findings. After examining the data from the three sources individually, all the data were triangulated in order to obtain a synthesised description of PSTs' PCK from the various perspectives.

FINDINGS

The paper presents illustrative findings from the study of the nature of PSTs' PCK. The
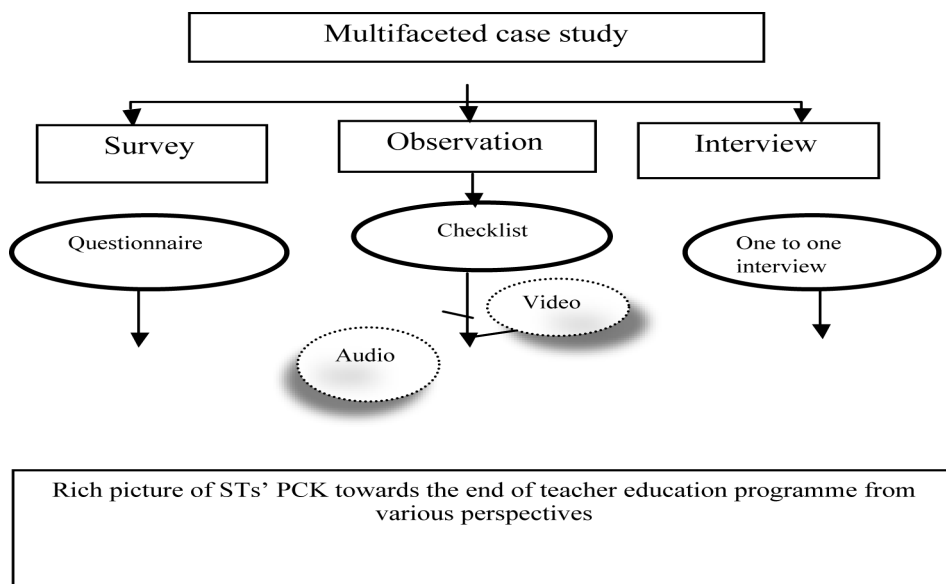
Fig.2: Multifaceted Approach in Examining PSTs' PCK

analysis was shaped by the combination of PSTs' questionnaire-based self-ratings regarding their application of PCK, observation of the PSTs' application of PCK and PSTs' reflections regarding their PCK practice during semi-structured interview. The discussion was particularly focused on the questions: *in which components of PCK do PSTs have strengths and in which components is there scope for development?*

Participants

The participants in this study were 20 pre-service teachers (PSTs) who were in their final semester of a one-year postgraduate programme and at the time of the study, were in school experience (practicum) placements.

The demographic characteristics of the STs considered for this study included gender, programme, qualification, and teaching experiences. Postgraduate Certificate in Education (PGCE) at the School of Education (SOE) is a one-year course designed to prepare PSTs to teach students in the 11-18 age range in the school. The major aim of the tutors and teachers in partnership schools who contribute to the course is to help PSTs acquire understanding and competence in the strategies of teaching, learning, assessment and classroom management. As shown in Table 1, the majority of the participants were female. Ten of the participants were from the Science Initial Teacher Education (PGCE) programme, followed by Maths, English, Modern Language, and Geography. Fifteen entered the PGCE

programme with a qualification related to their PGCE and five STs had somewhat related qualifications; for example, if the PSTs' qualification was in Economics and he or she entered the Mathematics programme, or if the qualification was Zoology and he or she entered Science programme. The 'somewhat related qualification' was identified according to whether the content of the programme matches the teaching subject or it was a part of that subject. Most of the PSTs were relatively new to teaching. Ten of them had 11-20 weeks of teaching experience, five STs had 1-10 weeks teaching experience, four had 21-30 weeks of teaching experience and only one PST had more than 30 weeks of teaching experience. In general, it could be stated that the participants were mostly female, who entered the PGCE programme with an appropriate degree but with quite limited teaching experiences.

Self-Rating of Pedagogic Content Knowledge

In order to get an overall picture of the PSTs' self-rating of their performance of PCK, the mean scores for each sub-component were calculated. These are shown by the length of the bars in the bar chart below (Fig.3).

The bars are labelled with abbreviations of the dimensions to which they refer. The overall mean score in the judgement ratings for the complete sets is 2.4, as illustrated by the horizontal line in Fig.3.

A number of instructive results seemed to have emerged from this questionnaire. However, as Argyris and Schön (1974)

stated that '*we cannot learn what someone's theory in use is simply by asking him'*. Thus, to determine the PSTs' PCK in greater depth, further observation was made of the three STs. These data are illustrated and discussed below.

Practices of Pedagogic Content Knowledge

In order to explore this, and thus to draw inferences about PCK, observations were carried out during PSTs' school experience (teaching practice). Data from the observations were recorded using a teaching checklist adapted from Tilstone's ABC of Behaviour Chart which emphasises PCK (Tilstone, 1998). A tape and a video recorder were used to help with the recording of the PSTs' behaviour during the classroom teaching. To record the categories of observation, data were grouped into the four components of PCK. They were Subject Matter Knowledge (SMK), General Pedagogical Knowledge (GPK), Knowledge of Curriculum and of Context (KCC) and Knowledge of Learners and

of Self (KLS). Each component contains further sub-components that have emerged from the observation. The observations were recorded using the following codes: - *cannot be detected*, /: *little utilised*, //: *average utilised*, and ///: *highly utilised*. Tables 7 to 10 illustrate the nature of the PSTs' practices of PCK.

As shown in Table 1, there are three dimensions of SMK recorded from the observation: *specific topics mentioned* (labelled as SMK1), *key points of topics briefly explained* (SMK2) and *further explanation of the topics* (SMK3).

TABLE 1
Observation Summary of the STs' SMK Practices

SMK Participants	SMK1 Specific topics	SMK2 Key points	SMK3 Explanation
Martin	/	/	/
Mick	//	/	-
June	-	/	/

Key: ///: considerable application inferred; //: moderate; /: low; - : could not be detected
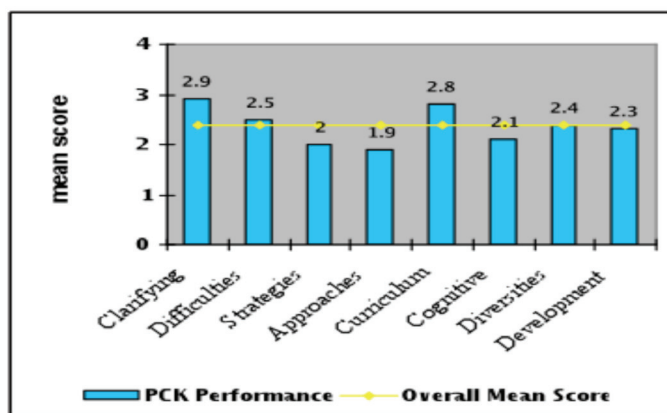
Fig.3: PSTs' Self-Rating of Pedagogic Content Knowledge

There were slight differences between each respondent. For example, Martin simply mentioned the topic of subject, slightly mentioned the key points regarding the topic and explained a bit further regarding the topic. Meanwhile, Mick mentioned the topic quite clearly, managed to explain a few points regarding topic but did not explain details regarding the topic. June did not mention the topic of the subject but slightly mentioned a few points of the topic and was able to explain a bit further.

General Pedagogical Knowledge (GPK) is a combination of content and pedagogy, where information that helps learners to an understanding, including any way of representing a subject that makes it comprehensible to others. Six dimensions of GPK were recorded, namely, GPK1: *class management*, GPK2: *teaching strategy*, GPK3: *teaching approach*, GPK4: *teaching technique*, GPK5: *student-teacher interaction*, GPK6: *pupils' motivation*. According to Putnam and Borko (1996), the domain of GPK encompasses a teachers' knowledge and beliefs about teaching, learning, and learners that transcend particular subject matter domains. It includes knowledge of various strategies and arrangements for effective classroom management, instructional strategies for conducting lessons and creating a good learning environment, as well as fundamental knowledge and beliefs about the learners, including how they learn, and how that learning can be fostered by teaching. Putnam and Borko (1996) argue that having a flexible, thoughtful

and conceptual understanding of subject matter is critical for effective teaching. In this manner, they claim that teachers need to know more than just the facts, terms and concepts of a subject matter. The knowledge of organizing ideas, connection among ideas, ways of thinking and arguing, and knowledge growth within a discipline is an important factor in how a teacher will teach the subject.

As shown in Table 2, Martin's teaching is strong in the dimension of class management and student-teacher interaction, average in teaching strategies, approach, and technique and pupils motivations.

Meanwhile, Mick's teaching seemed to be strong in terms of class management, average in terms of teaching strategy, but quite low in teaching technique and not clearly utilised in term of teacher-student interaction and pupils' motivation. June's teaching seemed to be average in class management and teaching approaches, and fairly low in teaching strategy, teaching technique, teacher-student interaction, and students' motivation.

In terms of KCC, there were also six dimensions revealed through the observation, as shown in Table 3 below.

In this component of dimensions, Martin's teaching apparently has its strength in KCC1 and KCC2, average in terms of KCC4, while not clearly utilised in terms of KCC6. Mick's teaching is obviously strong in KCC1 and average in KCC5. However, KCC2, KCC3, KCC4, and KCC6 were found to be not clearly utilised during his/her teaching. June's teaching revealed

TABLE 2
Observation Summary of the PSTs' GPK Practices

GPK / Participants	GPK1 Class management	GPK2 Strategy	GPK3 Approach	GPK4 Technique	GPK5 Interaction	GPK6 Motivation
Martin	///	//	//	//	///	//
Mick	///	//	/	/	-	-
June	//	/	//	/	/	/

Key: ///: considerable application inferred; //: moderate; /: low; - : could not be detected

TABLE 3
Observation Summary of the PSTs' KCC Practices

PCK / Participants	KCC1 Syllabus	KCC2 Context	KCC3 Objective	KCC4 Cognitive skills	KCC5 Teaching materials	KCC6 Assessment
Martin	///	///	//	/	/	-
Mick	///	-	-	-	//	-
June	///	-	//	//	/	-

Key: ///: considerable application inferred; //: moderate; /: low; - : could not be detected

slightly different practices of PCK, although June's teaching was also found its strength in KCC1; she was also average in KCC3 and KCC4, but not clearly utilised in KCC2 and KCC6. It happened that KCC6 could not be detected in the observations of any of the three participants whose data are shown in Table 3. Three dimensions of KLS were recorded, namely KLS1: _Learners' background_, KLS2: *Learners' interests* and KLS3: *Learners' Capabilities*.

As shown in Table 4, Martin's teaching was average in utilising KLS2 but slightly low in terms of KLS1 and KLS3. On the contrary, Mick's teaching seemed to be slightly low in terms of KLS2 and KLS3; nevertheless, she/he apparently did not deal with pupils' background. June's teaching seemed to be very good in KLS1, average

in KLS3; however, she/he was unable to deal with KLS2.

In summary, the PSTs demonstrated substantial application in GPK1 (class management) and in KCC1 (the syllabuses used). The results indicate that the PSTs had no difficulty in applying GPK1 and KCC1 during their teaching. They showed little engagement with SMK2 (describing topics they were teaching) and SMK3, i.e. explaining further the topics they were teaching, though they may not necessarily lacked that knowledge. It also seemed that they did not demonstrate KCC6, which is knowledge about the use of assessment during their teaching. This uncertainty may not mean that they lack the knowledge of this element.

TABLE 4
Observation Summary of the PSTs' KLS Practices

Participants / PCK	KLS1 Learners' backgrounds	KLS2 Learners' interests	KLS3 Learners' capabilities
Martin	/	//	/
Mick	-	/	/
June	///	-	//

Key: ///: considerable application inferred; //: moderate; /: low; - : could not be detected

Reflection on the Application of Pedagogic Content Knowledge

In order to gather information regarding how PSTs reflect on their practices (theories in use), semi structured interviews were carried out after the observation sessions. The interview focused on the preparations of lessons, expectations of learning outcome, satisfaction in teaching, and the room for improvement.

In this session, the PSTs were invited to reflect on their teaching, both in the observed lessons and more generally. The interviews were recorded and data were then transcribed. The researcher has used a checklist *matrix* (Miles & Huberman, 1994) to help with the coding and themes in the rewording process. The analyses were then related to the components of the PCK that PSTs emphasised on during their reflections on their teaching. A summary of the PSTs' reflection in relation to a few focus aspects of the interview is given in Table 5.

For the aspect of *the preparation of lessons* depicted in Table 5, KCC was the most significant component to be referred to by the PSTs. However, GPK and SMK were seen as secondary considerations. Interestingly, none of the STs referred to KLS is connected to preparing the lesson. It seemed that learners' backgrounds were not taken into consideration when the PSTs were preparing their lessons.

Referring to the *expectation of learning outcome,* all the PSTs were shown to stress on the component of SMK. This indicated that the PSTs felt that the content of subject is the most important element to be learned by their students. In addition, there was reference to KLS by all the three PSTs who seemed to be fully aware that learning outcomes are very much dependent on students' individual capability. The significant issue here is that, although in the *preparation of lessons*, the sub-components of KLS were not taken into consideration, the PSTs anticipate that different students will achieve different levels in terms of the *expectation of the learning outcome*. They were apparently aware of their students' diversity when reflecting on the *expectation of learning outcome*.

There was also diversity in the responses to the aspects of *satisfaction in teaching* and *room for improvement* reflected by the STs. This result indicates that PSTs have their own strengths and limitations.

TABLE 5
A summary of the PSTs' Reflections on the Application of PCK

Focus aspects / Participants	Martin	Mick	June
the preparation of lesson	SMK-KCC-GPK	KCC-GPK-KCC	KCC-GPK-SMK
expectation of learning outcome	SMK-KLS-KLS	SMK-KCC-KLS	SMK-SMK-SMK
satisfaction in teaching	KCC	GPK	KLS
room for improvement	GPK	GPK and KLS	KCC

Perspective, Practice and Reflection on Pedagogic Content Knowledge

One of the purposes in this study was to carry out research from various perspectives into student teachers' knowledge of various aspects in teaching. This sub-section considers the question, 'to what extend are the PSTs' self-rated PCK (espoused theories of action) consistent with their practices of PCK (theories in use)? To help with the illustration in this sub-component, researcher triangulated the findings from the PSTs' perspectives, practices, and reflections on the PCK. The data used in this sub-section came from the analysis of self-rating performance of the PCK, as well as the observation and interview of three PSTs, namely Martin, Mick and June.

The Subject Matter Knowledge

With all the respondents clearly understanding the terms that have been used, the components of SMK, particularly in terms of *clarifying topic* and *dealing with learning difficulties* were adequately developed by PSTs. Being strongly confident in presenting ideas clearly, the PSTs seemed to be reluctant to *spend time after class* and *repeat part of the lesson.* This finding revealed that most of PSTs believe 'quality time' during teaching, that is, the ability to *present ideas clearly* is better than 'quantity time' such as '*spend time after class'* or '*repeat part of the lesson'*. It also seemed that PSTs had difficulties *using appropriate analogies* during teaching. This suggests that this is an issue for attention in further observation and interview.

During observation, PSTs showed little active engagement in SMK2 (describing topics they were teaching) and SMK3 (explain further the topics they were teaching). It is unclear why PSTs did not perform in this dimension.

During the interview, while asking about room for improvement, none of PSTs stressed on any dimension of SMK. Most of them agreed that they have adequate command in SMK, although a component on the teacher education programme may still be needed to refresh their SMK:

> *Martin : Since I was at school and I've got a vague recollection of most things, but sometimes finding it out, getting it out of my head is difficult so with Y7, stuff like this, generally*

it's not too complicated and I'm quite happy with the subject content

Mick: For my degree I did English Language and Literature. So in some respects I'm better placed than people who did straight Literature or straight Language because obviously, I've got both sides of it. We've done all the stuff at university on it but because of the schools I've been in, it's just not been an issue.

June: My content knowledge is OK. I have a fair idea of the skills of English, how you analyze literature, how you look at language, how you communicate, how you express yourself in writing and in speech.

This suggests that though the PSTs have had adequate subject content knowledge, they may not have necessarily transformed it effectively into their classroom teaching.

From the PSTs' view, a teacher education programme should act as a 'revision' or 'refreshment' centre:

Mick: Obviously we have a lot of time at university in lectures, tutorials, which has been sort of revising stuff we did on degree but stuff that we've probably forgotten. So that's been quite useful, going back over stuff.

June: I did an English degree but I don't think that's prepared me… there are lots and lots of other things that I need to know because you can be teaching books and literature that you've never read before, often that happens.

The General Pedagogic Knowledge

The application of GPK in terms of teaching strategies indicated that the PSTs seemed to be more comfortable with direct teaching strategies as compared to indirect teaching strategies. Although a constructivist perspective suggests experiential learning strategies as one of the more effective learning strategies, it seems it was difficult for PSTs to apply this particular teaching strategy. This phenomenon can be seen in the actual teaching as Martin's teaching used whole class demonstration and individual tasks, Mick's teaching tended to use whole class work and group discussion, and June also used whole class discussion and individual task strategies. In the context of teaching approaches, Martin, Mick and June seemed comfortable to apply text book approaches and brainstorming.

Interestingly, the PSTs demonstrated substantial application in GPK1 (class management). While talking about GPK, PSTs mentioned having difficulty in GPK1 at the beginning of teaching practice although there was some improvement after a few weeks of teaching practice. Most of them worried about class management factors such as time management or class discipline more than the content that they

were to teach:

Martin: I think when I first started, obviously the most important thing to get straight away is classroom management, and in the first few weeks I found that that was taking up most of my time in teaching, the actual learning was becoming secondary.

Mick: What I've been looking at in the last few weeks is the transition time in the lesson, from ending one activity and starting another, because throughout the course of the lesson I might lose five minutes by letting things run over and what I really want to do is try to tighten that up so I can keep to my time plan a little bit better.

June: Classroom management which probably most teachers would say is something they want to work on because pupils can be quite difficult to manage sometimes. I've got an Y10 class and they have been a challenge because they don't always want to be there.

In this respect, it could be seen that when PSTs were concerned about a particular PCK dimension, they would pay more attention. These circumstances will lead to the improvement of those practices throughout their teaching.

Knowledge of Curriculum and Context

In the KCC, dimensions of *promoting thinking skills* and *curriculum implementation* were considered. In terms of *promoting thinking skills,* the overall results were not encouraging. STs agreed that they had applied several thinking skills particularly in *promoting critical* and *deductive thinking skills* but seemed not to have addressed the *meta-cognitive skills*. This phenomenon could be seen during observation, whereby most of the PSTs rarely addressed this particular issue in their teaching. During the interview, one of the PST mentioned the following:

Mick: I think with the higher attaining set you are more likely to just give them a problem or give them ... You've got to challenge pupils no matter; you've got to stretch them. But not stretch them too far so that they get into panic mode about 'We don't know what to do'.

Findings from the observations also show that only one PST had attempted to apply creative thinking skills in teaching and this was confirmed during the interview:

June: We'd move on to discuss how fairy stories could be changed for a particular purpose and then by the end I wanted the pupils to have written their own fairy stories with changes, in draft and then a best copy and that was the aim of the whole scheme of work

However, the PSTs demonstrated a good application of KCC1 (i.e. the syllabus they used). This was confirmed during the interview, whereby most PSTs referred to the KCC1 while preparing for their lessons.

The Knowledge of Learners and of Self

In the component of the KLS, the PSTs agreed that they have good knowledge. In this area, all the mean scores were above the overall mean score, especially in the aspect of *teaching goals address diversity*. It seemed that all the respondents clearly understood the terms used in this component. This phenomenon was also highlighted in the PSTs' lesson plans which had been gathered during the observation. All the PSTs wrote teaching goals which addressed different abilities of their students.

In terms of students' assessment, although the PSTs' mean score was 2.5 and rated as above the average mean score (M=2.4), it seemed that they did not demonstrate KCC6 (knowledge about the use of assessment) in their teaching. In addition, none of the PSTs mentioned the use of assessment with regard to reflection on '*room for improvement*' during the interview.

As for the aspect of professional development, PSTs admitted that they improved their professionalism through reading various sources, as it is rather rare to get the opportunity to attend any conferences or courses. However, it was really helpful when one of the PSTs got an opportunity to attend a course:

Mick: I was here, to be sent on a course, which is unusual for students because normally they save it up for teachers, but about six to eight weeks ago I got sent on a course at a local primary school, which was called Brain Gym and it looked at how links between one side of the brain and the other are created in younger pupils and how this relates to poor literacy skills and poor skills in behavior when they get older and that was really useful because we were told about the best ways of developing them.

DISCUSSIONS

The literature has acknowledged that learning is viewed as a life-long process (Alkove & McCarty, 1992; Jonassen, 1996; Zemelman *et al.*, 1993). In this context, learners such as the PSTs who had taken part in the present study were encouraged to continue learning through observations, literature review, and reflections on their own practices. As noted by Alkove and McCarty (1992), reflection is particularly important because it plays an important role in a teacher's search for congruency between her or his beliefs and practice. This section of the analysis focuses on the consistency between the perspectives, practices, and reflections of the PSTs based on the Theories of Action (Argyris & Schön, 1974, 1978; Argyris *et al.,* 1985).

To show the consistency between the three areas of perspectives, practices, and reflections, the information was summarized

and grouped into the following categories: general pedagogic knowledge, curriculum/context knowledge, subject matter knowledge, and knowledge of learners and of self. Perspectives, practices, and reflections were thus brought together under the same theme to identify their differences and similarities.

In relation to the perceptions of performance of the general pedagogic knowledge, the PSTs believe that they are relatively confident in clarifying their current subject knowledge, except for the use of demonstrations and appropriate analogies. In fact, these PSTs felt that they were more confident in their ability to clarify topics through their use of language to explain ideas, than their ability to use illustrations, apply meaningful activity, demonstrate or use appropriate analogies. This was also shown in their practices. In their reflections on their teaching satisfaction and the room for improvement regarding GPK, a diversity of responses were obtained; however, so no definition conclusion could be reached in relation to reflections. A number of studies have suggested that in general, teachers with greater subject knowledge tend to emphasise on the conceptual, problem solving, and inquiry aspects of their subjects (e.g., Putnam & Borko, 1996; Schifter & Fosnot, 1993). Less knowledgeable teachers tend to emphasise on facts, as well as rules and procedures, and stick closely to detailed lesson plans or the text, and sometimes missing opportunities to focus on important ideas or connections among the ideas.

As for the knowledge of curriculum and context, the PSTs believed they were able to integrate standard curriculum, but felt less assured about promoting cognitive skills. The PSTs were also comfortable with direct teaching strategies, such as whole class work and group work strategies and were able to deal with students' learning difficulties, as evidenced in their practices. Nonetheless, they were not really sure about indirect teaching strategies, self-directed learning, computer based learning and field learning strategies. This was also clearly shown in their practices.

The PSTs believe that they have quite strong curriculum and context knowledge, specifically in terms of the sources related to the syllabus and goals encompass curriculum. On the contrary, they were not sure about the assessments based on the national standards and multiple context of the subject matter. The practices show that they have used critical and creative thinking skills as well as deductive thinking in their lessons. However, it does not seem promising for them to apply higher order thinking skills and meta-cognitive skills. Once again, reflections were unable to reach definitive conclusions due to the diversity of the responses obtained.

In addition, the PSTs also believe that their performance was quite high in clarifying topics and integrating standard curriculum with respect to curriculum/context knowledge. The performance in the areas of application of teaching strategies, teaching approaches, and promoting cognitive skills was perceived to be low and their practices further confirmed this

view. In particular, the PSTs were relatively confident with their knowledge of the subject matter and curriculum, as well as context knowledge in terms of integrating standard curriculum but they had difficulties in general pedagogic knowledge, particularly in promoting cognitive skills. Reflections showed that the reasons for this could be the case. Preparation of lessons within the area of curriculum/context knowledge was the most significant component, while learners' backgrounds were not taken into consideration when the PSTs were preparing their lessons. The reflections also indicated that none had shown knowledge about the use of assessment during their teaching. Most were strong in terms of syllabus and context, but not in the cognitive skills and assessment.

As for their perceptions and practices of subject matter knowledge, the results were rather mixed. With regard to practices, there were little differences between the respondents as they simply mentioned the topic of the subject, touched on a key point regarding that particular topic and explained a bit further. Perceptions showed the PSTs thought they had knowledge about the subject, but could not look into the subject in-depth.

The reflections on the subject matter knowledge in terms of the expectations of learning outcomes also showed that the PSTs stressed on the component of subject matter knowledge. The PSTs felt that the content of the subject was the most important element to be learned by their students. However, the PSTs did seem to be fully aware that the learning outcomes are very much dependent on the individual student's capability. The reflections also showed that the PSTs were aware that they had evidenced little engagement with describing topics that they were teaching and further explaining the topics they were teaching.

As for the knowledge of learners and self, the findings were consistent across the perceptions, practices, and reflections. In more specific, the PSTs' perceptions showed that they were confident in their class management ability and student-teach interaction, but rather average in their teaching strategies, approaches, and techniques. The PSTs also perceived themselves as having low skills in the area of pupil motivations. The practices confirmed these views, especially in relation to pupils' motivations. The reflects were also found to be consistent with the perceptions and practices.

CONCLUSION

What have researchers found by triangulating the three categories of data? This illustrative study has led to the following observations about the findings and also the research approaches used. The overall nature of PCK was fairly good (based on the self-rating score); however, some elements such as promoting thinking skills and application of indirect teaching strategies and experiential learning need to be highlighted. Table 6 shows a summary of the findings derived from the questionnaire, observations and semi-structured interviews. The PSTs are sometimes aware of their capabilities/

limitations but most of them need further facilitation to help them to recognise the specific aspects of their potential and limitations.

The overall quality of PCK was fairly good; however, some elements such as promoting thinking skills, application of indirect teaching strategies and experiential learning, need to be highlighted. PSTs are sometimes aware of their potential or limitations, but in general, it seems that they need further facilitation to recognise their potential or limitations. Through the employment of a multifaceted approach, it may be possible to come to a rich picture of the PSTs' knowledge and learning needs.

REFERENCES

Abd Rahman, F. (2002a). Understanding multiple intelligences as a tool to establish Malay language competence (in Malay language). *Paper presented at the International Conference of Malay Language Studies.* Beijing, China.

Abd Rahman, F. (2002b). The effectiveness of 4mat learning style in teaching reading comprehension (in Malay language). *Language Journal, 1*(2), 45-56.

Abd Rahman, F., & Scaife, J.A. (2005) Assessing pre service teachers' pedagogical content knowledge using a 'bricolage' approach. *International Journal of Learning, 12*(10), 81-92.

Abd Rahman, F., & Scaife, J. (2008). Pedagogical content knowledge: How do pre service teacher adapt and employ it into their teaching? *The International Learning Journal, 15*(10), 34-45.

TABLE 6
Triangulated Data on the Nature of the PSTs' PCK

Questionnaire	Observation	Interview
PSTs self- rating:	*PSTs demonstrated :*	*PSTs understand:*
-good in SMK especially in clarifying topic	- little explanatory knowledge in SMK regarding topic	-KCC and SMK become a focal point in preparation of lesson
-moderate in KCC and having some difficulty in promoting thinking skill especially meta-cognitive skill	- substantial application in GPK regarding class management	- SMK should have been emphasized as a crucial learning outcome
- moderate in GPK, good in class management however prefer to apply direct teaching strategies rather than in-direct teaching strategies	- good in KCC which is application of the syllabuses	- have a strength at different elements of PCK
- good in KLS especially teaching goal address diversity	- having difficulty in applying appropriate assessment or task	- diversity in learning needs (improvement in teaching)

Alkove, L. D., & McCarty, B. J. (1992). Plain talk: Recognizing positivism and constructivism in practice. *Action in Teacher Education, 14*(2), 16-21.

Anderson, L. (1997). *Argyris and Schön's theory on congruence and learning.* Retrieved on July 01 2006, from http://www.scu.edu.au/schools/gcm/ar/arp/argyris.html.

Argyris, C. (1974). *Behind the front page*. San Francisco: Jossey-Bass.

Argyris, C. (1987). Reasoning, action strategies, and defensive routines: The case of practitioners. In Woodman, W. A., & Pasmore, W. A. (Eds.). Re*search in organisational change and development, 1*, 89-128. Greenwich: JAI Press.

Argyris, C., Putnam, R., & McLain Smith, D. (1985). *Action science: Concepts, methods, and skills for research and intervention*. San Francisco: Jossey-Bass.

Argyris, C., & Schön, D. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey Bass.

Argyris, C., & Schön, D. (1978). *Organizational learning: A theory of action perspective*. Reading, Mass: Addison Wesley.

Bromme, R. (1995). What exactly is pedagogical content knowledge? Critical remarks regarding a fruitful research program. In S. Hopman and K. Riquarts (Eds.). *Didaktik and/or curriculum*, 205-216. Kiel: IPN Schriftenreihe.

Calderhead, J. (1997). *Understanding Teacher Education: Case Studies in the professional development of beginning teachers*. London: The Falmer Press.

Carter, K., & Gonzales, L. (1993). Beginning teachers' knowledge of classroom events. *Journal of Teacher Education* (44), 223-232.

Gudmundsdottir, S. (1990). Values in pedagogical content knowledge. *Journal of Teacher Education, 3*(41), 44 -53.

Gudmundsdottir, S. (1995). The narrative nature of pedagogical content knowledge. In H. McEwan, & K. Egan. (Ed.), *Narrative in teaching, learning and research*. New York,: Teachers College.

Darling-Hammond, L., & Baratz-Snowden, J. (2005). *A good teacher in every classroom: Preparing highly qualified teachers our children deserve*. San Francisco: Jossey-Bass.

Darling-Hammond, L., Bransford, J., & LePage, P. (2006). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco: Jossey-Bass.

Halim, L. (1997). A critical appraisal of secondary science teacher training programmes in Malaysia with an emphasis on pedagogical content knowledge. (Unpublished PHD Thesis). University of London.

Halim, L., & Meerah, S. (2002). Science trainee teachers' pedagogical content knowledge and its influence on Physics teaching. *Research in Science and Technological Education*, *20*(2), 215-225.

Jonassen, D. H. (1996). *Computers in the classroom: Mind tools for critical thinking*. Eaglewood Cliffs: Prentice Hall.

Kagan, D. M. (1990). Ways of evaluating teacher cognition: Inferences concerning the Goldilocks Principle. *Review of Educational Research, 60*(3), 214-222.

Kane, R., Sandretto, S., & Heath, C. (2002). Telling the half story: A critical review of research on the teaching, beliefs and practices of university academics. *Review of Educational Research*, *72*(2), 177-228.

Li, X. (2001). *Literature review on pedagogical content knowledge*. Retrieved on December 18, 2003, from http://www.geocities.com/tg.zaiza/xuhuili/pck.html

Shulman, L. S. (1986a). Those Who Understand: Knowledge Growth in Teaching. *Educational Researcher, 15*(2), 4-14.

Shulman, L. S. (1986b). Paradigm and research programs in the study of teaching. A contemporary perspective. In M.C. Wittrock (Ed.), *Handbook of research on teaching*. New York: McMillan.

Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the new reform. *Harvard Educational Review, 57*(1), 1-22.

Shulman, L. S. (2002). *Making differences: A Table of Learning*. Retrieved on February 26, 2006 from http://www.carnegiefoundation.org/publications/sub.asp?key=452&subkey=612

Shulman, L., & Grossman, P. (1988). *The Intern Teacher Casebook*. San Francisco, CA: Far West Laboratory for Educational Research and Development.

Stroot, S., Keil, V., Stedman, P., Lohr, L., & Faust, R. (1998). *Peer assistance and review guidebook*. Columbus: Ohio Department of Education. Retrieved on November 6, 2006 from http://education.utoledo.edu/par/Successful.html.

Tilstone, C. (1998). The value of observation. In C. Tilstone (Ed.), *Observing teaching and learning: Principles and practice*. London: David Fulton Publisher.

Thompson, A. G. (1992). Teachers' belief and conceptions: A synthesis of the research. In D.A. Grouws (Ed.). *Handbook of research on mathematics teaching and learning* New York: Macmillan.

Turner-Bisset, R. A. (2001) *Expert Teaching: knowledge and pedagogy to lead the profession*. Lndon: David Fulton.

Veal, W., & MaKinster, J. (1999). Pedagogical content knowledge taxonomies. *Electronic Journal of Science Education, 3*(4), 47-56.

Wisdom, J., & Gibbs, G. (1994). *Course design for resource based learning - humanities*. Oxford: Oxford Centre for Staff Development.

Zemelman, S., Daniels, H., & Hyde, A. (1993). *Best practice: New standards for teaching and learning in America's schools*. Portsmouth, NH: Heinemann.

The Effects of Gender and Marital Status on Burnout of English Teachers in Iran

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ABSTRACT

Teacher burnout is a world-wide phenomenon that draws the attention of educational psychologists and stimulates efforts in construct elaboration and measurement. Emotional exhaustion, depersonalization, and lack of personal accomplishments are three dimensions that constitute the burnout syndrome. The purpose of this study was to determine the effects of gender and marital status on burnout of English teacher among 100 English teachers in Tehran, Iran. This paper describes the quantitative data obtained from the study. All the participants of the study were Iranian citizens who were working at secondary schools in Tehran. In order to determine the level of burnout experienced by English teachers, the Maslach Burnout Inventory test (MBI) was conducted. Based on the findings, the gender of English teacher seemed to have influenced the teacher's responses on each of the sub-scales of the Maslach Burnout Inventory so there was a significant difference between the gender and burnout. The study also found that there was no significant difference between marital status and the English teacher's score on the MBI.

Keywords: Gender, marital status, burnout, English teachers

INTRODUCTION

Teaching is a very stressful occupation with negative aspects such as unmotivated and difficult students, decreasing resources, large class sizes, and rigid administration practices which can sometimes lead to teacher burnout. Teacher burnout has long been understood to have significant negative effects on teaching efficacy. Avoiding teacher burnout is one of the biggest concerns among all educators while there have not been many studies conducted on this particular phenomenon, especially in Iran. Whether a teacher is teaching elementary, secondary or tertiary students,

in one way or another, it will hunt him/her down. The only thing any teacher can do is to prevent and stop teacher burnout. As stated earlier on, teaching is a stressful task in which its activities add up every day. The main component in carrying out learning and teaching processes is the teacher and there is a general view that teacher burnout may have a negative impact on the teachers themselves which will consequently lead to emotional and physical ill-health and on the students as burnout teachers may relatively be impaired in terms of their quality of teaching and commitment, may give less information and less praises and interact less work for their students. Teacher burnout is something that is becoming more common as school budgets get tighter. Teachers are asked to do more tasks every single day. With these added responsibilities, many teachers find by themselves tired and burned out.

REVIEW OF THE LITERATURE

Much of the research in the area of burnout can be traced to Herbert Freudenberger, a psychologist practicing in New York during the 1960's and 70's. Freudenberger employed the term 'burnout' to describe the effects of overwork, exhaustion and frustration that he experienced while operating a free clinic for drug users and indigent persons. Freudenberger first introduced this concept in 1974, and he defined the problem as one of chronic exhaustions and frustrations resulting from continued devotion to a goal or a principle that had failed to produce a corresponding reward. It was defined as wearing down or wearing out of energy (Freudenberger & North, 1985). Some other views can be added to Freudenberger's to give an exact meaning to the concept of burnout. According to Pines and Aronson (1988), burnout is formally clarified and subjectively experienced as a state of physical, emotional, and mental exhaustion which is caused by long-term involvement in situation that are emotionally demanding. The term "burnout" originated during the 1960's as a description of the effect of drug abuse on an individual (Capel, 1993, as cited in Landeche, 2009).
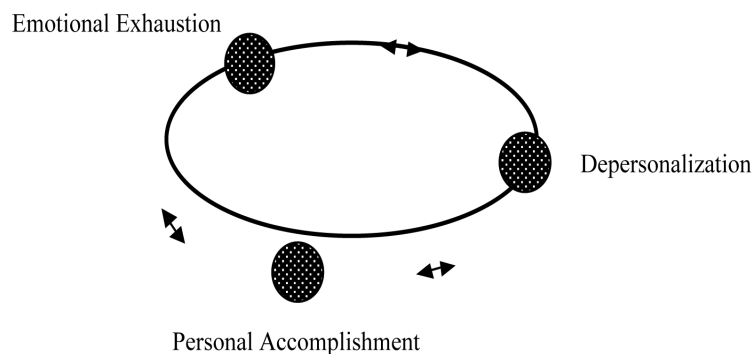
Fig.1: The Dimensions of Burnout (Sedgwick, 1998)

Maslach is one of the pioneers in the study of teacher burnout. In 1981, Maslach defined burnout as a syndrome that characterized with disturbing physical and emotional characteristics. She further pointed out burnout as a condition that is characterized by emotional exhaustion, depersonalization and loss of a sense of personal accomplishment. This condition is developed primarily in individuals who work in human services or occupations such as education, social work, police and emergency services. Burnout is manifested in the following ways: work overload, lack of control over one's work environment, lack of community among teachers in the school, lack of fairness in work assignments and uneven distribution or absence of rewards (Maslach & Jackson, 1981).

According to Sedgwick (1998), burnout is formally clarified and subjectively experienced as a state of physical, emotional, and personal caused. Emotional Exhaustion (EE) shows the feelings of over extension and exhaustion which is caused by daily work pressures and conflicts with the colleagues.

Depersonalization (DP) indicates the development of negative attitude and impersonal responses towards the people with whom one works. Meanwhile, Personal Accomplishment (PA) refers to the sense of personal achievement that is accompanied by self-esteem. It is inversely related with burnout.

Burnout can be a fundamental cause of an endless list of bad side-effects, not only on the person who is suffering from this particular syndrome, but also all the people around him/her (Landeche, 2009). As mentioned earlier, a teacher is the main component of teaching process; hence, when the teacher has this syndrome, it will cause him/ her to treat the students irrespectively and he/she will not be able to perform a day-by-day duty supposedly.

A variety of studies have been conducted to identify the causes associated with stress and burnout among teachers. For instance, studies carried out in Australia, Canada, Israel, New Zealand, the Netherlands, the United Kingdom and the United States have found similar causes of burnout in professional educators (Coulter & Abney, 2009). There are a number of studies dealing with the burnout issue which have included many variables that may affect teachers' level of burnout such as age, gender, marital status, as well as level of education, teaching level, teaching experience, and job satisfaction. Nonetheless, the focus of this study was only on the effects of gender and marital status on burnout.

Besides large volume of studies on the aetiology of stress, there are also many studies conducted on demographic data related to stress. The most common variables for these studies are gender, marital status, teaching experiences, educational level, as well as professional and religious backgrounds. The findings of Maslach, Jackson, and Leiter (1996) on service professionals including teachers indicated that female staff had higher emotional exhaustion than their male colleagues. In 2003, Mendes investigated

the relationship between emotional intelligence and teacher burnout among 49 credentialed secondary teachers and found that with more experiences, teachers were better at identifying emotions. Similarity, Lau, Yuen, and Chan (2005) explored the relationship between teachers' demographic variables and burnout by using the C-MBI questionnaire among 1797 participants from 45 secondary schools in Hong Kong. Gender differences were found in all three burnout syndromes, and teachers who were younger, unmarried, without religious beliefs, less experienced, without professional training and of junior rank were more consistently burned-out. Meanwhile, the strongest predictor for emotional exhaustion and depersonalization was age, and teachers' rank was found to be the best predictor for personal accomplishment.

In addition, Li, Yang and Shen (2007) examined the relationship between teachers' sense of teaching efficacy and job burnout. Li employed the Teachers' Sense of Teaching Efficacy Scale and the C-MBI questionnaire, as well. These instruments were administered among 247 secondary school teachers. The teachers' performance revealed that their length of teaching and marital status had significant effects on their personal teaching efficacy, depersonalization and reduced personal accomplishment.

However, there were also some inconsistent findings in relation to the relationship between demographic variables and teachers' level of burnout. For instance, Holloman (1999) explored if personal and school-related variables were associated with 383 first-year school teacher burnout. Based on the Holloman's findings, no statically significant differences were found between areas of burnout and the variables of gender, age and marital status. Likewise, the study administrated by Zhao and Bi (2003) in a sample of 190 secondary school teachers in Chinese Mainland concluded that there was no difference between the genders in three burnout syndromes.

A meta-analysis by Weng (2005) in 35 US research studies with K-12 teacher populations indicated that all of the variables of human characteristics included in the demographics of the selected studies did not have very strong predictive correlations with burnout. This means a single factor, such as gender, cannot be used to predict if a person is more susceptible to three dimensions of burnout.

A similar study was carried out among special head teachers and teachers in Turkey (entitled an analysis of burnout and job satisfaction among Turkish special school head-teachers and teachers, and the factors effecting their burnout and job satisfaction) by Sari in 2004. Sari reported that female teachers scored high emotional exhaustion than their male counterparts. On the other hand, male teachers scored high depersonalization than their female colleagues (2004). In addition, the study elaborated that there was no significant difference between the two genders in terms of personal accomplishment. The results of this study are supported by the findings of Dali's who did a study among

primary school teachers in Turkey in 2004. Dali (2004) reported that there was no significant difference between male and female primary school teachers in terms of all burnout dimensions. Lance Hogan and McKnight (2007) conducted the same study on university online instructors in which the female instructors revealed higher levels for the three burnout dimensions compared to their male counterparts.

Al-Qaryoti and Al-Khateeb (2006) carried out a study among 447 teachers (129 males, 318 females) in Jordon and revealed that there was no significant difference between the teachers in term of their burnout level according to the gender, whereas there was a relationship between teaching salary satisfaction and their burnout. In terms of the marital status, the results indicated that being married or not did not affect on these teachers' level of burnout.

In his study among teachers of two schools in Macau, Luk (2009*)* found that the teachers experienced relatively average burnout which coincided with the findings of a study carried out in Hong Kong. Luk reported that female teachers scored high on emotional exhaustion compared to male teachers; on the other hand, the male teachers were shown to score high on depersonalization than their female colleagues (2009). These findings added on to the database for comparison of the Chinese population internationally. The findings also identified those with greater degree of burnout, to whom more attention should be paid.

As previously mentioned, burnout can be a fundamental cause of an endless list of bad side-effects; on the other hand, a teacher is the main component of teaching process. Gender, marital status, teaching experiences, educational level, professional and religious backgrounds are the most common variables for burnout study. Nonetheless, there have been not many studies dealing with this phenomenon especially among English teachers in Iran. In accordance with the researcher's specialization, the main purpose of the current study was to investigate the effects of gender and marital status on the levels of burnout among English teachers in Iran. The specific objectives of this paper are as follows:

1. To determine gender differences in terms of the level of burnout among English teachers.

2. To determine the differences in term of marital status on the level of burnout among English teachers.

METHOD AND MATERIALS

Participants

The population for this descriptive study comprised of English teachers in Tehran, Iran, who had randomly been selected among 50 secondary schools. All the English teachers who were employed at the secondary schools were contacted via e-mail and invited to participate in this study. The researcher explained the research instrument to the participants and how to fill the items properly. The data were collected

by distributing the self-administered MBI questionnaire among the participants and these were collected back by the respective school general offices in January 2010. In total, 100 English teachers participated in the study. All the participants are Iranian citizens, with the majority of them (83%) holding bachelor degree from university and the rest were with master degree. Of the 100 English teachers who completed the inventory filled in the inventory correctly. Fifty percent of participants were females and 50% were males. Eighty two percent of the whole population are married and 18 percent are single. The participants' age ranged from 25 to over 40 years with a mean age of 33 years. These teachers have been in the teaching profession for an average of 9 years. In this study, all the English teachers were employed at secondary schools in Tehran, Iran.

Research Instrument

Burnout in respondents was measured on one occasion using the Educator Survey version of the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996). The Maslach Burnout Inventory (MBI) is a predominant instrument used to assess burnout in teachers and educational administrators (Maslach, Jackson & Schwab, 1986). The MBI consists of 22 item self-report instrument describing the feelings an individual might have as a result of being over-stressed or burned out. This instrument consists of three subscales, namely, Emotional Exhaustion (EE with nine items), Depersonalization (DP with five items), and Personal Accomplishment (PA with eight items).

The participants responded on a seven-point frequency rating scale, and their numerical values are as follows: 0 = Never; 1 = A few times a year or less; 2 = Once a month or less; 3 = A few times a month; 4 = Once a week; to 5 = A few times a week; and 6 = Everyday. High scores on the EE and DP subscales and low scores on the PA subscale are the characteristics of burnout. The feelings of low personal achievement can lead to burnout. Reliability coefficients for the Educator Survey version of the MBI have been reported by Pierce and Molloy (1990) as .89 for EE, .71 for DP, and .81 for PA for a large sample of Australian secondary school teachers ($N = 750$). In the present study, the corresponding coefficient alpha scores were .87 for EE, .79 for DP, and .71 for PA.

The demographic information of the English teachers was provided by a demographic questionnaire which derived the participant's age, gender, marital status, educational level, teacher experience and so on.

Meanwhile, SPSS Statistics software version 16.0 was used to analyze the data which were interpreted according to the variables. Since the main purpose of the study was to determine whether there was a statistically significant difference between gender and marital status and the overall burnout level among English teachers, descriptive statistics, t-test and Analysis of Variance (ANOVA) were performed on the collected data.

RESULTS AND FINDINGS

In order to study the level of the participants' different burnout syndromes, the means and standard deviations of the three burnout syndromes were calculated. The mean scores for emotional exhaustion, depersonalization and personal accomplishment were found to be 15.71 (SD = 14.84), 3.58 (SD = 5.93) and 35.11 (SD = 13.54), respectively. The dimension of burnout, as displayed in following table, is significantly high since the significant (p .000) is less than 0.05 among all the participants who were in the high level intervals.

In order to determine whether gender and marital status represented the significance of emotional exhaustion, depersonalization and personal accomplishment, the one-sample t-test was employed. The results of the analysis are presented in Table 2 below:

The scores obtained from each gender are elaborated with references to the burnout dimensions as presented in Table 2. The mean of the female teacher performance decreased in two out of three subscales of burnout (EE and DP), whereas the mean of this particular group increased in the personal accomplishment subscale compared to the male group. Meanwhile, the one-way ANOVA test was used to study the effects of demographic variables with teacher's burnout. The demographic variables included the participants' gender and marital status and regarded as independent variables while the three burnout syndromes were taken as dependent variables. The one-way ANOVA procedure was employed to find out any significant difference between gender and the teachers' level of burnout.

With reference to Table 4, the results of the gender and the levels of burnout

TABLE 1
Statistics and one-sample t-test for the burnout dimension

Burnout	N	Mean	SD	t	df	sig.	95% Confidence Interval	
							Lower	Upper
Emotional Exhaustion	100	15.71	14.84	-56.77	99	.000	-87.23	-81.34
Depersonalization	100	3.85	5.93	-162.01	99	.000	-97.32	-94.97
Personal Accomplishment	100	35.11	13.54	-47.89	99	.000	-67.57	-62.2

TABLE 2
The relationships between gender and marital status with the level of burnout among English teachers

Gender	Emotional Exhaustion			Depersonalization			Personal Accomplishment		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Female	50	9.46	11.12	50	1.72	4.69	50	39.46	9.92
Male	50	21.96	15.54	50	5.98	6.31	50	30.76	15.28
Married	82	16.01	16.15	82	4.34	6.38	82	34.56	14.58
Single	18	14.33	6.11	18	1.61	2.11	18	37.61	6.86

indicated that there are significant effects for two groups of gender across the three dimension levels of burnout (F = 21.371, $p<$ .05), (F =14.659, $p<$ .05) and (F =11.392, $p<$ .05). Finally, both females and males showed that they have been suffering from burnout.

The same analytic tool was used on marital status and the levels of burnout. The results showed that teachers who are married have the same feelings with those who are single. On the other hand, Table 4 illustrates that there is no main effect of being married or single on the teachers' performance and their levels of burnout (F =.187, $p>$ .05), (F =3.193, $p>$ .05) and (F =.746, $p>$ .05).

Based on the results presented above, it is noticed that there is no significant difference between married and single teachers in terms of their emotional exhaustion, depersonalization and personal accomplishment levels.

CONCLUSION AND RECOMMENDATIONS

Male and female teachers indicated the levels of burnout and this was perhaps because they had other responsibilities towards their families (children, husband and housework). In addition, they probably care too much about their students and want everything to be perfect which will eventually stress them out. The finding indicated that there is a significant difference between the male and female teachers and this finding is supported by Coulter and Abney (2009), who have also reported that there is a significant difference between the two genders and the rate of burnout. Similarity, the finding of this study is in line with that of Comber and Cormack's (2007) research. Comber and Cormack (2007) stated that gender did not affect on the level of burnout among teachers. On the contrary, the finding of this study does not support those of Capel (1992), Formanuik (1995) and Davis and

TABLE 3
The ANOVA results on the effects of gender on burnout dimensions

Source	Sum of Squares	df	Mean Square	F	Sig.
Emotional Exhaustion					
Between Groups	3906.250	1	3906.250	21.371	.000
Within Groups	17912.340	98	182.779		
Depersonalization					
Between Groups	453.690	1	453.690	14.659	.000
Within Groups	3033.060	98	30.950		
Personal Accomplishment					
Between Groups	1892.250	1	1892.250	11.392	.001
Within Groups	18169.790	98	166.097		

TABLE 4
The ANOVA results on the effects of marital status on burnout dimensions

Source	Sum of Squares	Df	Mean Square	F	Sig.
Emotional Exhaustion					
Between Groups	41.602	1	41.602	.187	.666
Within Groups	21776.988	98	222.214		
Depersonalization					
Between Groups	110.033	1	110.033	3.193	.077
Within Groups	3376.717	98	34.456		
Personal Accomplishment					
Between Groups	137.317	1	137.317	.746	.390
Within Groups	18032.473	98	184.005		

Wilson (2000), who reported that the level of stress led to burnout among female teachers more than among male teachers because the latter seemed to experience less stress than female teachers did and they also tended to have less teaching responsibilities. Similarly, the result does not concur with that Byrne (1998) who emphasizes that the causes leading to burnout affect male teachers more than the female teachers with higher motivation. However, there was no significant difference between the males and females in terms of their gender on their burnout levels.

The present study has also shown that there is no significant difference between married and single teachers, and this finding is in accordance with the findings of Al-Qaryooti and Al-Khadeeb (2006) also who reported that being married and unmarried does not affect on the level of burnout among Arab teachers even though the study involved teachers teaching handicapped students.

For future studies, it is recommended to investigate the effects on the level of burnout among teachers with different years of teaching experiences, educational levels or job satisfaction. Moreover, studies on the level of burnout can be carried out on a large sampling size that includes teachers who are teaching other subjects or living in other cities, countries or teachers with children and with or without babysitter so as to determine whether or not this particular factor will affect the results.

REFERENCES

Al-Qaryoti, & Al-Khateeb (2006). Jamming visual culture. *Literacy Learning in the Middle Years, 11*(2), 15–21.

Byrne, J. J. (1998). Burnout: Its Causes, Effects and Remedies. *Contemporary Education, 69*(2), 86–91.

Capel, S. A. (1993). Stress and burnout in teachers. *European Journal of Teacher Education*, *15*(3), 197–211.

Comber, B., & P. Cormack. (2007). Constituting the teacher of reading in contemporary Australian literacy debates. In P. Openshaw and J. Soler. Charlotte (eds.), *Reading Across International Boundaries: History, Policy and Politics*. NC: Information Age.

Coulter, M. A., & Abney, P. C. (2009). A Study of Burnout in International and Country. *International Review of Education*, 105-121.

Dali, T. (2004). Psychosocial work characteristics as predictors for burnout: findings from 3-year follow up of the PUMA study. *Journal of Occupational and environmental Medicine, 47*, 1015–1025.

Davis, J., & Wilson, S. M. (2000). Principals' efforts to empower teachers: effects on teacher motivation and job satisfaction and stress, *Clearning House*, *73*(6), 349–353.

Evans, L. (2001). Delving deeper into morale, job satisfaction and motivation among education professionals: examining the leadership dimension. *Educational Management and Administration*, *29*(3), 291–306.

Formanuik, T. V. (1995). The emotional burnout syndrome as an indicator of the teachers' professional disadaptation. *Russian Education and Society*, *37*(9), 78–92.

Freudenberger, H. J., & North, G. (1985). *Women's burnout: How to spot it, how to reverse it and how to prevent it*. Virginia, USA: R.R. Donnelley & Sons Company.

Holloman, H. L. (1999). Factors related to burnout in first-year teachers in South Carolina. Dissertation, University of South Carolina.

Lance Hogan, J. A., & McKnight, J. D. (2007). Depression, burnout, and perceptions of control in hospital nurses. *Journal of Consulting and Clinical Psychology, 61*, 147–155.

Landeche, P. (2009). The correlation between creativity and burnout in public school classroom teachers.

Lau, P. S. Y., Yuen, M. T., & Chan, R. M. C. (2005). Do demographic characteristics make a difference to burnout among Hong Kong secondary school teachers? *Social Indicators Research, 71*, 491–516.

Li, Y. X., Yang, X., & Shen, J. L. (2007). The relationship between teachers' sense of teaching efficacy and job burnout. *Psychological Science (China), 30,* 952–954.

Luk, A. L. (2009). *An Exploration of the Burnout Situation on Teachers in Two Schools in Macau*. Springer.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout, *Journal of Occupational Behavior*, *2*(1), 99–113.

Maslach, C., Jackson, S. E., & Schwab, R. L. (1986). *Maslach burnout inventory: Educators survey*. Palo Alto, CA: Counselling Psychologists Press.

Maslach, C., Jackson, S. E., & Leiter, M. (1996). *Maslach burnout inventory manual* (3rd Ed.). CA: Consulting Psychologists Press.

Pierce, C. M. B., & Molloy, G. N. (1990). Psychological and biographical differences between secondary school teachers experiencing high and low levels of burnout. *British Journal of Educational Psychology, 60*, 37-51.

Pines, A., & Aronson, E. (1988). *Career burnout: Causes and cures*. London: Collier MacMilla Publishers.

Sari, H. (2004). An analysis of burnout and job satisfaction among Turkish special school headteachers and teachers, and the factors effecting their burnout and job satisfaction. *Educational Studies, 30.*

Weng, C. H. (2005). Meta-analysis of teacher burnout in public schools in the United States. Dissertation, University of South Dakota.

Zhao, Y., & Bi, C. (2003). Job burnout and the factors related to it among middle school teachers. *Psychological Development and Education, 1*, 80–84 (in Chinese).

Computer Games Development Class with Appreciative Learning Approach: From the Perspective of Bloom's Taxonomy

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ABSTRACT

Both computer games development and appreciative learning approach are still at the infancy stage of utilization at educational setting. The purpose of this study was to explore what lower secondary students learned from the application of appreciative learning approach in computer games development class. Triangulated data comprising of interviews, logbooks, visual captures, researchers' observations, and games were produced. NVivo software was used to support data management. The compiled codes were clustered to create themes pertinent to Bloom's taxonomy. As a result, computer games development within appreciative learning approach environment was found as positively related to students' cognitive, affective, and psychomotor development. Nevertheless, caution is warranted in making inferences as different students gained different learning experiences and outcomes, analogous to different players generated different outcomes in computer games.

Keywords: Appreciative learning approach; Bloom's taxonomy; computer games development; learning outcomes

INTRODUCTION

This study was an extension of what had been previously investigated on the effects of the combination of appreciative learning approach and computer games development on students' creative perception (Eow, Wan Zah, Rosnaini, & Roselan, 2010a) and creative process (Eow, Wan Zah, Rosnaini,

& Roselan, 2010b). Although previous studies found appreciative learning approach applied in computer games development class as positively enhancing students' creative perception (Eow *et al*., 2010a) and creative process (Eow *et al*., 2010b), no extensive study has been carried out to investigate its potential beyond creativity enhancement. In order to fill in this gap, this paper was meant to investigate students' learning outcomes from the perspectives of Bloom's taxonomy.

Computer Games Development

Computer games is synonymous with the young generation's habits and interests (Eow & Roselan, 2008; Eow, Wan Zah, Rosnaini, & Roselan, 2009b; Inal & Cagiltay, 2007; Oblinger, 2006; Prensky, 2007a; Rosas *et al*., 2003; Yee, 2006). The current generation is growing up with a pastime that demands interaction and play (Becker, 2007; Henderson, 2005; Prensky, 2001). However, Caillois (2001) argues that play is an occasion of pure waste in terms of time, energy, ingenuity, skill, and money. The philosopher defines play as a free and voluntary activity that occurs in a pure space, and is isolated and protected from the rest of life. He further inserts that play is uncertain and the outcome may not be foreseen. Therefore, the question worth answering is that whether computer games development activity is just another mere play and a waste of time, energy, ingenuity, skill, and money, without contributing to any learning outcomes.

Previous research found that on average, youths spent 22 hours on computer games per week, with 70% of these youths spending at least ten continuous hours in the virtual world at one sitting (Yee, 2006). Meanwhile, a survey conducted among 236 Form One (Grade 7) students at one Malaysian secondary school revealed that 75.8% were gamers who spent an average of 8.47 hours per week playing computer games (Eow *et al*., 2009b). Therefore, it is becoming increasingly difficult to overlook the fact that computer games are the contemporary culture of today's youth.

Thus, with the current trend, what could be a better way than applying the same technology that has been the students' contemporary interest to excite and engage them? Kearney and Skelton (2003) recommended computer games development as one of the ideal ways to reach out to students who have been growing up in the playstation generation so as to inspire a sense of creativity and a desire for innovation. In addition, educational practitioners are urged to use computer games within a meaningful learning environment to promote learning and students' self-development (Egenfeldt-Nielsen, 2007). Egenfeldt-Nielsen further advised educators to move towards a new generation's usage of computer games that covers a broader scope, and not just as an information transmission tool. Besides that, Prensky (2007a) stressed that students should be allowed to go as far as they could with technologies they love using, characterize their age and at the same time be able to prepare students for the 21st

century's challenges as well. This is agreed by Shaffer (2007) who states that time has changed and education should move beyond the traditional organization of schools. This is to prepare the young generation living in the digital age with different skills and ways of thinking. With these justifications, computer games development could be a task that goes beyond information transmitter, i.e. not only it fulfils students' preferences but also contributes to their learning beyond standard curriculum. However, academic studies rarely tapped on the first persons' perspectives since education is mostly teacher-centred (Stringer, 2008). Thus, the available academic studies are mostly focusing on teachers' reflections. In fact, it could cause the formulation of theories based on false beliefs (Whitehead, 2009). For this reason, this study was projected to explore on the perceptions of the first persons, namely, the stakeholders of the learning process.

Technology has been progressing aggressively. Hence, computer games development tools have become more widely available and affordable for non-professionals. Game Maker, Torque Game Builder, Golden Game Engine, The Game Creators, Game Factory 2D and 3D Game Studio are among a few examples of the computer games development tools that are readily available for free downloading or with reasonable and affordable fees. As for this study, Game Maker was utilized because it provides a friendly and simple game developing environment that suits students at lower secondary level (Habgood

& Overmars, 2006). Although computer games development courses are well established in some of the higher learning institutions (e.g. Limkokwing University of Creative Technology, 2010; University of Central Lanchashire, 2007; University of Luton, 2008; University of Worcester, 2009), it is still new to lower secondary students, especially in the Malaysian setting. This is because most Asian schools are conservatively regarded as social institutions in which knowledge is rarely dispersed beyond standardized curriculum and chalk and talk method (Tan & Law, 2004). Besides that, computer games development is traditionally known to be a difficult task which requires a big amount of expenditure (Saulter, 2007). As a result, research on computer games development often focused on higher learning level (Cagiltay, 2007; Ip, Capey, Baker, & Carroll, 2009; Killi, 2005; Ogletree & Drake, 2007; Schaefer & Warren, 2004), leaving a gap at secondary and primary school levels. Consequently, the gap created the opportunity for this study to be carried out.

Appreciative Learning Approach

Technology alone is not sufficient to create appropriate learning outcomes (Kelly, 2005; Kiili, 2005). Thus, appreciative learning approach was employed in this study. Appreciative learning approach was based on Appreciative Inquiry (AI) Theory. Cooperrider, Whitney and Stavros (2008, p. 1) define appreciative and inquiry as:

Ap-pre'ci-ate, v., 1. to value; recognize the best in people or the world around us;

affirm past and present strengths, successes, and potentials; to perceive those things that give life (health, vitality, excellence) to living systems. 2. to increase in value. Synonyms: value, prize, esteem, and honour.

In-quire', v., 1. to explore and discover. 2. to ask questions; to be open to seeing new potentials and possibilities. Synonyms: discover, search, systematically explore, and study.

Cooperrider *et al*. (2008) further explained Appreciative Inquiry (AI) as a cooperative co-evolutionary search for the best in people, their organizations, and the world around them. Every organization or person is perceived to have something that works well, and strengths that can be a starting point for creating positive change. AI is both theory and practice (Cooperrider & Srivastva, 2001). Cooperrider and Srivastva (2001) added that a good theory is one of the most powerful resources that helps social systems evolve, adapt, and creatively alters their patterns over time. However, most traditional research focused on changing people and behaviour by using problems as a base to be fixed (Watt, 2007; Whitehead, 2009). With AI practices, instead of negation and criticism, the 4D*s* (discovery, dream, design, destiny) model helps merging the past and present capacities such as achievements, assets, unexplored potentials, strengths, elevated thoughts, opportunities, high point moments, and visions into positive changes without having the intention to solve existing problems (Cooperrider & Whitney, 2005).

Computer games are always link to controversial issues, such as fostering violence (Bartholow, Bushman, & Sestir, 2006; Carnagey, Anderson, & Bushman, 2007), low academic performance (Gentile, Lynch, Linder, & Walsh, 2004), addiction (Healthwatch, 2006), demoralisation (Anderson, 2003), and youth obesity (Bijvank, Konijn, Bushman, & Roelofsma, 2009). Despite all these concerns, computer games are undeniably the students' habits and interests due to the number of gamers recorded and also the amounts of time, money, and effort they spent for them (Eow *et al*., 2009b; Inal & Cagiltay, 2007; Oblinger, 2006; Prensky, 2007a; Yee, 2006). It is crucial to note that this study did not intend to solve any existing problems relating to computer games. Since the study was based on AI as both theory and practices, computer games development was considered as an affirming task to create positive changes in students, instead of problems to be solved. The consequences on students' learning would be referred to Bloom's Taxonomy.

Bloom's Taxonomy

Bloom's Taxonomy, Kirkpatrick's model, Maslow's hierarchy of needs, Mcgregor's XY Theory, SWOT analysis model and Berne's transactional analysis model are timeless and always relevant to the understanding and development of people (Chapman, 2006; Forehand, 2005). In this study, justifications for the use of Bloom's Taxonomy in relating the research

findings are due to the fact that Bloom's Taxonomy is a systematic classification of thinking and learning (Krathwohl, 2002), apart from being familiar to most educators (Schlemmer & Schlemmer, 2008). In addition, Bloom's Taxonomy covers complete aspects of cognitive, affective and psychomotor development (Krathwohl, Bloom, & Masia, 1964), and it has been proven to be a valuable tool for evaluation (Marzano & Kendall, 2007). Krathwohl *et al*. (1964) described cognitive as a domain that emphasizes on objectives which vary from a simple recall of material learned to a highly original and creative way of combining and synthesizing new ideas and materials. Meanwhile, affective domain relates to the feeling tone that can be expressed as interest, attitude, appreciation, value, and emotional set or biases. Krathwohl *et al*. (1964) further associated psychomotor domain with muscular or motor skill, manipulation of material and objects, or act which

requires neuromuscular co-ordination. Thus, Bloom's Taxonomy is relevant not only to simple but also complex types of human learning. Bloom's Taxonomy remains a classical reference model and tool into the 21st century (Chapman, 2006). With these justifications, Bloom's Taxonomy has become the main reference pertinent to students' learning outcomes generated in this study.

As a summary, both computer games development and appreciative learning approach are still in the infancy stage of utilization at lower secondary educational settings. By tapping the contributions of computer games development and appreciative learning approach combination towards learning, educators could be assisted in making better judgment on computer games development as a technological tool and appreciative learning approach as a pedagogical strategy in actively engaging their students.
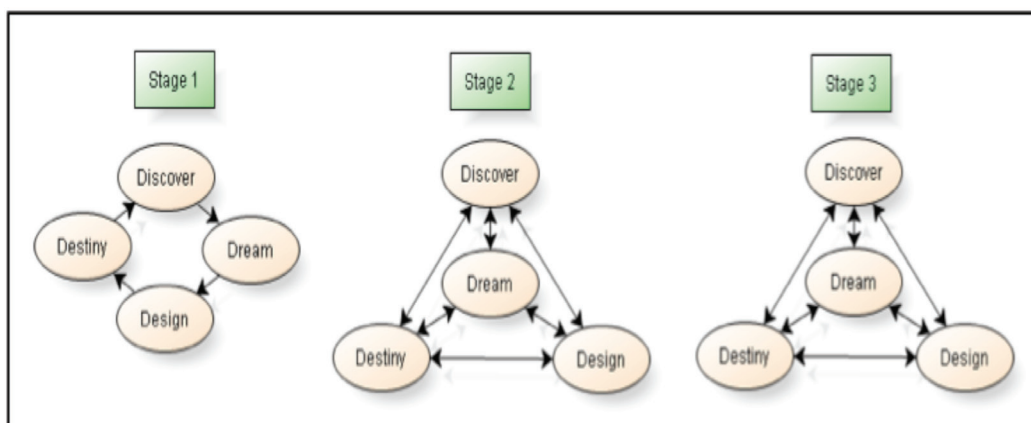
Fig. 1: Appreciative learning approach model applied in the action research study (adapted from Cooperrider *et al*., 2008)

Fig. 2: Discover section of the logbook

MATERIALS AND METHODS

Research Procedure

The findings on the learning outcomes were generated through interviews at three different phases of action research methodology. The first phase of the action research study applied the 4D*s* model suggested by Cooperrider *et al.* (2008) which consisted of discovery, dream, design, and destiny stages revolving in the respective sequence (Fig. 1). However, as the study progressed, students' opinions were taken into consideration (Eow, Wan Zah, Rosnaini, & Roselan, 2009a) and subsequently the model was altered to create more flexibility to suit students' needs and appeals in the second and third phases of action research (Fig. 1). The 4D*s* stages were carried out simultaneously fulfil students' different preferences. Students wanted more control on their actions instead of following the

sequence of the initial model (Eow *et al*., 2009a). Nevertheless, the initial objectives for each phase remained the same. The discovery stage was carried out with the intentions to get the gamer students see new potentials and possibilities in computer games. Group conversations were carried out for students to share their views and experiences. However, at the second and third phases of the action research, group conversation was toned down as some students regarded it as a threat to their privacy (Eow *et al*., 2009a). In order to accommodate students' intrapersonal trait, researchers introduced "My 4D*s* Project" with a specific designed logbook (Fig. 2) as the main mode of communication between facilitator and students. Since it was positively accepted by the students, the practice was continued during the third phase of action research. The obvious differences between the second phase and the third phase of the study were the grouping of the students and the games designed. The students worked individually in the first and second phases and in a group of two in the third phase. The games produced at the third phase were with educational features, while no educational elements were embedded in the games that were produced during the first and second phases of the study.

The discovery stage was meant for the students to self-discover Game Maker knowledge and skills with the guide of game modules adapted from Habgood and Overmars (2006). During the first phase of action research, the students were introduced to a more general type of leisure game, followed by a puzzle game in the second phase, and a platform game in the third phase. The modules were designed with an increasing difficulty at each phase, as more complex events and actions were introduced, while less instruction on the steps to be undertaken was given when students proceeded to the next level. This was because the students were expected to engage more in thinking rather than mere imitation.

Next, in the dream stage, the students were asked to dream on how they wanted their own games to be. For this, the students were asked to sketch or to note down their dreams or ideas on the logbook provided. In the design stage, the students started to develop computer games based on the dreams and ideas generated. Lastly but not least, was the destiny stage where the students envisioned how they were going to empower their newly found knowledge and skills in Game Maker. As a result, appreciative learning approach provides opportunities for students to be heard, to explore and dream, to take actions, as well as share their products and envision their future.

Subjects

During the first phase, 34 Form One (grade 7) students aged between 13 to 14 year-old, who were interested in learning computer games development, had been playing computer games for at least two years, and are still actively playing, were randomly selected from the interested population generated from a school located

in Kuala Lumpur, Malaysia. As the research progressed to the second and third phases, the number of students who had fully attended the activity conducted and managed to produce computer games of their own was reduced to 30.

Data Collection

Qualitative research methodology was employed in this study as the primary concern was on the description and interpretation of what was happening in a specific setting (Lacey & Luff, 2007). The main data were collected through interviews to explore students' learning outcomes from the students' own perspectives. Twenty-one students were interviewed throughout the study (with eight during phase one, six in phase two, and seven in phase three). All the interviews were audio-taped as it was assumed to be less distracting (Ary, Jacobs, Razavieh, & Sorensen, 2006). The interview questions were constructed with the concept of learning in mind. Nevertheless, the interviews were carried out according to the students' own themes and ideas as they emerged during the interviews.

Analysis of Data

The audio-taped interviews were transcribed and analysed through the process of coding. The compiled codes were clustered to create categories according to Bloom's Taxonomy. NVivo software package was used to manage the data. Finally, the information was concluded and reported. Although the transcribed interviews were the main data, visual captures, students' logbooks, and computer games produced were also used to triangulate the data collected in order to establish a more rigorous study in terms of reliability and validity. It is important to note that data triangulation can also be conducted through contrasting data gathered at different times and settings (Turner & Turner, 2009). As for this study, data pertinent to the learning outcomes experienced by students were collected at all the three phases of action research so as to reveal the typical and recurrent patterns that could improve the confidence of the findings. Meanwhile, credibility of the data (Lincoln & Guba, 1985) in this study was established through the proof reading process by the students interviewed. It served to confirm and revise the data transcribed. Besides checking for accuracy, it was also used as a way to get students' consent for the use of data in the research report. Many reviewers considered respondents' validation in qualitative research to be a mark of quality and a way of demonstrating rigorousness (Lacey & Luff, 2007). Meanwhile, constructivist theorists believe students are the creations of their own learning (Schunk, 2004). Simpson (2002) agreed to the notion that all knowledge is subjective and personal. Hence, a person's learning constructions are true to that particular person and not necessarily to anyone else. Therefore, researchers would not judge the students' learning outcomes as authentic or contradictory.

RESULTS AND DISCUSSION

In this study, the students were interviewed at different phases of action research. Through the help of NVivo, however, data management was able to trace the similarity of the 16 identified themes pertinent to Bloom's taxonomy at each phase of action research (Fig. 3). It is crucial to highlight the fact that different students might have different perceptions of what they have learned. The following findings and discussions were the accumulations of the students' perceptions generated throughout this study.

Cognitive Domain

Knowledge (Level 1)

During the interviews, students indicated that they gained knowledge and skills that they had never learned before. By the end of the first phase of the action research, most of the students were already aware that they could load sprite, object, background, sound, and music into their games without referring to the game modules. Besides that, the students were able to list some of the English vocabulary learned throughout the learning process. As they proceeded to the subsequent level of action research, the number of English vocabulary listed further increased and varied. However, students also claimed that there were a lot more knowledge and skills in Game Maker that they have yet to master, as they also realized they could not design games with more sophisticated features. AI theory assumes every living system as having many untapped, rich and positive inspirations (Cooperrider & Whitney, 2005). Thus, the learning environment of the appreciative learning approach applied in the study focused on friendly, supportive and unthreatening guided autonomy atmosphere that enables the students to progress with more self-
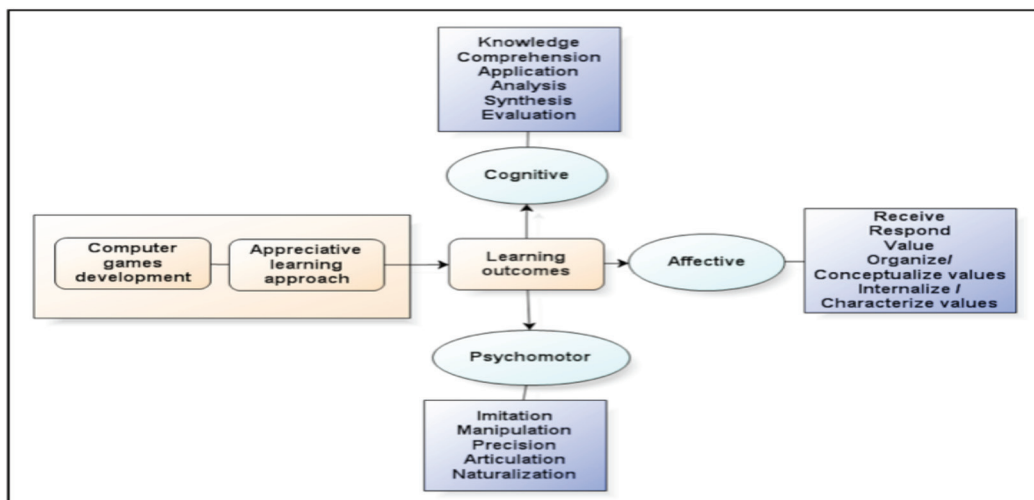
Fig. 3: Learning outcomes generated from the application of appreciative learning approach in the computer games development class as perceived by the students

fulfilling. However, knowledge constructed by human is tentative and incomplete as it will keep shifting and expanding (Juniu, 2006). Accordingly, students displayed their interest and inquisitiveness in acquiring more skills and knowledge in Game Maker at every phase of the action research.

Comprehension (Level 2)

Students stated that computer games development helped them to understand how typical computer games were developed. During the interviews, several students were able to relate some of the tasks they did during the class to the readily available games online. Bencze (2007) believe that students could not change their ways of thinking or perception if they were lacking in their understanding of knowledge, skills, and resources availability. Hence, computer games development and appreciative learning approach combination have helped students to see things in bigger perspectives by enlightening them on the alternatives through discovery, dream, design, and destiny stages. Thus, students would not end up just being mere gamers without understanding the environment they were engaging in and the alternatives availability pertinent to computer games.

Application (Level 3)

By understanding how computer games were developed, students demonstrated their capabilities in applying the knowledge into their own products, which in this case were the computer games produced. Some

students thought previous experiences in playing computer games had helped them in discovering new events and actions to be developed. These students further added that their products resembled some of their favourite online games. Several students claimed that they even downloaded their favourite music and characters in order to construct their own computer games. In addition, the students stated that they had also modified the games suggested by the game modules. Thus, learning outcomes reflecting the application level were further supported by students' designs, which portrayed the subjects' learning materials such as mathematics, science, languages, and geography. Therefore, the design stage of appreciative learning approach offered students the opportunities to apply various knowledge and skills that could be learned within and beyond traditional classroom curriculum.

Analysis (Level 4)

Students learned analysis skill during computer games development class. They did troubleshooting and analysing mistakes done in the previous level. However, most students alleged of being weighted down when their games could not run as desired. Researchers would like to emphasize that appreciative learning approach applied in the study was grounded on the belief of connection between positive image and positive action (Yballe & O'Connor, 2000). Yballe and O'Connor (2000) described mistakes or problems as possible sources of frustration, pain, or loss. Thus,

it is undeniable that the analysis domain experienced by students could have caused frustration and loss in students. As the facilitator in the study was grounded with the practice of appreciative learning approach, facilitator stayed within the boundary by positively encouraging students throughout the process. In more specific, facilitator continually praised the students for their volunteered actions taken and the outcomes generated in order for students to feel appreciated. Even a small task done was a big achievement from the facilitator's perspective. As a result, half of the interviewed students described their achievements in developing own computer games prevailed over the frustrations faced earlier. In fact, students were very proud of their ability in overcoming the frustration they had faced earlier on and deemed it as meaningful.

Synthesis (Level 5)

During the interviews, almost all the students expressed their excitement, amazement, pleasure, or self-satisfaction when they managed to design computer games, which are not only playable but presentable as well. According to Fitzgerald, Murrell and Miller (2003), the creation and sustaining momentum for change require large amounts of positive affect and social bonding such as hope, excitement, caring, *esprit de corps,* sense of urgent purpose, and sheer joy in creating something meaningful together. All these were made possible by the application of appreciative learning approach in computer games development class. AI theory allows one to see the world in a way which has probably never been imagined before (Cooperrider & Srivastva, 2001). In addition, it merges students' past and present capacities such as achievements, strengths, high point moments, and visions into positive changes without negation and criticism of students' work (Cooperrider & Whitney, 2005). Consequently, it gives way to imagination and innovation. Accordingly, it provides students with the opportunities to create and to feel appreciated without feeling weighted down by their feeling of incompetence. Meanwhile, the positive images of oneself and the world around them are expected to inspire the students for more volunteered actions and innovations (Cooperrider & Whitney, 2005; Lebrun, 2007). Therefore, appreciative learning approach facilitated students in enhancing synthesis skill and countered initial negative images, beliefs, and expectations pertinent to computer games. By acknowledging the habits of playing computer games as the students' strength, students are made to believe in their ability as being more than just players. In this study, students were lead to be game designers. There were also vast opportunities for students to practice their synthesis skill. Students' products, which consisted of computer games produced and logbooks, were the best evidences of the synthesis skill that they had applied (Fig. 4).

Fig. 4: Computer games produced and students' logbooks were the best evidences of the synthesis skill applied by students

Evaluation (Level 6)

The analysed interviews revealed that all the 21 students evaluated their own computer games by running them throughout the design stage. Some even went a step further by asking their friends to evaluate their computer games. Students thought that by doing evaluation frequently, they would be able to trace inappropriate events and actions developed in their computer games. Besides that, the students also stated that the evaluations done were meant for polishing games in order to look more presentable and interesting. Visual captures confirmed these statements as students were seen playing games developed, as well as discussing and giving suggestions to friends (Fig. 5). During the interviews, several students justified the use of computers beyond chatting, playing games, typing, and surfing internet. These students were

able to recognize computer as a tool for innovation. Meanwhile, one student seemed to be learning evaluation skill at a more complex level by criticizing and making judgment on the teachers in general. He was quoted as saying, "Now I realized teachers are not smart in everything. They do not even know how to develop computer games." However, this comment should not be looked from the negative perspective as Prensky (2007b) observed that students tend to view their teachers being lack of fluency with modern tools and illiterate in the very domain which students regard as their future technology. Thus, the smartest teacher is the one who will collaborate with their students, whom most of the time are eager to teach their teachers (Prensky, 2007b). In fact, Prensky (2007b) highlighted on the needs for teachers of the current generation to realize that the acquisition of knowledge

Fig. 5: A student was trying out his game while friends looking on and giving suggestions for more improvement

and skills is a shared responsibility for both students and teachers. It no longer rests on teachers' shoulders as students are the ones who should take the biggest responsibility. Therefore, the whole learning process helps students to evaluate not only about themselves but also about the world around them.

Affective Domain

Receive and Respond (Levels 1 and 2)

Computer games development and appreciative learning approach combination facilitated students in learning to receive and to respond to phenomena. During the study, the students went through computer games development activity for four hours every session without complaining of tiredness. In fact, most students asked for more time allocation during the interviews. Computer games are undeniably

the students' interests as they responded positively through their attendance to each session. Students claimed that they were fully engaged with the activity and eager to know the outcomes of every action taken. In addition, the students demonstrated the skills of receiving and responding to the new learning experiences positively when they expressed their willingness to participate in future study. Students perceived it as their lifetime opportunity. At the end of the third phase of the action research, the students asked for more of such activity to be conducted in the near future. Besides that, most students responded positively during group conversation by sharing their experiences related to computer games. The process of listening and sharing stories among the students during discovery and destiny stages reflected the poetic principle of AI theory (Doveston & Keenaghan, 2006). Group conversation was carried

out with the intention for students to feel belonging to a community with shared experiences, values, and aspirations. This connection development will help create a deeper understanding of one another (Egan & Lancaster, 2005). Thus, computer games development and appreciative learning approach combination provide students the opportunities in learning to receive and respond to new friends and learning experiences as well.

Value (Level 3)

On some superficial level, students play computer games because they enjoy the overall experience (Shaffer, 2007). As for computer games development with appreciative learning approach, several students commented that it was more enjoyable and exciting than playing the available computer games. When students revealed how much they had enjoyed themselves and the excitement they experienced during computer games development process, it reflected their commitment and value towards the tasks given within the learning environment provided. Meanwhile, three students narrated how the facilitator had detected their smoking habits through the strong smell of cigarettes on their bodies. However, the facilitator did not reprimand them. On the other hand, the facilitator started with friendly conversation with these students by asking them why, when and how they had started smoking and their feelings being smokers. The students also revealed that the facilitator expressed her wish to

see them smoking less. Smoking less was the destiny expressed by the facilitator for the students to take action. In fact, the facilitator did not criticize students on their smoking habits. Gradually, these students reacted with their overt behaviour when they came to class with as less as possible of the cigarettes smell thereafter. This illustrates how appreciative learning approach assists in transforming by focusing on what is right and not the existing problems (Fitzgerald *et al*., 2003). In this case, smoking was not a problem but smoking less and getting rid of it became the focus. Although the issue of smoking was not within the focus of this study, the practices of appreciative learning approach allowed it to be apprehended as education is not restricted to skills and knowledge acquisition. Accordingly, appreciative learning approach guides students in developing value skill of what is preferable in their social system.

Organize or Conceptualise Values (Level 4)

Students were also believed to have reconciled internal conflict when they claimed that the combination of computer games development and appreciative learning approach had helped them to accomplish their previously unachievable dream in developing own computer games. According to Darby (2008), the normal games loving persons do not fit into the professional category that uses programming languages. On the other hand, most games loving persons would normally love to fulfil their dream of developing a game of

their own. In fact, many people have the aspirations in developing own computer games, but just do not know if it is possible to do so or where to start (Darby, 2008). Aside from that, students seemed to have organized or conceptualised values when they had altered their initial perceptions towards school. After going through computer games development class, most students began to perceive their school as an exciting place and has something different from other schools. They wished the activity to be carried out for years to come as students believed that there are more to be learned in Game Maker. In fact, some students quantified these personal views with the reason that the more they know about Game Maker, the more they feel insufficient.

Internalise or Characterise Values (Level 5)

Computer games development and appreciative learning approach combination were presumed to have provided students with the opportunities to adopt their own belief system. For example, when the students believe themselves as being more computer competence, they display it through their actions in helping out friends solving problems (Fig. 6). The students also demonstrated their ability to cooperate in the group activity, as well as working independently. In fact, the facilitator did not play a significant role in controlling the students' behaviour as they were expected to have their own value system while working within the appreciative learning approach environment. Therefore, the appreciative learning environment has offered students

Fig. 6: Helping a friend to solve problems

the opportunity to behave consistently to their personal values. At the same time, the students also commented that computer games development was not as hard as what they had thought before. Some students even claimed of experiencing great self-satisfaction and being proud of themselves when they were able to solve problems during the learning process. According to Henry (2005), appreciative learning approach has the ability in breaking through to new level of consciousness. When the facilitator recognized and amplified the students' successes and strengths, it created a new image of the future that would be compelling in resulting students consciously and unconsciously moving towards the images without much confrontation. Subsequently, the students' own value system controlled their persistency in developing computer games.

Psychomotor Domain

Imitation and Manipulation (Level 1 and 2)

A few students preferred copying and reproducing the actions of other students or game modules without much modification. Although imitation and manipulation are a part of the psychomotor skills, these skills were not encouraged as they inhibited students' potential to be creative and innovative (Fig. 7). On the contrary, the students should present what they know rather than memorizing what the teachers or textbooks tell them (Jonassen, Howland, Moore, & Marra, 2003). Jonassen *et al*. (2003) further added that computer technology is a tool which students should learn with and not from, as students do not learn from technology, but they learn from thinking. The students who

Fig. 7: Imitation and manipulation skills were parts of the skills learnt during the discovery stage but not encouraged during the designing stage

preferred imitation and manipulation skills to articulation skill admitted that they were actually lazy in thinking beyond the materials provided. They perceived thinking as a tiring task, which would consume enormous energy and time. Thus, the researchers attempted to minimise the setback by encouraging the students to dream more and sketch or note down their dreams and ideas into the logbooks provided (Fig. 8).

Precision (Level 3)

Most students perceived themselves as self-dependence since they managed to perform the tasks given to the level of self-acceptable quality without much assistance or help from neither facilitator nor friends. This could due to the fact that Game Maker is a friendly software (Habgood & Overmars, 2006). In addition, computer games are students' habits and interests (Eow & Roselan, 2008; Eow *et al*., 2009b; Inal & Cagiltay, 2007; Oblinger, 2006; Yee, 2006).
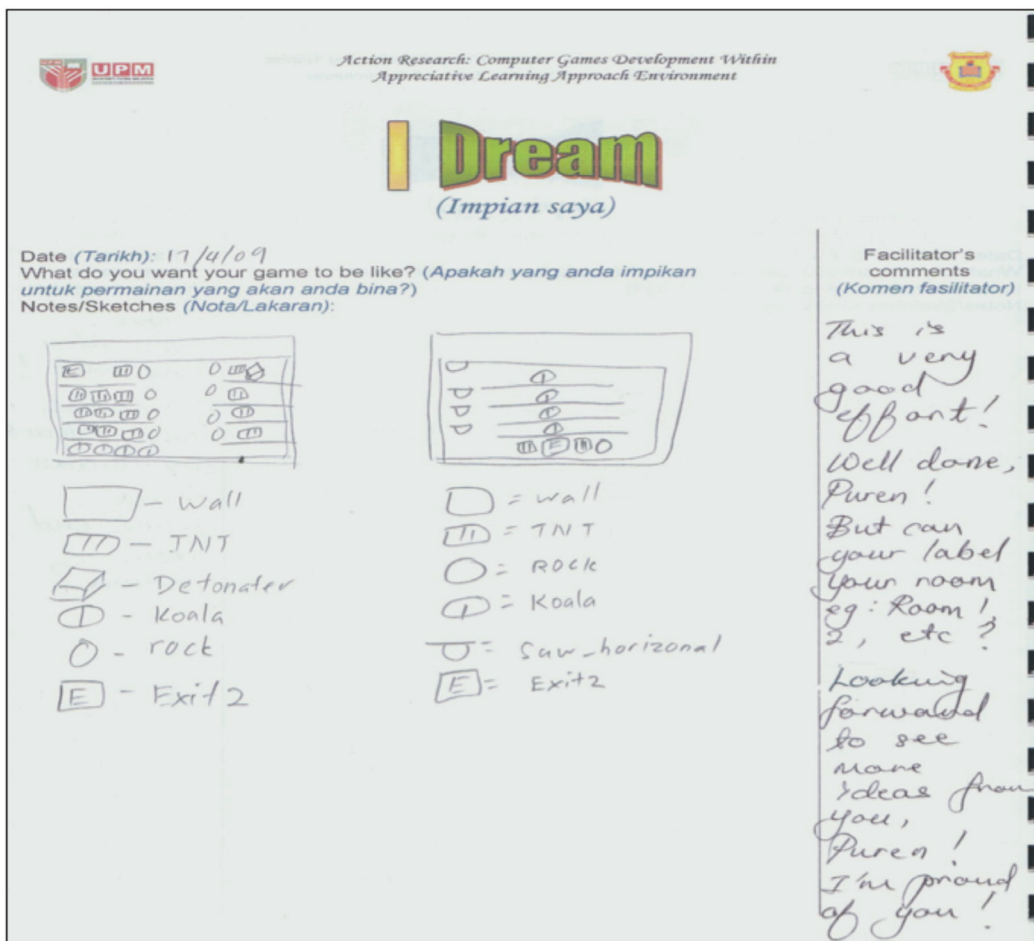
Fig. 8: Dream section of the logbook

Therefore, they could easily enhance their precision skill especially during discovery and design stages of appreciative learning approach.

Articulation (Level 4)

More than half of the students interviewed wanted the computer games produced to be different from others. As a result, they invested extra efforts by adapting and integrating other skills such as searching for graphics and sounds to be constructed into the computer games, and using trial and error process in creating new events and actions. The students even claimed that all these were volunteered actions. According to Kelly (2005), learning system should adapt to the differences of students' interests, backgrounds, learning styles, and aptitudes. Jonassen *et al.* (2003) stressed that students do not learn from teachers or technologies. On the other hand, students learn from thinking, and that thinking mediates learning and learning results from thinking. Appreciative learning approach has the potential in providing students the opportunities to think about what they have done, are doing and going to do next in its' 4D*s* stages while computer games are the students' habits and interests. Therefore, by creating an appealing environment through appreciative learning approach and computer games development combination, it would help to engage them in thinking, and subsequently, generate the learning of articulation skill.

Naturalization (Level 5)

Generally, learning outcomes at naturalization level were initiated when the students were seen executing their own strategies in achieving their dreams and claiming ownership of the computer games produced. Students claimed ownership through the name stated as the designer of the computer games produced. They expressed of being proud when proclaiming the products in front of their friends and siblings. Fitzgerald *et al.* (2003) stated what we perceived and experienced would create our realities through shared symbolic and mental processes. In this study, appreciative learning approach seemed to have provided the students with vast opportunities for them to discover their many unexplored potentials related with computer games through the 4D*s* stages of discovery, dream, design, and destiny. It worked on the assumption that every student has the potential for self-development. This study has guided students in exploring their potential rather than focusing on problems and difficulties faced during the learning process. Meanwhile, affirmative statements and questions were posed during the learning process through face-to-face conversation, as well as on students' logbooks. This was to help the students in reflecting on what they had done, were doing, and going to do next. These positive and affirmative statements on the students' actions and decisions were the appreciative elements created by the facilitator. The facilitator who was bounded with AI practices would then shift the focus

on failures towards possible achievements that could be attained by the students. When students perceived themselves positively, it would help them create their own reality naturally. Therefore, the naturalization skill learned by students is strongly supported by certain evidence such as students' inventions (computer games) and their ability in managing a project given (computer games embedded with learning materials, Fig. 9) during the third phase of the action research.

As a summary, this study has shown that computer games development and appreciative learning approach have complemented each other in contributing to holistic positive learning outcomes. Jonassen *et al*. (2003) classified technology as more than hardware, which consists of designs, environments, techniques, and methods in engaging learners. Thus, computer games development and appreciative learning approach are both technology for encouraging students in learning new skills and knowledge.

CONCLUSION

One of the most powerful and ancient learning strategies is through struggling in accomplishing a difficult but highly motivating task that requires new knowledge, carefully scanning a complex and changing environment, and seeking individualized help from experts or friends (Kelly, 2005). Computer games development and appreciative learning approach is a perfect pair of learning strategy that not only provides a highly motivating task but also a platform for students to learn the holistic skills of cognitive, affective, and psychomotor domains. Appreciative learning approach creates a lot of opportunities for students to engage in thinking, making decision, and taking ownership of the products. Meanwhile,
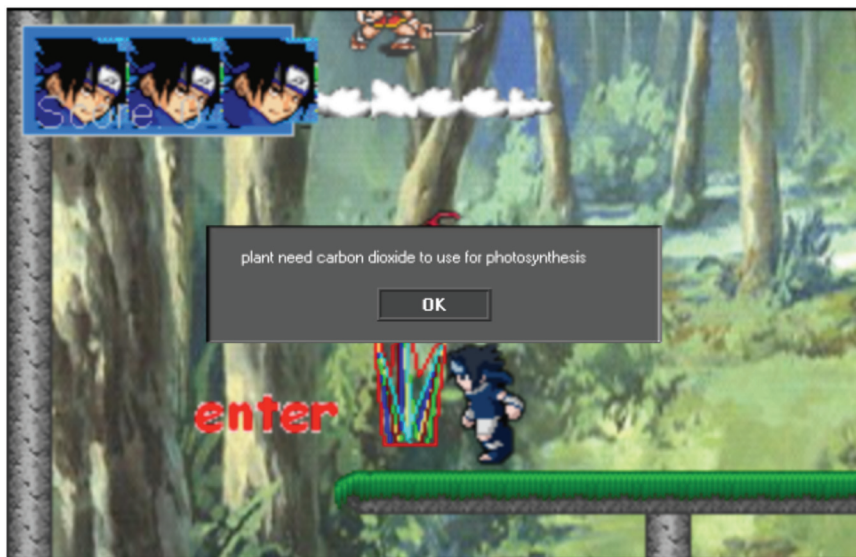
Fig. 9: One of the computer games embedded with learning materials

computer games are the students' habits and interests. Although the combination of computer games development and appreciative learning approach was found to have the positive impact on cognitive, affective, and psychomotor domains, caution is warranted in making inferences. This is because different students gained different learning experiences and outcomes, akin to different players having different endings in games. In addition, it is noted that there is no best teaching method or technology that could accommodate all domains, age groups, and cultures (Shelton & Wiley, 2007). Therefore, the question remains as to what degree of differences it would have on the students' learning outcomes. This further creates a gap for future research.

REFERENCES

Anderson, C. A. (2003). Video games and aggressive behavior. In D. Ravitch, & J. P. Viteritti (Eds.), *Kid stuff – Marketing sex and violence to America's children* (pp. 143-167). Baltimore: The Johns Hopkins University Press.

Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. (2006). *Introduction to research in education (Seventh edition)*. Canada: Thomson Wadsworth.

Bartholow, B. D., Bushman, B. J., & Sestir, M. A. (2006). Chronic violent video game exposure and desensitization to violence: Behavioral and event-related brain potential data. *Journal of Experimental Social Psychology, 42*(2006), 532-539.

Becker, K. (2007). Digital games once removed: Teaching teachers. *British Journal of Educational Technology, 38*(3), 478-488.

Bencze, J. L. (2007). Constructivist learning theory. Retrieved August 18, 2007, from http://leo.oise. utoronto.co/~lbencze?Constructivism.html.

Cagiltay, N. E. (2007). Teaching software engineering by means of computer-game development: Challenges and opportunities. *British Journal of Educational Technology, 38*(3), 405-415.

Caillois, R. (2001). *Man, play and games*. Champaign, IL: University of Illinois Press.

Carnagey, N. L., Anderson, C. A., & Bushman, B. J. (2007). The effect of video game violence on physiological desensitization to real-life violence. *Journal of Experimental Social Psychology, 43*(2007), 489-496.

Chapman, A. (2006). Benjamin Bloom's taxonomy of learning domains - Cognitive, affective, psychomotor domains - design and evaluation toolkit for training and learning [Electronic Version]. Retrieved November 2, 2009 from http://www.businessballs.com/ bloomstaxonomyoflearningdomains.html.

Cooperrider, D. L., & Srivastva, S. (2001). Appreciative inquiry in organizational life. In P. F. Sorensen, T. F. Yaeger, & D. Whitney (Eds.), *Appreciative inquiry: An emerging direction for organization development* (Chapter 3). Champaign IL: Stipes Publishing.

Cooperrider, D. L., & Whitney, D. (2005). *A positive revolution in change: Appreciative inquiry*. San Francisco, CA: Berrett-Koehler Publishers.

Cooperrider, D. L., Whitney, D., & Stavros, J. M. (2008). *Appreciative inquiry handbook: For leaders of change (2nd edition)*. Brunswick, OH; San Francisco: Brown Custom Publishing, Inc.; Berrett-Koehler Publishers, Inc.

Darby, J. (2008). *Game creation for teens*. Boston, MA: Course Technology, Cengage Learning.

Doveston, M., & Keenaghan, M. (2006). Growing talent for inclusion: Using an appreciative inquiry approach into investigating classroom dynamics. *Journal of Research in Special Education Needs, 6*(3), 153-165.

Egan, T. M., & Lancaster, C. M. (2005). Comparing appreciative inquiry to action research: OD practitioner perspectives. *Organisation Development Journal of Adolescence, 23*(2), 29–50.

Egenfeldt-Nielsen, S. (2007). Third generation educational use of computer games. *JI of Educational Multimedia and Hypermedia, 16*(3), 263-281.

Eow, Y. L., & Roselan, B. B. (2008). An exploratory study on the reasons and preferences of six Malaysian students on the video games played. *Journal of Environmental and Science Education, 3*(1), 19-25.

Eow, Y. L., Wan Zah, B. W. A., Rosnaini, B. M., & Roselan, B. B. (2009a). Appreciative learning approach in computer games development class [Electronic Version]. *1st International Conference on Educational Research and Practice, 10 -11 June 2009, Marriott Hotel, Putrajaya, Malaysia*, 177-188.

Eow, Y. L., Wan Zah, B. W. A., Rosnaini, B. M., & Roselan, B. B. (2009b). Form one students' engagement with computer games and its effect on their academic achievement in a Malaysian secondary school. *Computers & Education, 53*(4), 1082-1091.

Eow, Y. L., Wan Zah, B. W. A., Rosnaini, B. M., & Roselan, B. B. (2010a). Computer games development and appreciative learning approach in enhancing students' creative perception. *Computers & Education, 54*(1), 146-161.

Eow, Y. L., Wan Zah, B. W. A., Rosnaini, B. M., & Roselan, B. B. (2010b). Computer games development experience and appreciative learning approach for creative process enhancement. *Computers & Education, 55*(3), 1131-1144.

Fitzgerald, S. P., Murrell, K. L., & Miller, M. G. (2003). Appreciative inquiry: Accentuating the positive. *Business Strategy Review, 14*(1), 5-7.

Forehand, M. (2005). *Bloom's taxonomy: Original and revised*. Retrieved November 19, 2009, from http://eit.tamu.edu/jj/DE/BloomsTaxonomy.pdf.

Gentile, D. A., Lynch, P. J., Linder, J. R., & Walsh, D. A. (2004). The effects of violent video game habits on adolescent hostility, aggressive behaviors, and school performance. *Journal of Adolescence 27*(2004), 5-22.

Habgood, J., & Overmars, M. (2006). *The Game Maker's apprentice: Game development for beginners*. Berkeley, CA: APress.

Healthwatch. (2006, July 3). Detox for video game addiction? Experts says gaming can be a compulsion as strong as gambling. Retrieved February 12, 2007, from http://www.cbsnews.com/stories/2006/07/03/health/webmd/main1773956.shtml

Henderson, L. (2005). Video games: A significant cognitive artifact of contemporary youth culture. *Proceedings of DiGRA 2005 Conference: Changing Views – Worlds in Play.* Retrieved June 14, 2007, from http://www.diagra.org/dl/db/06276.11341.pdf

Henry, R. T. (2005). Discovering and growing what gives life: Appreciative inquiry in community colleges. *Instructional Leasdership Abstracts, 3*(1), 1-3.

Inal, Y., & Cagiltay, K. (2007). Flow experiences of children in an interactive social game environment. *British Journal of Educational Technology, 38*(3), 455-464.

Ip, B., Capey, M., Baker, A., & Carroll, J. (2009). Evaluating coursework in computer games

degrees: Students and assessors as virtual characters. *Australasian Journal of Educational Technology, 25*(1), 80-100.

Jonassen, D. H., Howland, J., Moore, J., & Marra, R. M. (2003). *Learning to solve problems with technology: A constructivist perspective (Second edition)*. Upper Saddle River, NJ: Merrill Prentice Hall.

Juniu, S. (2006). Use of technology for constructivist learning in a performance assessment class. *Measurement in Physical Education and Exercise Science, 10*(1), 67-79.

Kearney, P., & Skelton, S. (2003). *Teaching technology to playstation generation*. Paper presented at the Proceedings of 16th Annual NACCQ, Palmerston North, New Zealand, July 2003.

Kelly, H. (2005). Games, cookies, and the future of education. *Issues in Science and Technology, 21*(Summer 2005), 33-40.

Kiili, K. (2005). Digital game-based learning: Towards an experiential gaming model. *The Internet and Higher Education, 8*(2005), 13-24.

Killi, K. (2005). Content creation challenges and flow experience in educational games: The IT-Emperor case. *Internet and Higher Education, 8*(3), 183-198.

Krathwohl, D. R. (2002). A revision of bloom's taxonomy: An overview. *Theory into Practice, 41*(4), 212-218.

Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (1964). *Taxonomy of educational objectives: The classification of educational goals. Handbook II: Affective domain*. New York: David McKay Company, Inc.

Lacey, A., & Luff, D. (2007). *Qualitative research analysis*. Sheffield, UK: Trent RDSU National Institute for Health Research.

Lebrun, M. (2007). Quality towards an expected harmony: Pedagogy and Technology speaking together about innovation. *AACE Journal, 15*(2), 115-130.

Limkokwing University of Creative Technology. (2010). Bachelor of Science (Hons) in games technology. Retrieved January 26, 2010, from http://www.limkokwing.net/malaysia/courses/bachelor_of_science_hons_in_games_technology/

Lincoln, S., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Marzano, R. J., & Kendall, J. S. (2007). *The new taxonomy of educational objectives (2nd edition)*. California: Corwin Press.

Nije Bijvank, M., Konijn, E. A., Bushman, B. J., & Roelofsma, P. H. M. P. (2009). Age and content labels make video games forbidden fruit for youth. *Pediatrics International, 123*, 870-876.

Oblinger, D. G. (2006). Games and learning: Digital games have the potential to bring play back to the learning experience. *Educause Quarterly, Number 3 (2006)*, 5-7.

Ogletree, S. M., & Drake, R. (2007). College students' video game participation and perceptions: Gender differences and implications. *Sex Roles, 56*(7-8), 537–542.

Prensky, M. (2001). *Digital game-based learning*. New York: McGraw-Hill.

Prensky, M. (2007a). Emerging technologies for learning, Volume 2 (2007). British Education Communications and Technology Agency (BECTA). Retrieved July 20, 2008, from http://www.becta.org.uk.

Prensky, M. (2007b). How to teach with technology: Keeping both teachers and students comfortable in an era of exponential change. In BECTA (Ed.), *Emerging technology for learning (Volume 2)* (pp. 39-46). Conventry, JJ, UK: British Educational Communications and Technology Agency (BECTA)

Rosas, R., Nussbaumb, M., Cumsillea, P., Marianovb, V., Correaa, M., Floresa, P., *et al*. (2003). Beyond Nintendo: Design and assessment of educational video games for first and second grade students. *Computers & Education, 40*, 71-94.

Saulter, J. (2007). *Introduction to video game design and development*. New York, NY: McGraw-Hill/ Irwin.

Schaefer, S., & Warren, J. (2004). Teaching computer game design and construction. *Computer-Aided Design, 36*(2004), 1501-1510.

Schlemmer, P., & Schlemmer, D. (2008). *Teaching beyond the test: Differentiated project-based learning in a standards-based age*. Minneapolis, MN: Free Spirit Publishing.

Schunk, D. H. (2004). *Learning theories: An educational perspectives (Fourth edition)*. New Jersey: Pearson Merrill Prentice Hall, 83-135.

Shaffer, D. (2007). In praise of epistemology. In B. E. Shelton, & D. A. Wiley (Eds.), *Modeling and simulations for learning and instruction: The design and use of simulation computer games in education* (pp. 16 - 27). Rotterdam, Netherlands: Sense Publishers.

Shelton, B. E., & Wiley, D. A. (2007). *Modeling and simulations for learning and instruction: The design and use of simulation computer games in education*. Rotterdam, Netherlands: Sense Publishers.

Simpson, T. L. (2002). Dare I oppose constructivist theory? *The Educational Forum, 66*(4), 347-354.

Stringer, E. (2008). *Action research in education (Second edition)*. New Jersey: Pearson Prentice Hall.

Tan, A. -G., & Law, L. -C. (2004). *Creativity for teachers*. Singapore: Marshall Cavendish International.

Turner, P., & Turner, S. (2009). Triangulation in practice. *Virtual Reality, Mixed Environments and Social Networks, 13*(3), 171-181.

University of Central Lanchashire. (2007). Computer games development and design. Retrieved December 28, 2007, from http://www.uclan. ac.uk/courses/ug/subjects/compgamesdesign. htm

University of Luton. (2008). Computer games development BSc Hons. Retrieved April 3, 2008, from http://www.beds.ac.uk/courses/ bysubject/cominfsys/bsc-comgamdev.

University of Worcester. (2009). Computer games & multimedia development BSc(Hons). Retrieved July 1, 2009, from http://www.worc.ac.uk/ courses/3765.html

Watt, L. (2007). Appraising professional practice in a tertiary environment using appreciative inquiry. *Proceedings of 30th HERDSA Annual Conference: Enhancing Higher Education, Theory and Scholarship [CD-ROM], July 8-11, Adelaide, Australia*.

Whitehead, J. R. (2009). Generating living theory and understanding in action research studies. *Action Research, 7*(1), 85–99.

Yballe, L., & O'Connor, D. (2000). Appreciative pedagogy: Constructing positive models for learning. *Journal of Management Education, 24*(4), 474-483.

Yee, N. (2006). The demographics, motivations and derived experiences of users of massively-multiuser online graphical environments. *PRESENCE: Teleoperators and Virtual Environments, 15*, 309-329.

Motivation in Learning Oral Arabic among Students with Different Prior Experiences and Gender

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ABSTRACT

This study investigated students' motivation level in learning oral Arabic at Universiti Teknologi MARA (UiTM) Malaysia. Motivation consists of three main components, namely value, expectancy and affect. This study was aimed at investigating motivation differences (1) between students with different prior experiences, namely students with prior experience (SWE) and students without prior experience (SNE), (2) between students of different genders, and (3) between students with interactions of different genders and different prior experiences. This study used a questionnaire that was adapted from *The Motivated Strategies for Learning Questionnaire* (MSLQ) involving 182 students which were selected based on the disproportionate stratified random sampling. The study revealed that (1) SWE scores significantly higher than SNE in intrinsic motivation, extrinsic motivation, task value and self-efficacy and significantly lower in test anxiety; (2) Females scored significantly higher than males in extrinsic motivation, task value, control of learning beliefs and self efficacy; and (3) there are no statistically significant differences in all components with the interaction of prior experience and gender. This study suggests that UiTM students have to be categorized according to their prior experiences. Otherwise, some additional Arabic classes need to be carried out for inexperienced students before registering for the actual Arabic classrooms. Learning activities also need to involve students of mixed gender in order to create a collaborative environment and also bridge the motivation gaps between them.

INTRODUCTION

Self-regulated learning strategies (SRL) refers to a learners' self-directive process which transforms their mental abilities into academic performance (Baumfield, 2004; Brophy, 1998; Pintrich & Schunk, 1996; Zimmerman, 2008). SRL was originally developed from Bandura's Social-Cognitive Learning Theory, Piaget's Theory of Regulation and Effort Theory of Vygotsky (Hsu, 1997). It has two main components, namely, motivation and learning strategies. Previous studies proved that SRL is one of the main factors in learning success (see Olaussen & Braten, 1999; Ray, Garavalia, & Murdock, 2003). Previous studies also found that students who use SRL develop their own initiatives while learning (Olaussen & Braten, 1999) and perform better in their academic life (Bail, Zhang, & Tachiyama, 2008; Ray, *et al*., 2003).

One of the SRL instruments is the *Motivated Strategies for Learning Questionnaire* (MSLQ) developed by Pintrich, Smith, Garcia and McKeachie (1991). MSLQ has been used in many studies (Duncan & McKeachie, 2005) including in language research (Huang, 2008). According to MSLQ, SRL is divided into motivation and learning strategies. This study used the motivation component which comprises of three subscales, namely, value, expectancy and affect. This particular component focuses on the reasons why students enrol in the course and how they engage in the learning process.

The value component comprises of intrinsic motivation, extrinsic motivation and task value with first focuses on learning and mastery (Hsu, 1997; Lynch, 2006; Pintrich *et al*., 1991), and the second part is related to grades achievement and recognition from others (Hsu, 1997; Lynch, 2006; Pintrich, *et al*., 1991), while the third part refers to students' judgements of how useful and important the content of the course is to them (Hsu, 1997; Lynch, 2006; Pintrich *et al*., 1991). The expectancy component refers to students' beliefs in organising and accomplishing the learning based on their learning objectives (Bandura, 1986; Hsu, 1997; Lynch, 2006; Pintrich *et al*., 1991). It has two sub-components which are the control of learning beliefs and the perceptions towards self-efficacy for learning (Lynch, 2006; Pintrich & De Groot, 1990). The affect component refers to test anxiety which concerns with students' anxiety while taking examinations. Previous research have found that test anxiety has a negative correlation with students' performance (Malpass, O'Neil, & Hocevar, 1999; Pintrich *et al*., 1991). However, a previous study on test anxiety among UiTM students (Ghazali Yusri, Nik Mohd Rahimi, & Parilah, 2010a) showed that test anxiety has no statistically significant correlation with intrinsic motivation and extrinsic motivation.

The Arabic course at UiTM is an elective offered to first degree students. It is a basic Arabic course focusing on preparing students with communicative competent for their future professional careers. However, the students' learning background is different in terms of their

prior experiences in learning Arabic. Some of them have five year experience of learning Arabic in secondary school while some others do not have any experience at all. As for the second group, learning Arabic at UiTM is their first experience. According to the Causal Attribution Theory, individual factors such as prior experience and knowledge are expected to influence the level of self-efficacy for learning and students perceptions to succeed in their learning (Pintrich & Schunk, 1996).

During the formal teaching which consists of about 25 students per class, all these students are put in the same classroom consisting of mixed ability learners. The mixture of the classes has some negative effects towards inexperienced students, as proven in some previous studies (Ghazali Yusri, Nik Mohd Rahimi, & Parilah, 2010b; Ghazali Yusri & Nik Mohd Rahimi, 2009). Besides different prior experiences and ability, gender difference has also been found to have influenced the level of motivation among students (Bembenutty, 2007; Lundeberg & Mohan, 2008; Ray *et al*., 2003).

There are some studies previously carried out on students' motivations in learning foreign languages in Malaysia whether at the higher education level (Ainol Madziah & Isarji, 2009; Kaseh, Nik Farakh, & Zeti Akhtar, 2010) or at the school level (Kamarul Shukri, Mohd Amin, Nik Mohd Rahimi, & Zamri, 2009a). At UiTM level, previous research (Norhayuza, Naimah, Sahabudin, & Ibrahim, 2004; Sahabudin, 2003) has generally concluded that UiTM students are still weak in oral Arabic.

There are also many factors which have been identified to contribute to this situation. One of them is the use of SRL among the students. In order to investigate the use of SRL among students, there are some studies investigating UiTM students' attitude in oral Arabic context (Ghazali Yusri *et al*., 2010b). However, this study was entirely based on qualitative data and did not mean to generalize the findings to UiTM's overall population. There are also other studies carried out on the components of SRL among UiTM students in oral Arabic such as motivation and test anxiety (Ghazali Yusri *et al*., 2010a), test anxiety (Ghazali Yusri, Nik Mohd Rahimi, Parilah, & Wan Haslina, 2011b), control of learning belief (Ghazali Yusri, Nik Mohd Rahimi, Parilah, & Wan Haslina, 2011a), self-efficacy (Ghazali Yusri, Nik Mohd Rahimi, Parilah, Wan Haslina, & Ahmed Thalal, 2011c) and the effects of different courses on the use of self-regulated learning strategies (Ghazali Yusri & Nik Mohd Rahimi, 2010). However, there is no previous study comparing students' motivation level in terms of different prior experiences and gender in learning oral Arabic at UiTM.

Therefore, this study was carried out to investigate the motivation differences between two groups of students with different prior experiences and genders to distinguish the importance of the use different approaches in the teaching and learning of oral Arabic. This study has provided some classroom implications that can be taken into consideration to improve the Arabic language instructional practices at UiTM and other higher institutions.

Research Questions

This study was based on the following research questions:

1. Are there significant differences in motivation level between students with different prior experiences?

2. Are there significant differences in motivation level between students of different genders?

3. Are there significant differences in motivation between students with the interaction of different prior experiences and different genders?

RESEARCH METHODOLOGY

The Participants

This study is a cross sectional study aimed to investigate the students' motivation level in learning oral Arabic at Universiti Teknologi MARA (UiTM) Malaysia. This type of research was chosen to generalize the findings to the student population of UiTM. The participants of the study were 182 students from all the faculties at UiTM and they were selected based on the disproportionate stratified random sampling.

The students were divided into two groups according to their prior experiences of Arabic learning. One group consisted of 88 students with five year experience of learning Arabic at secondary school (abbreviated by SWE) and another group consisted of 94 students with no experience of learning Arabic (abbreviated by SNE). Of the 182 samples, 73 were males and 109 were females. The number of the samples within groups was controlled to be

not exceeding the ratio of 1:1.5, which is crucial to compare means between groups (Coakes & Steed, 2001; Hair, Black, Babin, Anderson, & Tatham, 2006).

There are three levels of the Arabic course taken in three semesters. Each level has 2 credits and 2 hours of meeting in a week. At the end of the course, students will have a total 84 hours of meetings for the three semesters. The samples were chosen from the third level of the Arabic course (BAB501) which is the highest level in UiTM. They were also considered as the final product of the Arabic curriculum in UiTM.

Instruments

The students responded to a seven-point Likert scale from 'not at all true of me' to 'very true of me' of a self-report questionnaire - *The Motivated Strategies for Learning Questionnaire* (MSLQ) - developed by Pintrich *et al*. (1991). Overall, MSLQ contained 81 items but in this study, only 31 items were used to assess the motivational beliefs, namely, intrinsic motivation, extrinsic motivation, task value, control of learning beliefs, self-efficacy for learning and performance and test anxiety.

Permission was officially sought from the authors before distributing the questionnaire to the students. The questionnaire was then translated into Malay language because all the students are Malays. All the items were also modified according to the research objectives which were to measure the oral Arabic skills. A pilot study was carried out to determine

the internal consistency between the items. Table 1 illustrates the alpha values which vary between .65 to .93, and are accepted by scholars (Sekaran, 2003).

TABLE 1
The Coefficient Alphas of MSLQ Scales in This Study

No.	Subscales	α
1	Motivation – value (intrinsic motivation, extrinsic motivation and task value)	.82
2	Motivation – expectancy (control of learning beliefs and self efficacy)	.93
3	Motivation – affect (test anxiety)	.65

Data Analysis

Initially, the two-way MANOVA was used to analyse the differences between the students with different prior experiences and genders. The preliminary assumption testing was also conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices and multicollinearity, with no violations noted, except for the low correlation between test anxiety and other components. In this case, a separate univariate analysis of variance can be considered (Pallant, 2005). Therefore, for the test anxiety component, the two-way ANOVA was carried out instead of using the two-way MANOVA.

RESULTS

The analysis shows that there is a statistically significant difference between the students with different prior experiences on the combined dependent variables (Table 2): F (5, 174)=7.45, p=.000, Wilks' Lambda=.824, partial eta squared=.176. When the results for the dependent variables were considered separately, the differences to reach statistical significance (Table 3), using a new Bonferroni adjusted alpha level of 0.01, were (1) intrinsic motivation: F (1, 180)=16.263, p=.000, partial eta squared=.084, (2) extrinsic motivation: F (1, 180)=7.517, p=.007, partial eta squared=.041, (3) task value: F (1, 180)=12.161, p=.001, partial eta squared=.064 and (4) self-efficacy: F (1, 180)=35.57, p=.000, partial eta squared=.167.

Meanwhile, an inspection of the mean scores (Table 4) indicates that SWE has higher level of (1) intrinsic motivation (M=5.41, SD=.882) than SNE (M=4.87, SD=.950), (2) extrinsic motivation (M=6.11,

TABLE 2
Multivariate test of the effects of prior experiences and gender (N=182)

Effects	Wilks' Lambda (λ)	F value	df1	df2	Sig.[*]	Partial Eta Squared
Prior experience	.824	7.45	5	174	.000[*]	.176
Gender	.907	3.569	5	174	.004[*]	.093
Prior experience*gender	.987	.456	5	174	.808	.013

[*]significant at p< 0.05

TABLE 3
Tests of Between-Subjects Effects: prior experience and gender (N=182)

Effects	Dependent Variables	F value	df1	df2	Sig[*]	Partial Eta Squared
Prior experience	Intrinsic motivation	16.263	1	180	.000[*]	.084
	Extrinsic motivation	7.517	1	180	.007[*]	.041
	Task value	12.161	1	180	.001[*]	.064
	Self-efficacy	35.57	1	180	.000[*]	.167
	Control of learning beliefs	2.605	1	180	.108	.014
Gender	Intrinsic motivation	6.151	1	180	.014	.033
	Extrinsic motivation	11.517	1	180	.001[*]	.061
	Task value	9.810	1	180	.002[*]	.052
	Self-efficacy	9.517	1	180	.002[*]	.051
	Control of learning beliefs	10.030	1	180	.002[*]	.053

[*]significant at $p < 0.01$, using a new Bonferroni adjusted alpha level: .05/5

TABLE 4
Descriptive analysis of effects: Prior experience and gender (N=182)

Effects	Dependent Variables	Independent Variables	M	SD
Prior experience	Intrinsic motivation	SNE	4.87	.950
		SWE	5.41	.882
	Extrinsic motivation	SNE	5.82	.812
		SWE	6.11	.692
	Task value	SNE	5.12	.792
		SWE	5.50	.717
	Self-efficacy	SNE	4.73	.889
		SWE	5.42	.722
Gender	Extrinsic motivation	Male	5.73	.752
		Female	6.11	.746
	Task value	Male	5.10	.755
		Female	5.44	.767
	Self-efficacy	Male	4.84	.838
		Female	5.21	.883
	Control of learning beliefs	Male	5.55	.756
		Female	5.92	.795

SD=.693) than SNE (M=5.82, SD=.812), (3) task value (M=5.50, SD=.717) than SNE (M=5.12, SD=.792), and (4) self-efficacy (M=5.42, SD=.722) than SNE (M=4.73, SD=.889).

There is a statistically significant difference between the students with different gender on the combined dependent variables (Table 2): F (5, 174)=3.57, p=.004, Wilks' Lambda=.907, partial eta squared=.093. When the results for the dependent variables are considered separately, the differences to reach statistical significance (Table 3), using Bonferroni adjusted alpha level of 0.01 are (1) extrinsic motivation: F (1, 180)= 11.517, p=.001, partial eta squared=.061, (2) task value: F (1, 180)= 9.81, p= .002, partial eta squared=.052, (3) control of learning beliefs: F (1, 180)= 10.03, p=.002, partial eta squared=.053 and (4) self-efficacy: F (1, 180)=9.517, p=.002, partial eta squared=.051.

An inspection of the mean scores (Table 4) indicated that female students had a higher level of (1) extrinsic motivation (M=6.11, SD=.746) than the males (M=5.73, SD=.752), (2) task value (M=5.44, SD=.767) than the males (M=5.10, SD=.755), (3) control of learning beliefs (M=5.92, SD=.795) than

the males (M=5.55, SD=.756), and (4) self-efficacy (M=5.21, SD=.883) than the males (M=4.84, SD=.838).

However, there was no statistically significant difference found between the interaction of both the independent variables, which were different prior experience and different gender, on the combined dependent variables (Table 2): F (5, 174)=.456, p=.808, Wilks' Lambda=.987, partial eta squared=.013.

As mentioned earlier, with a low correlation value between test anxiety and other components, it is suggested that a separate univariate analysis of variance be applied to that particular component (Pallant, 2005). Therefore, a two way between groups analysis of variance (two-way ANOVA) was conducted to explore the impact of prior knowledge and gender on students' motivation level.

Meanwhile, there was a statistically significant main effect for prior experience (Table 5): F (1, 180) = 38.08, p=.000, partial eta square=.176. The main effect for gender: F (1, 180) = .363, p=.547 and the interaction effect: F (2, 180) = .336, p=.563 did not reach statistical significance. An inspection of the mean scores (Table 6)

TABLE 5
two-way ANOVA - Tests of Between-Subjects Effects (N=182)

Effects	Dependent Variable	F value	df1	df2	Sig.*	Partial Eta Squared
Prior experience	Test anxiety	38.079	1	180	.000*	.176
Gender	Test anxiety	.363	1	180	.547	.002
Prior experience*gender	Test anxiety	.336	1	180	.563	.002

*significant at p< 0.05

indicated that SWE had a lower level of test anxiety (M=4.57, SD=.856) than SNE (M=5.38, SD=.837).

TABLE 6
Descriptive analysis of effects (prior experience and gender) for test anxiety (N=182)

Effect	Dependent Variables		M	SD
Prior experience	Test anxiety	SNE	5.38	.837
		SWE	4.57	.856

DISCUSSION

Experienced students were found to score significantly higher than the inexperienced ones in all the value components which comprised of intrinsic motivation, extrinsic motivation and task value, showing that the earlier group had more positive value towards oral Arabic learning than the latter students. Learning experience has contributed in nurturing experienced students' value towards learning Arabic. From this study, it can be concluded that the longer the experience of a student in learning Arabic, the more positive value would a student possess towards learning the language, a finding that is similar to some previous studies (*see* Magnan & Back, 2007; Morris, 2005).

The importance of having high value towards learning has been discussed by some scholars. For example, intrinsic motivation has been proven to be the most important type of motivation to ensure students' perseverance and resilience in learning as compared to extrinsic motivation (Pintrich & De Groot, 1990; Pintrich & Schunk, 1996). Intrinsic motivation also stimulates the use of high cognitive learning strategies among students as compared to extrinsic motivation (Ghazali Yusri, Nik Mohd. Rahimi, Parilah, & Wan Haslina, 2011d; Morris, 2005).

Pintrich *et al*. (1991) also stressed on having high task value which increases students' participation in learning activities. Thus, while teaching a class comprising of students with mixed prior experiences at UiTM, the students are expected to react differently towards the learning process according to their different value levels. In particular, the students with higher values are expected to participate more actively in the learning process than the others.

As for the expectancy component, experienced students were found to have scored significantly higher in self-efficacy, indicating that they are more confident in achieving their learning objectives than inexperienced ones. On the other hand, both the groups have similar level of control of learning beliefs, showing that these groups have similar level of beliefs in that they are the main contributors to a successful learning. This finding is reflected by the nature of Arabic learning at UiTM, in which students rely on themselves to learn, as formal meetings with lecturers are only scheduled once a week.

This finding also proves that the experienced students have higher positive level of self-efficacy to perform and to achieve their academic goals compared to the others. The importance of having high level of self-efficacy has been stressed by many scholars (see Brophy, 1998; Crandall,

Katkovsky, & Preston, 1962; Ghazali Yusri *et al.*, 2011c; Pintrich & Schunk, 1996), especially in the process of task selection and students' participation. Students will get involved in learning activities that they expect they are able to complete them, and thus influence their achievement in learning (Pintrich & Schunk, 1996; Wigfield & Eccles, 1992). Therefore, experienced students are also expected to show higher participations in the learning activities and choose more challenging activities compared to inexperienced ones, as suggested by Morris (2005).

Prior experience is also found to influence the level of students' test anxiety. Inexperienced students exhibited a higher level of test anxiety compared to experienced students, indicating that experience plays significant roles in reducing test anxiety level. Experienced students are more likely to have experience in facing exams cognitively and physically. Therefore, they know how to control their anxiety much better than the inexperienced students. Similarly, lack of experience also propably affects inexperienced students' achievement, as suggested by some previous research findings which have proven that test anxiety has a negative correlation with academic achievement (Malpass *et al.*, 1999; Pintrich *et al.*, 1991). According to Pintrich and Schunk (1996), many research carried out on test anxiety consistently showed negative correlation with the achievement.

Gender has been proven to have a significant influence towards learning (Bembenutty, 2007; Lundeberg & Mohan, 2008; Ray *et al.*, 2003). This study found

that there is a statistically significant difference between students with different gender in terms of their extrinsic motivation, task value, control of learning beliefs and self-efficacy. In particular, female students exhibited significantly higher than their male counterparts in all the components, except for intrinsic motivation and test anxiety. These findings show that female students have higher value towards learning than the males, such as the intention to get more external rewards, high marks and recognition from outsiders. Female students also value the oral Arabic learning higher than the males.

However, in terms of learning for mastery, both genders are at the same level. It is probably due to the status of the Arabic language itself, which is the official language of Islam. All the students involved in this study are Muslims, regardless of their gender. Islam as one of the most influential motivation in learning Arabic in Malaysia, as discussed by many scholars (Kaseh *et al.*, 2010) and it has also become one of the most effective strategies used by the students in learning Arabic (Kamarul Shukri, Mohd Amin, Nik Mohd Rahimi, & Zamri, 2009b).

For the expectancy component which comprises of control of learning beliefs and self-efficacy, female students yielded statistically different and higher levels than the males, showing that the earlier group possess stronger belief in themselves, which serves as the main contributor of their success in learning oral Arabic. They also have more confidence in achieving the course objectives. Both the male and female students, however, showed no difference

in the test anxiety, and this means that they share the same anxiety level towards examinations. This is probably due to the same nature faced by the students learning oral Arabic learning at UiTM, and thus contributes to the no significant difference between them.

IMPLICATIONS

This study has some classroom implications. Experienced students have higher positive value and expectancy towards Arabic learning. In addition, they also have lower level of test anxiety as compared to the other gender. Therefore, teachers are expected to face different participations and reactions towards learning from their students (Brophy, 1998; Dornyei, 2001; Morris, 2005; Pintrich & De Groot, 1990; Pintrich & Schunk, 1996; Zimmerman & Martinez-Pons, 2004).

Most probably, teachers will also find different levels of achievement among their students, depending on their prior experiences, due to the finding that prior experience has contributed to the different levels of motivation. Some previous studies have also shown that different levels of motivation will contribute to different levels of achievement (Pintrich & Schunk, 1996; Wigfield & Eccles, 1992). Therefore, this study suggests that students need to be placed separately in different classes according to their prior experience. Meanwhile, a survey has to be carried out at the beginning of the class to determine students' level of experiences. It is also easier for teachers to manage a class of students whose levels of motivation are not the same.

Otherwise, preparatory classes can be provided for inexperienced students before they register in the actual classes. These additional classes are expected to bridge the motivational gaps between these two groups of students. Besides, it is also important for teachers to teach students with different experiences and achievement using different stimulus (Cajkler & Addelman, 2000) and different supports (Dabbagh, 2003).

Teachers also need to seriously take gender factor into consideration. Female students are expected to perform better than their male counterpart because their motivation level is statistically significant and higher, as it was found in this study, except for intrinsic motivation and test anxiety. Therefore, this study further recommends that any activities in the classroom have to include the participation of mixed genders. In other words, collaborative grouping activities between the male and female students need to be implemented to nurture a positive motivation towards learning (Brophy, 1998; Cajkler & Addelman, 2000; Dornyei, 2001; Pintrich & Schunk, 1996).

Another suggestion is to separate male and female students into different classes. However, in terms of practicality, the separation of students based on their gender is difficult to be implemented at UiTM because the number of males is much smaller than the females. It is also difficult to set up a class to solely consist of male students. This is because they come from various programmes, which makes it difficult to fix them into the same timetable.

Therefore, this study strongly suggests that gender gaps have to be treated by having collaborative activities involving male and female students together.

LIMITATIONS OF THE STUDY AND RECOMMENDATIONS FOR FUTURE STUDIES

This study is limited to comparing the motivation level of students with different prior experiences and genders based on quantitative data. Hence, it is recommended that further studies be carried out using qualitative data that include methods such as interviews and observations in order to obtain more insightful and in-depth explanations of the situation.

Further studies can also be carried out to compare students' motivations across the different faculties and different UiTM campuses. As the biggest university in Malaysia, UiTM has more than 23 faculties, which can be further divided into different clusters based on their nature of learning. The various faculties which students belong to may also influence students' motivations, as mentioned by Feather (1988) who found that students' enrolment in Humanities, Science Social and Science faculties is related to their expectancy and task value towards Science and Mathematics.

REFERENCES

Ainol Madziah, Z., & Isarji, H. S. (2009). Motivation to learn a foreign language in Malaysia. *GEMA Online Journal of Language Studies, 9*(2), 73-87.

Bail, F. T., Zhang, S., & Tachiyama, G. T. (2008). Effects of a self-regulated learning course on the academic performance and graduation rate of college students in an academic support program. *Journal of College Reading and Learning, 39*(1), 54-72.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Baumfield, V. (2004). Thinking for yourself and thinking together: The community of inquiry as a pedagogy for self-regulated learning. In O. S. Tan, A. Chang, & J. Ee (Eds.), *Thinking about thinking: What educators need to know* (pp. 72-87). Singapore: McGraw Hill Education.

Bembenutty, H. (2007). Self-regulation of learning and academic delay of gratification: Gender and ethnic differences among college students. *Journal of Advanced Academics, 18*(4), 586-678.

Brophy, J. (1998). *Motivating students to learn*. New York: McGraw-Hill.

Cajkler, W., & Addelman, R. (2000). *The practice of foreign language teaching* (2 ed.). London: David Fulton Publishers.

Coakes, S. J., & Steed, L. G. (2001). *SPSS: Analysis without anguish: Version 10.0 for windows*. Brisbane: John Wiley & Sons Australia Ltd.

Crandall, V. J., Katkovsky, W., & Preston, A. (1962). Motivational and ability determinants of young children's intellectual achievement behaviors. *Child Development, 33*(3), 643-661.

Dabbagh, N. (2003). Scaffolding: An important teacher competency in online learning. *TechTrends, 47*(2), 39-44.

Dornyei, Z. (2001). *Motivational strategies in the language classroom*. United Kingdom: Cambridge University Press.

Duncan, T. G., & McKeachie, W. J. (2005). The making of the Motivated Strategies for Learning Questionnaire. *Educational Psychologist, 40*(2), 117-128.

Feather, N. T. (1988). Values, valences, and course enrollment: Testing the role of personal values within an expectancy-valence framework. *Journal of Educational Psychology, 80*(3), 381-391.

Ghazali, Y., & Nik, M. R. (2010). Self-regulated learning strategies among students of Arabic language course and intensive Arabic course in MARA University of Technology Malaysia (UiTM). *International Journal of Applied Educational Studies, 8*(1), 57-67.

Ghazali, Y., Nik, M. R., & Parilah, M. S. (2010a). Kebimbangan ujian dan motivasi dalam kalangan pelajar kursus bahasa Arab dalam konteks kemahiran lisan. *ASEAN Journal of Teaching & Learning in Higher Education, 2*(2), 50-63.

Ghazali, Y., Nik, M. R., & Parilah, M. S. (2010b). Sikap pelajar terhadap pembelajaran kemahiran lisan bahasa Arab di Universiti Teknologi MARA (UiTM). *GEMA Online Journal of Language Studies, 10*(3), 15-33.

Ghazali, Y., Nik, M. R., Parilah, M. S., & Wan Haslina, W. (2011a). Control of learning beliefs among Arabic language course students. *International Journal of Applied Educational Studies, 11*(1), 74-84.

Ghazali, Y., Nik, M. R., Parilah M. Shah, and Wan Haslina, W. (2011b). Test anxiety among Arabic language course students. *The International Journal of Learning, 18*(1), 73-86.

Ghazali, Y., Nik, M. R., Parilah, M. S., Wan Haslina, W., & Ahmed, T. H. (2011c). Kepercayaan jangkaan keupayaan kendiri dalam kalangan pelajar kursus bahasa Arab di Universiti Teknologi MARA (UiTM). *GEMA Online Journal of Language Studies, 11*(1), 81-96.

Ghazali, Y., Nik, M. R., Parilah, M. S., & Wan Haslina, W. (2011d). Cognitive and metacognitive learning strategies among Arabic language students. *Interactive Learning Environments*. DOI: 10.1080/10494820.2011.555840, 1-11.

Ghazali, Y. A. R., & Nik, M. R. N. Y. (2009). Sikap pelajar tiada asas terhadap kemahiran lisan bahasa Arab di Universiti Teknologi MARA. *ILANNS 2009*.

Hair, J. F. J., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6 ed.). New Jersey: Pearson Prentice Hall.

Hsu, J. T. S. (1997). *Value, expectancy, metacognition, resource management, and academic achievement: A structural model of self-regulated learning in a distance education context.* (Unpublished Doctoral dissertaion), University of Southern California, California.

Huang, S. C. (2008). Assessing motivation and learning strategies using the Motivated Strategies for Learning Questionnaire in a foreign language learning context. *Social Behavior and Personality, 36*(4), 529-534.

Kamarul Shukri, M. T., Mohd Amin, E., Nik Mohd Rahimi, N. Y., & Zamri, M. (2009a). Language learning strategies and motivation among Religious Secondary School students. *The International Journal of Language Society and Culture,* (29), 71-79.

Kamarul Shukri, M. T., Mohd Amin, E., Nik Mohd Rahimi, N. Y., & Zamri, M. (2009b). Strategi metafizik: Kesinambungan penerokaan domain strategi utama pembelajaran bahasa. *GEMA Online Journal of Language Studies, 9*(2), 1-13.

Kaseh, A. B., Nik Farakh, S., & Zeti Akhtar, M. R. (2010). Self-Determination Theory and motivational orientations of Arabic learners: A principal component analysis. *GEMA Online Journal of Language Studies, 10*(1), 71-86.

Lundeberg, M., & Mohan, L. (2008). Gender Issues and Schooling. 21st Century Education: A Reference Handbook. Sage Publications. Retrieved 27 April 2010, from Sage Publications: http://www.sage-ereference.com/education/Article_n81 .html.

Lynch, D. J. (2006). Motivational factors, learning strategies and resource management as predictors of course grades. *College Student Journal, 40*(2), 423-428.

Magnan, S. S., & Back, M. (2007). Social interaction and linguistic gain during study abroad. *Foreign Language Annals, 40*(1), 43-61.

Malpass, J. R., O'Neil, H. F. J., & Hocevar, D. (1999). Self-regulation, goal orientation, self-efficacy, worry, and high-stakes math archievement for mathematically gifted high scholl students. *Roeper Review, 21*(4), 281-288.

Morris, M. (2005). Two sides of the communicative coin: Honors and non honors French and Spanish classes in a Midwestern high school. *Foreign Language Annals, 38*(2), 236-249.

Norhayuza, M., Naimah, A., Sahabudin, S., & Ibrahim, A. (2004). *Kajian penilaian modul BA UiTM (2002) peringkat ijazah*. Shah Alam: Institut Penyelidikan, Pembangunan & Pengkormesialan UiTM.

Olaussen, B. S., & Braten, I. (1999). Students' use of strategies for self-regulated learning: Cross-cultural perspectives. *Scandinavian Journal of Educational Research, 43*(4), 409-431.

Pallant, J. (2005). *SPSS survival manual*. New South Wales: Allen & Unwin.

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*(1), 33-40.

Pintrich, P. R., & Schunk, D. H. (1996). *Motivation in education: Theory, research and applications*. Englewood Cliffs: Prentice-Hall Inc.

Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1991). *A manual for the use of the Motivated Strategies for Learning Questionnaire (MSLQ)*. Michigan: University of Michigan. Retrieved from http://eric.ed.gov/PDFS/ED338122.pdf.

Ray, M., Garavalia, L., & Murdock, T. (2003). Aptitude, motivation, and self-regulation as predictors of achievement among developmental college students. *Research & Teaching in Developmental Education, 20*(1), 5-21.

Sahabudin, S. (2003). *Masalah penguasaan bahasa Arab komunikasi di kalangan pelajar Melayu: Satu kajian kes*. (Unpublished M. A dissertation), Universiti Malaya, Kuala Lumpur.

Sekaran, U. (2003). *Research methods for business: A skill-building approach* (4th ed.). United States of America: John Wiley & Sons, Inc.

Wigfield, A., & Eccles, J. S. (1992). The development of achievement task values: A theoretical analysis. *Developmental review, 12*(3), 265-310.

Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal, 45*(1), 166-183.

Zimmerman, B. J., & Martinez-Pons, M. (2004). Pursuing academic self-regulation: A 20-year methodological quest. In J. Ee, A. Chang, & O. S. Tan (Eds.), *Thinking about thinking* (pp. 3-30). Singapore: McGraw Hill Education.

SOCIAL SCIENCES & HUMANITIES

The Terengganu State Legal Text of 1911 Analysis of Islamic Influence in Statecraft and the Authority of the Ruler in a Malay State

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ABSTRACT

The Terengganu state legal document *ItqânAl-mulûkbi Ta`dîlAl-sulûk*: *Undang-Undang bagi Diri Kerajaan Terengganu* is a printed text ordered to be written by the then ruler of Terengganu Sultan Zainal `Abdin the Third, dated 11th Zulqa`idah 1329 (H) or 2nd November, 1911. It comprises of an introduction, 53 articles and a conclusion. The contents clearly show a strong Islamic influence in the formulation of legal text pertaining to statecraft, while still maintaining some forms of Malay state tradition in several features. It also clearly indicates that this particular law was ordered to be written by the Sultan to resist the encroaching influence of the European colonial powers in the Malay world, particularly in the state of Terengganu at the end of the 19th Century and early 20th Century. This paper will not seek to discuss details of the contents of the legal text but focuses on only two aspects, namely, the extend of the Islamic influence in the legal text, and the particular clauses that gave the full authority and legal right to the present Sultan vis-a-vis the Constitution of Malaysia to appoint or reject any candidate to the office of Menteri Besar or the Chief Minister. The research methodology used was the content analysis of the text.

Keywords: Legal text, statecraft, constitution, federation, unitary government, Terengganu state

INTRODUCTION

Purpose of the Study

The laws of the state of Terengganu or the *Itqân al-mulûk bi ta`dîl al-sulûk: Undang-Undang bagi Diri Kerajaan Terengganu* (henceforth referred to as *Undang-Undang Terengganu)* dated back to 11[th] Zulqa`idah 1329 H or 2nd November,

1911 C.E. is a printed text ordered to be written by the ruler of Terengganu Sultan Zainal `Abidin III (1881 – 1918). It comprises of an Introduction, 53 Clauses and a Conclusion. The contents reflect the strong Islamic influence in the formulation of legal statecraft in a traditional Malay state, whilst still maintaining some forms of the Malay state tradition in several features. The Undang-Undang Terengganu was ordered to be written by the Sultan to resist the encroaching influence of the European colonial powers in the Malay world, particularly in Terengganu. This is evident from Article 14 *Prohibition upon the Ruler:*

> "It is not permitted and unlawful for the Ruler to come into agreement or contrive to forgo or surrender the State and the government or any part thereof to any foreign government or any European powers or others."

This is also mentioned in the Article 26 *Prohibition upon the Ministers and State Advisory Councillors* which specifies the prohibition upon all senior office bearers of the state:

> "It is not permitted and unlawful for all Ministers and Members of the State Advisory Council to contrive or to come into agreement with any nation or government with the intention to surrender the state and the government or to reduce the power and rights of the government of Terengganu. Should

they contravene this prohibition, then they are considered as traitors and the government shall punish them accordingly."

The idea to investigate Terengganu's traditional canon of law was motivated by an interesting event which occurred immediately after the previous Malaysian General Election held in March 2008. The present day Sultan or Ruler of Terengganu rejected the candidate recommended by the Prime Minister and Chairman of the ruling Barisan Nasional (BN) party for the office of Menteri Besar (Chief Minister). The BN had won the majority of seats in the Parliament (140 against 82) and in the Terengganu State Legislative Assembly (24 against 8) and thus formed the government. Even after much negotiation and consultation in and outside the State Assembly, the Sultan (who is also the present King or Yang Dipertuan Agong of Malaysia) refused to budge, forcing the Prime Minister and the State Assembly to propose another candidate to the Sultan for consideration. This person was then sworn into office by the Sultan. The question is whether there is a provision in the *Undang-Undang Terengganu* that gives a complete authority to the Sultan and to override the Federal Constitution as was expounded 32 years earlier, which states that:

> "In the exercise of his functions under the state constitution… the Ruler (Sultan or Governor) must act in accordance with the advice of the Executive Council

or a member of the Council acting under its (Council's) authority…" (Tun Muhamed Suffian bin Hashim, 1976, p. 76).

Thus, the first objective of this paper was to examine the particular clauses that gave the full authority and legal right to the present Sultan vis-a-vis the Constitution of Malaysia to appoint or reject any candidate to the office of Menteri Besar or the Chief Minister. The second objective of this paper was to find out the extent of the Islamic influence in the *Undang-Undang Terengganu* and how much of the Malay traditional statecraft was retained.

This paper will analyze both the issues and also some aspects of the language usage, especially the use of the Arabic words in the text.

The State of Terengganu in the Later Part of the 18th Century and the Early 19th Century

The famous stone edict or *Batu Bersurat Terengganu,* found in 1887 in the District of Hulu Terengganu, is indeed a very significant legal document to the state of Terengganu (Muzium Negeri Terengganu, 1992, *Memorial Batu Bersurat).*

Most importantly, the stone inscription (dated 702 A.H / 1303 C.E.) is the earliest Malay text written in Jawi. Previously, all the Islamic inscriptions found in the Malay world were written in Arabic, such as the Brunei gravestone (440 A.H./1048 C.E.), the Leran Surabaya gravestone (495 A.H/1082 C.E.), the Pasai gravestone of

Malik al-Salleh (696 A.H./1297C.E.), etc. (cf. Hashim Musa, 2006a, 2nd ed., pp. 84-87).

The second significant fact about the edict is that it is the earliest Islamic law digest written in Malay in the Malay world, implying that the Islamic law and practices had been promulgated in a Malay state specifically in the state of Terengganu about a hundred years before the foundation of the Malacca Sultanate. These two facts have strong impact on the formulation and writing of the *Undang-Undang Terengganu,* which will be discussed in the subsequent section.

In the 18th Century, two major powers, namely Siam and Britain, were exerting their influences in the northern Malay Peninsula. The Siamese-Terengganu relationship was first established in 1765 on a friendly basis and was not political. Initially, friendly gifts were exchanged including the sending of *uftibungaemasdanperak*or golden-silver flowers tribute by Terengganu to the King of Siam. However, the Siamese began insisting that the sending of the tribute to them was a mark of a vassal status on the part of the kingdom of Terengganu in return for political protection and as a mark of suzerainty of Siam. In 1787, Sultan Mansur refused to continue submitting to the Siamese and began to establish a closer relationship with the British colonial power by writing several letters to Capt. Francis Light in Penang requesting him to send war ships to protect Terengganu. When Sultan Omar ruled Terengganu, he stopped sending the golden-silver flower tributes to Bangkok and instead established closer ties with the

British by going to Singapore to meet the British Governor. In 1869, he sent a mission to London to cement the ties and to request for a greater protection from the British against any aggression from Bangkok. In 1887 and 1889, however, during the reign of Sultan Zainal `Abidin III, King Rama III of Siam visited Terengganu for the first time, on the pretext of establishing closer ties and more cordial relationship with Terengganu. The Siamese King managed to exert pressure resulting in the continuation of the sending of golden-silver flower gift by Terengganu (cf. Muhammad YusoffHashim, 1991, p. 92).

At that time, the British colonial officers were busy trying to place an advisor in Terengganu in order to place state as a part of the Federated Malay States which came under the British Protectorate. The British were also busy making political and diplomatic manoeuvres with the Siamese in order to have more influence and power over the Unfederated Malay States. This underhanded manoeuvre resulted in the formulation of several treaties with Bangkok, such as the Siam-British Secret Agreement (1887), Siam-British Border Treaty (1899), the British-Siam Declaration (1902), and the Treaty of Bangkok in 1909, which declared that Siam no longer had any form of sovereignty over the northern Malay states of Kedah, Kelantan and Terengganu:

> "The Siamese government transfers to the British government all rights of suzerainty, protection, administration, and control whatsoever which they possess over

the state of (Kelantan), Terengganu, (Kedah, Perlis and adjacent island)" (W.G. Maxwell & W.S. Gibson, ed., 1824, p. 55, quoted in Muhammad Yusoff Hashim, 1991, Ibid, 112).

This event cleared the way for the British to enter those states and to exert their influence directly. However, this was vehemently opposed and rejected by the Sultan of Terengganu who remarked to the Strait Settlement Governor in Singapore when he visited the Governor, as reported by J. Anderson, a British colonial officer "…he (the Sultan) claimed that he had not been informed of the Treaty (1909) and he (the Sultan) could not understand how Siam could transfer to Great Britain what it never possessed" (Quoted in Muhammad Yusuf Hashim, 1991, Ibid: 112).

Sultan Zainal Abidin III received full backing from court officials and also prominent Islamic scholars or *ulama* in his effort to resist the British pressure on him to sign the 1909 Bangkok Treaty and to accept British Advisor to the state. However, the British, using their diplomatic prowess and subtleties managed to convince the Terengganu government of the benefits of having a British advisor in the state, as put forward by Anderson "…that it was not the British intention to assume administration of Terengganu, but rather to protect His Highness from the wile of unscrupulous Europeans and other adventurers who would probably now annoy His Highness with unreasonable demands for concessions…" (Ibid, p.113). Nonetheless, the Sultan and

his advisors were not completely convinced, and thus from 1910 – 1919, Terengganu only allowed one British agent at a time to give whatever suggestions to the Sultan, which carried little weight. Thus, it was in this condition of resistance and reluctance of the British influence on the part of the Sultan and his advisors that the *Undang-Undang Terengganu* was formulated and ordered to be written by Sultan Zainal Abidin III in 1911.

With regards to the character of Sultan Zainal `Abidin III, it was reported that he was a very pious man and deeply committed to the teachings and practices of Islam. The then Governor of Straits Settlement Mitchell remarked in a letter dated 14 September 1896 that Sultan Zainal `Abidin was "…very studious, reading many Arabic works of science, very strict in religious observance" (quoted in Muhammad Yusuf Hashim, 1991, Ibid, 107). He was well-versed in Arabic and had several well-known Islamic scholars as his teachers, among whom were Wan Muhammad Wan Abdullah, the son of Tuk Sheikh Duyung (a venerated ulama) and Engku Syed Keramat (another venerated religious personality of Terengganu) (Haji Buyong Adil, 1982, p. 20).

Hugh Clifford also observed that the Sultan "…does not personally suppress his people…love of justice and the merciful disposition which are popularly ascribed to him." In observing faithfully to the tenets of Islam, the Sultan went for his pilgrimage to Mecca in 1913 and made many committed efforts to implement Islamic religious code in Terengganu (H. Clifford, 1961, p. 1-62).

The formulation and writing of the *Undang-Undang Terengganu* were in line with his vision and mission for the state and the people of Terengganu.

The Contents of Undang-Undang Terengganu

As mentioned earlier, the *Undang-Undang Terengganu* comprises an Introduction or *al-Muqqadimah*, 53 Clauses or *Fasal* and a Conclusion or *Khatimah.* The 1911 printed version has 22 pages, apart from the Preface in which the Sultan in his capacity as the author of the text described in brief its vision, content and the title, namely, the *Itqân al-mulûk bi ta`dîl al-sulûk: Undang-Undang bagi Diri Kerajaan Terengganu* (Excellent Government through Righteousness: The Laws of the State of Terengganu).

Muhammad Yusoff Hashim remarked that the *Undang-Undang Terengganu* was modelled upon the *Undang-Undang Tubuh Negeri Johor* and that it was regarded as the first secular legal document written in the state of Terengganu (Muhammad YusoffHashim, Op cit. 109). Another scholar, i.e. Mohd Yusof Abdullah, was of the opinion that the *Undang-Undang Terengganu* was copied from the *Undang-Undang bagi Diri Kerajaan Negeri Johor (1895)* and was modified" (Mohd Yusof Abdullah, 2006, p. 190). Halimah Hassan, in the same volume, has described in full the contents of all the 53 Articles in the *Undang-Undang Terengganu* (Halimah Hassan, 2006, Ibid: 148-187).

This paper does not seek to discuss the details of the contents of Undang-Undang

Terengganu, but focuses only on two aspects, namely, the Islamic influence and the particular clauses that gave full authority and legal right to the Sultan to appoint or reject any candidate to the office of the Menteri Besar or the Chief Minister.

The Rights and Authority of the Sultan or the Ruler to Appoint or Reject a Candidate for the Office of Menteri Besar

There are five Clauses that are relevant to the issue of the legal rights and the authority of the Sultan to appoint or reject anyone to the office of the *Menteri Besar* and other senior appointments in the state. These are Articles six, seven, eight, nine and ten, as described in the following sub-section:

Article Six: For the Ruler to Appoint State Officers

Verily it is the authority of the Ruler to appoint anyone to the post of Ministers and officers and to specify their functions, duties and emoluments, and also to confer any Honourable Titles and acknowledgment to them.

Article Seven: For the Ruler to dismiss Ministers

Verily it is the right and authority of the Ruler to dismiss ministers and officers from their posts, if they committed any offence against the state law or shari`ah (Islamic) law, and that the offence and the punishment will be according to the consideration of the Ruler.

Article Eight: Incumbent upon the Ruler to have Consultation

Notwithstanding the rights and authority rest wholly upon the Ruler, it is customary and incumbent upon him to have consultation with all the council of Ministers on matters of the state and its laws.

Article Nine: The Authority of the Ruler during the absence of the Members of the Advisory Council

If the Ruler is of the opinion that a certain matter with regard to the welfare and wellbeing or of danger and calamities that requires urgent action, whilst at that material time the Councillors were not present, then the decision to act rest solely upon the opinion of the Ruler. However, when the Councillors are present later, it is customary to discuss again whatever rulings or laws instituted by the Ruler and should the rulings or laws are not agreeable to the Councillors, then it can be annulled.

Article Ten: The Ruler is permitted to pass any ruling on his own authority

Verily, it is provided for the Ruler if he so wishes, to pass a ruling on his own authority, upon his officers who hold state posts and also upon the people of the state; no other person is permitted to do so except those Heads who are vested with those duties.

It is thus very clear that according to Article Five, when combined with Article Six and Article Ten, the Ruler or the Sultan has full rights and authority to appoint or to dismiss any officer holding any senior post of the State, including the Ministers and *Menteri Besar*. However, according to Article Eight, it is customary and incumbent upon the Ruler to consult with the Advisory Council on any matter of the state and its laws. Hence, what transpired in the case of the rejection of one candidate and the acceptance of another candidate for the post of MenteriBesar of Terengganu in March 2008 by the Sultan, without the consultation and consensus of Council Members, as some people argued, was not according to the common or customary practices as provided for by the law. Others, however, argued that Article Eight does not cover the matters of the appointment and dismissal of Ministers and the *Menteri Besar*, because these matters are specifically dealt with in Article Six, Article Seven and Article Ten, where the appointment, dismissal and punishment of those office bearers of the state, are specifically mentioned.

Then, in the matter of the Ruler's decision supposedly contravening the Federal Constitution which states that "in the exercise of his functions under the state constitution…the Ruler (Sultan or Governor) must act in accordance with the advice of the Executive Council or a member of the Council acting under its (Council's) authority…", Malaysia being a Federation of Malay States and not a Union provides the exercise and application of the State Constitution by all the states in Malaysia. When the concept and formation of Malayan Union as proposed by the British Government in 1946 was rejected by the Malay Sultans and particularly by the United Malay National Organization (UMNO), the Federation of Malaya was then formed in 1948 bringing together under a federal government all the Malay States including states without Sultans, namely Penang and Malacca. In the concept and practices of the Federal government, and due to the recognition and acknowledgement, to each state is still given the space to exercise its own state constitution. It was specifically for this purpose that in 1948 the government of the Federation of Malaya directed all the Malay States to formulate and established its own State Constitution modelled upon the *Undang-Undang Tubuh Negeri Johor* and *Undang-Undang bagi Diri Negeri Terengganu.*

Therefore, most people argue the decision of the Sultan of Terengganu pertaining to the choice of the MenteriBesar was proper and done within the provisions of all the existing laws in Malaysia.

The Islamic Influence and Retention of Some Malay Traditional Statecraft in the Undang-Undang Terengganu

It is very clear that, on cursory observation, *Undang-Undang Terengganu* is an admixture of Malay traditional statecraft with heavy Islamic influences. The title itself, which in reality is the theme of the law, reflects Islamic flavour, as many titles of the traditional literary works in Malay relating to Islamic discourses at the time were written in Arabic, such as *Bidayat al-*

Hidāyat, Sirāj al-Huda, `Āqidat al-Nājīn, Şirāt al-Mustaqīm, Sabil al-Muhtadīn, Hidayat al-Salikin, Siyār al-Sālikīn, Furu' al-Masa'il, and many others.

The title of the *Undang-Undang Terengganu,* that is, "*Itqân al-Mulûk bi Ta`dîl al-Sulûk"* was written in beautiful *Kuffickhat* style, and on the same title page at the bottom was written in Arabic that this Law is proclaimed by the Sultan himself: *Fayaqul al-mutawassil bi Saiyyidi al-Mursalin al-Wathiqbil-Lāhi al-Qawi al-Mātin al-SultānZain al-`Ābidin yang Ketiga.* Similarly, in the Preface, the traditional Islamic opening of writing a text was used, starting with the Basmallah, and followed by the formula of glorification to Allah the Almighty and the salutations to the Noble Prophet Muhammad, *sallallhu `alihiwasallam,* his family members and companions.

Besides the title in Arabic, the *Undang-Undang Terengganu* also utilises many Arabic terms to describe the general or the legal concepts which are not available or deemed as inadequate in Malay, for example:

Arabic	English
al-muqaddimah	introduction
haq / huquq	rights
jamā`ah	assembly
redhā	pleasure/permission
aula	foremost
itlaq	obligatory
wadzifah	appointment/duty
ijtima`	conference/meeting
muhibbah	goodwill

mafhum	meaning
Ahlu al-Hillwa	committee which appoint, reject or dismiss candidates for
al-`Aqdī	paramount posts in the state
khātimah	conclusion
ittifaq	agreement
inshāAllāh	by the will of Allah
wārith	relative/successor
`a'lām	let it be known
ba`id	distant
rukhsah	excuse
mengimarah	to prosper
taqsīr	to reduce
nasal/nasab	relative/descendent

The full title of the Sultan was also given in Arabic, as *Syed al-Mursalin al-Wathiq bi l-Lāh al-Qawi al-Mātin al-SultānZainal `Abidin III,* which was the established practice of all the Malay Sultans on ascending the throne in the Malay states.

Another clear sign that the *Undang-Undang Terengganu* was greatly influenced by the Islamic tenets is the condition of the appointment of the Rulers, namely, the Menteri Besar and the Ministers that they be Muslims (Article Two, Article Twenty four). The official religion of the state is Islam, although there may be followers of other religions residing or allowed to settle in the state (Article Fifty One).

The formation of the state Advisory Counsellor the *"Jemaah Pangkuan Negeri"*, as termed by the *Undang-Undang Terengganu* comprising the Ministers and Chief Heads and also prominent Islamic

scholars, follows the Islamic tenets of the formation of the *"Ahlu al-□illwaal-`Aqdī"* given the task of choosing the rightful Ruler and other paramount positions in the state government. This resembles, perhaps distantly, to the concept of the Council of Shura (*MajlisShūra*), as described by al-Mawardi when Khalifah Umar *radhiayallāhu`anhu* appointed six prominent companions (Ali, Zubair, Uthman, Abdul Rahman bin Auf, Thalha, and Sa`ad Abu Waqqas*radhiayallāhu `anhum*) to search for Umar's successor when he was dying [cf. Imam Al-Mawardi, (Tr.) Fadhil Bahri (2000, pp. 16-17)].

Articles Eight, Forty Eight, Fifty One and Fifty Two in particular, are also clear indications of heavy Islamic influences. Article Eight mentioned that although all the powers in the state and the government of Terengganu rested fully in the hands of the Sultan, it is common and necessary, following the Islamic teaching that he confers with all the ministers on the state's matters and the laws pertaining to them. Article Forty Eight states that it is incumbent upon the government of Terengganu to honour all treaties with any government as long as there is no proven act of treachery or cruelty committed by them, which is also in line with the teaching of Islam that exhorts all to honour promises and agreements as long as there are no default and treachery. As mentioned above, Article Fifty One was clearly derived from the Islamic requirement, namely the state religion must be forever Islam and no other religion can be included as the state religion, no matter how numerous are their followers residing in the State. Finally, Article Fifty Two which deals with the act of treason to the state, whether they are committed by the Crown Prince or other members of the royalties in direct line to the throne, or by the ministers and other government officials. The act is considered to be the most serious offence to the state and the perpetrators are deemed to be traitors and are punishable either by death penalty or banishment, and all their rights and status are forfeited forever.

Thus, several features in the *Undang-Undang Terengganu* described above clearly point to the fact that Islamic influences played a heavy role in the formulation and writing of the law. In the matters of succession to the throne, however, the Malay traditional statecraft was followed, i.e. the successors must be a Terengganu Malay male who is a "blood" descendant of the Sultans ruling the state of Terengganu. Thus, the succeeding sultans after Sultan Zainal `Abidin III must only be from his progeny. It is not permitted and illegal for others not of his progeny to ascend the throne, except in situations where his rightful progeny is incapable due to physical handicaps, such as being mentally unstable, blind, deaf and dumb, or possessing other disabilities. The procedures for choosing heirs to the throne also followed the Malay tradition of appointing a Sultan's son as the first heir, with the title of "Yang Dipertuan Muda", followed by another son as the next-in-line and other close members of the royal family as potential heirs.

The honourable addresses or titles of the Ruler and his royal family members also follow the convention of the Malay tradition. The Sultan is addressed as the *Duli Yang Maha Mulia Sultan Yang Dipertuan Besar,* his son Warith Ganti Raja *Yang Amat Mulia Yang Dipertuan Muda,* while the Sultan's consort is known as *Permaisuri* or *Tengku Ampuan.*

CONCLUSION

The writing of the *Undang-Undang Terengganu* isindeed very significant not only in the legal and administrative aspects of the state but also in the literary development of the state of Terengganu and in the Malay world as a whole. Muhammad Yusoff Hashim remarked that the *Undang-Undang Terengganu* was the first secular legal document written in the state of Terengganu (Muhammad Yusoff Hashim, op cit. 109).

Together with the *Undang-Undang Johor,* the *Undang-Undang Terengganu* became the model of the writing of the *Undang-Undang*of other Malay states when the government of the Federation of Malaya in 1948 requested all the other Malay states to formulate and write their own state laws to be implemented in the governing and administration of their respective states. In the concept and practices of the Federal Government, due recognition and acknowledgement are still given to each state to exercise its own state constitution.

From the discussions above, the issue whether the decision of the Sultan of Terengganu pertaining to the appointment of the *Menteri Besar* in March 2008 was proper and within the provision of all existing laws in Malaysia, this paper argued that it was indeed within the authority of the Sultan to do so, when the *Undang-Undang Terengganu* and the status of the Federation of Malaya/Malaysia are taken into account. It must be noted that the original *Undang-Undang Terengganu* of 1911 has been revised several times and new Clauses were added on as provided for by the Article 53: *Obligation to add and expand the Law.* The Teregganu State Legal Text of 1911 was amended on 1st February 1948 and 14th August 2002, by the current ruler who is also the present Paramount Ruler of Malaysia or *Yang Dipertuan Agong Duli Yang Maha Mulia al-Wathiq Billāh* Sultan Mizan Zainal `Abidin, to improve the power of the Terengganu government, signifying to the fact that the *Undang-Undang Terengganu* is still in operation and binding in matters involving the administration of the state of Terengganu.

The *Undang-Undang Terengganu,* as shown in this paper, is actually an admixture of Malay traditional statecraft with heavy Islamic influences. The title in Arabic being the theme of the Law, the contents of some of the Articles, especially Articles Two, Eight, Twenty-four, Forty-eight, Fifty-one and Fifty-four, the Islamic traditional formula of the writing texts on the Islamic discourses, and the profusions of the Arabic words and the phrases used in the text, all point to the fact that the Islamic influences formed the underlying spirit of the writing of the *Undang-Undang Terengganu.* In the

matters of succession to the throne, however, the procedures of choosing and naming heirs to the throne, and awarding honourable addresses and royal titles, it strictly follows the convention of the Malay traditional statecraft.

Wa l-Lāhu `a'lamu bi s-sowāb, wa l-hamdulillāhir-Rabbil `ālamīn.

REFERENCES

Abdullah Zakaria Ghazali. (1996). *Terengganu: Tokoh, Pentadbiran dan Perjuangan*. Kuala Lumpur: Persatuan Muzium Malaysia.

Buyong Adil, Hj. (1982). *Sejarah Terengganu.* Kuala Lumpur: DewanBahasa dan Pustaka.

Clifford, H. (1961). Expedition toTrengganu and Kelantan. *Journal of the Malaysian Branch of Asian Studies, 34*(IH), 1-62.

Halimah Hassan. (2006). *Itqan al-Muluk bi Ta'dil al-Suluk* (Undang-Undang bagi Diri Kerajaan Terengganu): Kedudukan Raja dan Pembesar. In Rogayah A. Hamid & Mariyam Salim. (Peny.), *Kesultanan Melayu Terengganu* (pp. 148-186). Kuala Lumpur: Dewan Bahasa dan Pustaka.

Hashim Musa (2006). *Epigrafi Melayu: Sejarah Sistem Tulisan dalam Bahasa Melayu* (Edisi ke-2). Kuala Lumpur: Dewan Bahasa dan Pustaka.

Imam Al-Mawardi, *Al-Ahkam al-Sultaniyyah fi al-Wilayah al-Diniyyah.* (Tr.). (2000). Fadhil Bahri. Jakarta: Darul Falah.

Mohd Yusof Abdullah (2006). *Itqan al-Mulk bi Ta'dil al-Suluk*: Suatu Tinjau Umum. In Rogayah A. Hamid & Mariyam Salim. (Peny.), *Kesultanan Melayu Terengganu* (pp. 188-217). Kuala Lumpur: Dewan Bahasa dan Pustaka.

Muhamed Suffian bin Hashim, Tun (1976). *An Introduction to the Constitution of Malaysia.* Kuala Lumpur: Government Printers of Malaysia.

Muhammad Yusoff Hashim. (1991). *Terengganu Darul Naim: Tradisi Persejarahan Malaysia,* K. Lumpur: Dewan Bahasa dan Pustaka.

Muzium Negeri Terengganu (1992). *Memorial Batu Bersurat.* Kuala Terengganu: Yayasan Islam Terengganu.

Rogayah A. Hamid & Mariyam Salim (Peny.) (2006). *Kesultanan Melayu Terengganu.* Kuala Lumpur: Dewan Bahasa dan Pustaka.

APPENDIX

Title page of the Undang-Undang Bagi Diri Kerajaan Terengganu

انتقاء الملوك بتعجيل السلوك

بهواس ايته سوات اوندا‌ڠ² باݢي ديري كراجأن ترڠڬانو

فيڠول المتوسل بسيد المرسلين الواثق بالله القوي المتين

السلطان زين العابدين ـ بفكنيك
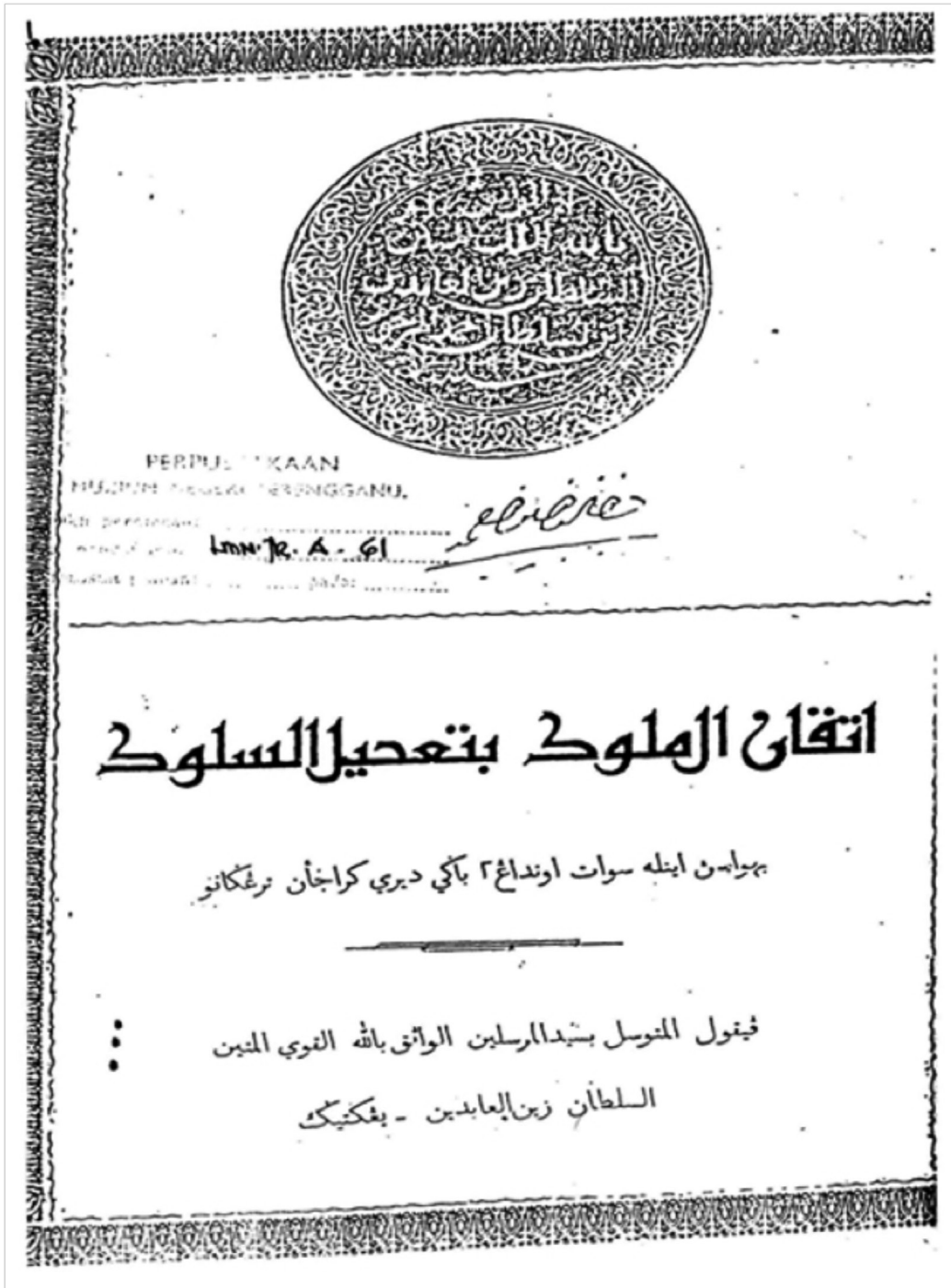
Critical Factors Influencing the Effectiveness of Research Teams among Academicians

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ABSTRACT

Work team is one of the common methods of doing research nowadays. The concept of work teams is seen as a special application of groups in business, industry, government, as well as education and healthcare settings, which lies at the foundation of the modern organization. This method allows team members to save their energy, time and resources. There are a lot of models and theories discussed on the work team. However, little attention has been given to developing a model of research work team in academic setting. Looking into the academician career, there are some aspects which are different from those who work in industrial setting, particularly in terms of their needs, job load, resources and outcomes. This paper focuses on the factors needed for an effective research work team in the academic setting. Using semi-structured interviews, the author asked the following question, "Based on your experiences, what are the important factors needed for a research team to function effectively?" Three main themes emerged during the interviews, and these were leadership, team members and support. The discussion considers the experiences of the respondents when involving themselves in a research team. Further discussion shows how this issue can assist academicians to work better in a team and to get more satisfaction in the future.

Keywords: Work team, teamwork, research team, academician

INTRODUCTION

There has been an increasing movement towards using teams in most organizations in the last twenty years. Working in team is believed to be the best way to get better results or outcomes because team members with variety skills can share the information they possess (Parris, 2003).

This approach is taken to compete against each other in inventing something new and useful to the society. The universities around the world are also using the same approach in conducting their research. Numerous numbers of research teams from various universities are now competing and struggling to be the world-class university and to be among the best by conducting research in various disciplines, which can hopefully be invested for the future.

As in Malaysia, universities have also started to have the same trend. Up to now, a huge amount of allocation has been invested by the government and private institutions to create new knowledge to contribute to the society. Besides that, the government has also conferred research university status on four local universities, namely, Universiti Kebangsaan Malaysia (UKM), Universiti Malaya (UM), Universiti Putra Malaysia (UPM) and Universiti Sains Malaysia (USM). These universities are designated under the Ninth Malaysia Plan to be the country's first full-fledged research universities with the aim to create a new higher education culture in the country (The Star, August 2007). Public universities in Malaysia, especially these four universities, have placed strong ongoing commitments to the development and support of a research culture in their respective universities.

With the emphasis of strong research culture in universities, more and more lecturers engaged themselves in team-based research projects and thereby increased their involvement in working as a team. More often, most of them are team leaders leading a research team in collaboration with other lecturers or they become a team member to a research led by their colleagues. Currently, many lecturers in the universities are involved in more than one research teams at the same time. Thus, working in teams forms an integral part of academic work among the lecturers in order to achieve research excellence in universities (Bishop *et al*., 2000).

PROBLEM STATEMENT

This paper was specifically written to identify the important factors needed to ensure the effectiveness of research team among the academicians based on the personal experiences of the lecturers involved. Several research has been done to identify the factors contributing to unsuccessful project teams such as lack of monitoring and feedback (Slevin, 1987), lack of team commitment, lack of support from key stakeholders, lack of skilled professionals, unshared vision, communication issues, conflicts, and unclear line of project authority (Youker, 1999), as well as resistance to change, lack of a team culture, and inability of team members to work with others outside of their area (Brown, 1999). In his research, Giegerich (2002) found the barriers to project management which include design problems, cash flows issues, capacity changes, unacceptable quality of work, lack of management involvement, lack of teamwork, as well as lack of effective communication and conflict.

However, there is no trace of past research which focuses on finding important factors contributing to research team's success in academic setting among the academicians (Fox & Mahopatra, 2007; Bayerlein, Johnson & Bayerlein, 1995). Furthermore, little research has examined how working within a team impacts an individual (Parris, 2003) in academic setting. Thus, the objective of this paper was to uncover the important factors of research teams involving academicians in the academic setting in Malaysia.

METHODOLOGY

The data were collected using the quantitative interviews, and interpreted on a surface value. The researcher asked the question, "Based on your experiences, what are the important factors needed for a research team to function effectively?" The face-to-face interview approach and interviews through telephone call were used in this study. These approaches allowed the author to have control over the line of questioning (Creswell, 2003). The data collected were analysed descriptively.

Study Setting

The interviews were conducted in four Research Universities in Malaysia, namely, Universiti Putra Malaysia (UPM), Universiti Kebangsaan Malaysia (UKM), Universiti Sains Malaysia (USM) and Universiti Malaya (UM). The author carried out the interviews with the respondents from UPM, while enumerators were assigned and

trained to perform the interviews with those from the other universities.

Sampling

A total of 40 lecturers were involved in this study who had been purposively selected based on their vast experiences in research team since this study was done to identify the contributing factors to their success, and this was done through quantitatively interviewing forty selected experienced researchers. All the respondents are experts in various areas such as agriculture, computer science, educational studies, engineering, food science and technology, forestry, industrial technology and medical. The respondents were selected from four Malaysia's Research Universities and they have experiences conducting research in teams, either as project leaders or as co-researchers or both.

Analysis

The issues given for considering a factor as important by the respondents was to first analyze using word frequency counts to identify words of potential interest. This was then coded and categorized based on themes drawn from the answers provided. Coding and categorization is an iterative process; the codes and categorization would be discussed and reviewed several times to establish accuracy and consistency. Codes were changed while new ones were also developed during this stage. When there were inconsistencies, the researchers discussed the data and jointly arrived at an

agreement as to whether the data should remain in the current category or be grouped into a different category.

FINDINGS AND DISCUSSION

• Explanation on what is going to be presented

As shown in Table 1, the respondents are from four Research Universities, Universiti Kebangsaan Malaysia (ten respondents), Universiti Malaya (eight respondents) Universiti Putra Malaysia (twelve respondents) and Universiti Sains Malaysia (ten respondents). In terms of their years of service, the respondents have had from one to 38 years, with an average year of service of 15 years. Meanwhile, 39 respondents (97.5%) have experienced working as a team leader and 37 of them have experienced working as a co-researcher (92.5%). Almost all of them (90%) have had

experiences working both as a team leader and a co-researcher.

Several important categories also emerged during the interviews, and these were grouped into three main themes, namely, leadership, team members and support.

Team Leadership

A large and growing body of literature has investigated on different aspects of leadership in work team (see for instance, Jong & Hartog, 2007; Bartram & Casimir, 2007; Taggar & Ellis, 2007; Sanders & Schyns, 2006; Harris, 2004; Merlo *et al.*, 2002; Cronshaw & Lord, 1987). During the interviews, ten respondents (25%) agreed that team leader plays an important role in a work team. They mentioned that team leader should be responsible in ensuring the effectiveness of the work team by

TABLE 1
Respondents' Background

Profile	Frequency	Percentage (%)
University		
Universiti Kebangsaan Malaysia	10	25.0
Universiti Malaya	8	20.0
Universiti Putra Malaysia	12	30.0
Universiti Sains Malaysia	10	25.0
Years of Service (x= 15.38, S.D.= 8.992)		
<10	15	37.5
11-20	15	37.5
21-30	9	22.5
>31	1	2.5
Has experience working as a team leader	39	97.5
Has experience working as a co-researcher	37	92.5
Has experience as a leader and a co-researcher	36	90.0

choosing the right team members to avoid unfair contribution and uncommitted team members; conducting continuous meeting so that the progress of the research project can be updated and monitored; discussing and overcoming any problems which arise among the team members as soon as possible to keep away from bigger problems later.

In their study, Jong and Hartog (2007) stated that leaders should influence their team members to do the best job as a team. According to them, there are several responsibilities of a leader in a team such as planning and organizing, problem solving, clarifying roles and objectives, informing, monitoring, motivating and inspiring, supporting, managing conflicts, etc. Beattie *et al*. (2005) emphasizes the idea of team leader conducting continuously project meeting. The team leader must ensure that the research team members are always given the latest information during the meetings to ensure that the focus is maintained throughout the project period and to keep the momentum.

Team members

In team members' theme, a lot of issues were brought up during the interview. All the respondents concurred that among the three, this particular theme is the most important to ensure the effectiveness of work team. The issues include receiving commitment, cooperation, cohesiveness, heterogeneity, time management, clear objectives and plan, mutual respect, communication, trustworthy and workload.

In their study, Larson and LaFasto (1989) described commitment as follows:

"…a sense of loyalty and dedication to the team. It is an unrestrained sense of excitement and enthusiasm about the team. It is a willingness to do anything that has to be done to help the team succeed. It is an intense identification with a group of people…" (pg. 63).

About 57.5% of the respondents said that commitment is the important issue in a work team which makes commitment the most crucial factor in this theme. This result has been proven by several researchers (e.g. Becker, 1992; Bishop & Scott, 1997; Bishop *et al*., 1997) who found that the levels of an individual's commitment to the team and to the organizations are very crucial and related to many of the benefits associated with the teams. Furthermore, Becker and Billings (1993, as cited in Bishop, 2000) discovered in their research that team commitment is linked to extra-role behaviour and team performance (Scott & Townsend, 1994; Bishop & Scott, 1997; Bishop *et al*., 1997). Commitment is much related to the time management issue. A team member who does not have a good time management will never have time to commit and focus in his or her work team.

The second mostly mentioned issue in this factor is cooperation among team members. This is important as 50% of the respondents brought up this particular issue during the interview. Cooperation

or collaboration is also known as working together. It is important that team members cooperate with each other to ensure that a project can be accomplished within the time given because good cooperation can reduce the amount of time spent on other activities. Moreover, cooperation will enhance both the motivation and effort of team members (Yeatts & Hyten, 1998). The respondents also believe that without cooperation within a work team, a lot of problems will surface and these cause the team members to struggle when doing their research project.

The next issue is related to cohesiveness, which includes the level of understanding and the chemistry or relationship between team members. Twelve respondents (30%) agreed that this issue should be considered as one of the important factors in ensuring the effectiveness of a work team. Past research revealed that a team with high level of cohesiveness has high level of trust among team members, good coordination, has less conflict and prefers supporting and collaborating with each other to achieve the team's objectives (Dobbins & Zaccaro, 1986; Mudrack, 1989). Dobbins and Zaccaro (1986) also stated that cohesiveness could create a positive impact on a work team; among other , active participation among team members creates a better interaction, decreases absenteeism among members and increases the feeling of self-respect among them. Verma (1997) mentioned in his book that team cohesiveness determines how strongly the team members feel bonded to each other.

Another issue arose from the interview is heterogeneity in team members' skills and experiences. Eleven respondents (27.5%) assumed that this particular issue is important in making sure the effectiveness of a work team. The research by Campion *et al.* (1993) indicated that heterogeneity has a positive effect on team performance because of the team members' various abilities and experiences which allow them to learn from each other. However, Pierce and Ravlin (1987) had a different point of view. They argued that homogeneity is better than heterogeneity because when a work team consists of members with the same skills and experiences, the team can function successfully and conflicts among them can be reduced. This finding, however, was disagreed by Jung and Sosik (1999) who claimed that even though conflict and dissatisfaction could possibly happen in a heterogeneity team, they assumed that the team would be more essential.

The other issue which is very common is the lack of time which has been a global phenomenon among researchers. Due to academicians' heavy workload and tight schedule, time management issue has been a phenomenon across the universities and it is often exaggerated by the published or perished phenomena some researchers are familiar with (Al-Jumaily & Stonyer, 2000). As discussed earlier, time management has a positive relationship with commitment. Without a good time management, a team member will never have time to commit and be focused in his or her work team. Eight

respondents (20%) were in agreement that time management is a crucial factor in a work team.

One of the issues that was discussed in this theme is receiving clear objectives and planning on what should be done and who should do it. Eight respondents (20%) thought that this particular factor is crucial in a work team. The respondents claimed that before starting a research work team, the team members should have a clear objective about their research project and then create a plan to achieve the objectives so that they could produce a quality research in the specific time given. Colenso (1997) suggests that the team objectives should be continuously reasserted, and this usually involves the processes of mission building, developing a shared vision and then resolving these into a set of strategic objectives.

Mutual respect and trustworthy are two issues that show level of bonding in a team. The only way to make people respectful or trustworthy is to respect and trust them. Trust, as in Yeatts and Hyten (1998), is a belief held by one team member about another. Verma (1997) concludes that an environment where team members are professionally satisfied, involved, motivated and have mutual trust should be created. In more specific, they should respect, trust and help each other to win. Seven respondents (17.5%) felt that mutual respect is important in a work team, while four respondents (10%) felt there must be trustworthiness. Trust does lead to open communication and hence help solve team problems, make

decisions and optimize team output. If there is a trust environment in a team, the members will voluntarily share their problems (Verma, 1997).

Lack of communication or ineffective communication between team members (even if they are really good) can cause failure in work team process and subsequent performance (Yeatts & Hyten, 1998). However, in this study, only six respondents (15%) realized the importance of communication. By communicating with other team members, they could share their ideas and feelings as this will contribute to increased team performance. So, without communication, a team will not function effectively (Ab Aziz, 2003). Ab Aziz (2003) also adds that an effective communication minimizes conflict, prejudice and misunderstanding problem which normally occur in a work team.

According to Beattie *et al*. (2005), avoiding participation in a lot of research or reducing academician workload can help the team to produce quality research outcomes because they can concentrate and focus on specific research project. In this way, the commitment of team member can be increased, apart from improving communications among members which will lead to exchanging ideas and cooperation. Beattie *et al*. (2005) also believe that communication and cohesiveness among team members can be built during the meeting. Besides that, workload sharing is another concern that was pointed out and discussed during the interviews. By sharing their workload, the effectiveness of a team

can be enhanced by avoiding social loafing (Campion *et al.*, 1993).

Support

The third theme which was highlighted during the interview is support. There are four issues in this theme, and these are support from department, material resources support, funding support and support from research assistants (RA/GRA/GRF). Nineteen respondents (47.5%) mentioned about the importance of support factors in ensuring the effectiveness of a work team. Several respondents complained that the procedures set by the University for researchers to use or to apply for research grant are too cumbersome which result in delaying of research progress. Besides that, the lack of material resources support will also cause a delay in a project.

Support from department or faculty (top management) is one of the issues which was mentioned by eight respondents (20%). In a study on knowledge workers, which included academicians, Campion *et al*. (1996) found a significant and high correlation between management support for teams and employees' judgments of team effectiveness. Higher performance was found in a team which is better connected with other parts of the organizations (Van Aken & Kleiner, 1997). The Dean or Head of Department should always show their concern over on-going research projects and should always help and support whenever the academicians need them regarding their research project. This kind of encouragement will increase the level of motivation among the researchers as this will give them the confidence to perform more research in the future.

In the research done by Vinokur-Kaplan (1995), a positive relationship was found between material resources and collaboration and group interdependence. His study was investigation on the existence of confidential meeting rooms and the necessary equipment for the team to hold a productive and confidential meeting. The sufficiency of material resources is hypothesized to influence group effectiveness. This result is supported by a research by Hyatt and Ruddy (1997) who found that the overall success of a team critically relies on the team's access of necessary material resources. A study on team leaders by Doolen and Hacker (2002) also found that their respondents were very concern with getting resources needed by the team because to them it is very important to provide the necessary resources for their team to be successful. From the interviews, seven respondents (17.5%) had brought up the issue on research funding allocation. Besides funding support, support for material resources necessity was also mentioned by eight respondents (20%), especially for those who are working in the scientific field.

The resources discussed by the respondents included money, people, material, information and training (Doolen & Hacker, 2002). The uniqueness of this study is the findings in relation to the need of research assistants among academicians in conducting research. The research assistants in the academic setting are commonly

referred as Graduate Research Assistants and Graduate Research Fellowship which involve graduate students. Six respondents (15%) said that they needed research assistant to help them in accomplishing a research and a few of them stated that they would not take responsibility to conduct research if there was no research assistant provided for the particular research due to their heavy workload and busy schedule.

Table 2 shows the 15 issues that were mentioned during the interviews by the respondents. As stated earlier, the issues were grouped into three themes. The

'Yes' column shows the amount and the percentage of t respondents who mentioned about the particular issue. On the contrary, the 'No' column illustrate the total number and percentage of the respondents who did not mention about the particular issue. Overall, it can be seen that commitment is the most important factor in the work team in the academic setting as mostly mentioned by the respondents.

Table 3 shows the number and percentage of the respondents' feedbacks on the issues that were gathered from the interviews according to the themes, namely

TABLE 2
Frequency table by issues/factors

Issues	Yes		No	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Leadership theme				
1. Team leadership	10	25.0%	30	75.0%
Team members' theme				
2. Commitment	23	57.5%	17	42.5%
3. Cooperation	20	50.0%	20	50.0%
4. Cohesiveness	12	30.0%	28	70.0%
5. Heterogeneity	11	27.5%	29	72.5%
6. Clear objective	8	20.0%	32	80.0%
7. Time management	8	20.0%	32	80.0%
8. Mutual respect	7	17.5%	33	82.5%
9. Communication	6	15.0%	34	85.0%
10. Trustworthy	4	10.0%	36	90.0%
11. Workload	1	2.5%	39	97.5%
Support theme				
12. Top management support	8	20.0%	32	80.0%
13. Material resources	8	20.0%	32	80.0%
14. Funding allocation	7	17.5%	33	82.5%
15. RA/ GRA/ GRF	6	15.0%	34	85.0%

TABLE 3
Frequency table by themes

Themes	Yes		No	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Team Leadership	10	25.0%	30	75.0%
Team Members	40	100.0%	0	.0%
Support	19	47.5%	21	52.5%

```
┌─────────────────────────┐
│  Team Leadership        │
└─────────────────────────┘

┌─────────────────────────┐
│  Team Members'          │
│                         │
│  • Commitment           │
│  •   Cooperation        │        ┌──────────────────────┐
│  • Cohesiveness         │        │ Successful work team │
│  • Heterogeneity        │        │ in the academic      │
│  • Time management      │        │ setting              │
│  •   Clear objectives   │        └──────────────────────┘
│  • Mutual respect       │
│  • Communication        │
│  • Trustworthy          │
│  •   Workload           │
└─────────────────────────┘

┌─────────────────────────┐
│  Support                │
│                         │
│  •   Top management     │
│  • Funding allocation   │
│  •   Material resources │
│  •   RA/ GRA/ GRF       │
└─────────────────────────┘
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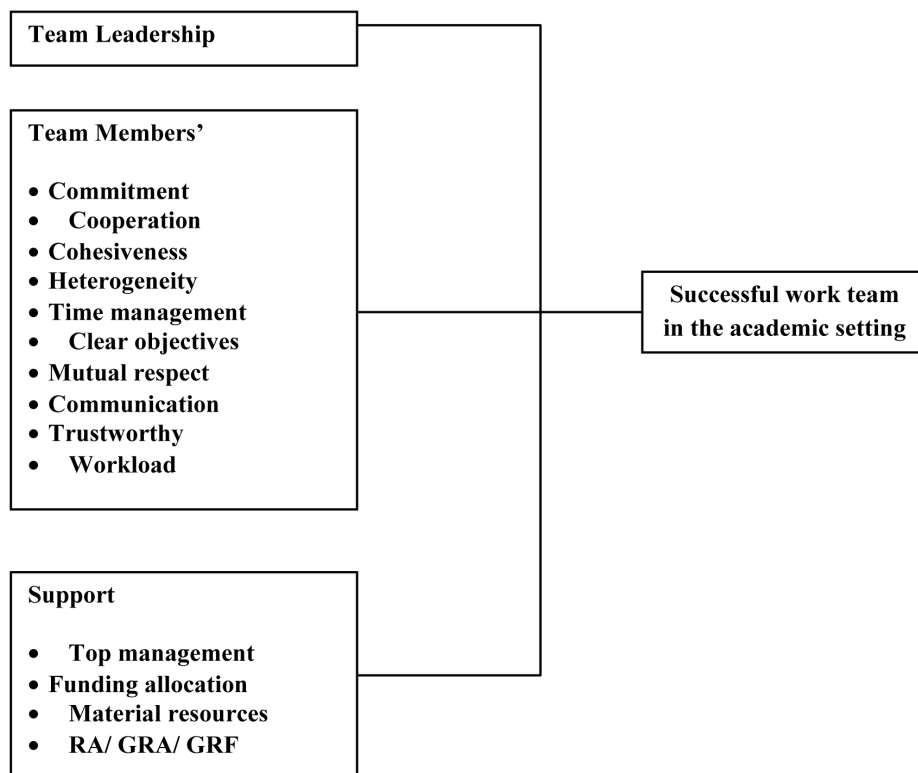
Fig.1: Research team success factors for academicians in Malaysia

leadership, team members and support. The table also reveals that all the respondents have mentioned about issues pertaining to team members which further confirm that team members' roles are very important in ensuring the effectiveness of a work team in the academic setting.

CONCLUSION

This paper discovers the important factors of research teams involving academicians in academic setting. The findings require a reconsideration of our understanding of work teams among academicians in the academic setting, particularly the experiences of the

individuals within these teams. The findings also showed that the issues in team members theme are the key in success factor in any academic research team. However, there are still a lot of limitations in every research project which the academicians should focus on so as to ensure that their projects can be accomplished without disappointment. Besides that, the top management or the faculty should also give particular attention to support so that every research team can produce quality outcomes which will hopefully contribute something useful to the society.

Based on the factors attained from the interviews and the review of literature on work team, the proposed model of research team success factor among academicians in the academic setting was developed. In short, the proposed model (see Figure 1) summarizes the factors which will create a successful work team among academicians in the academic setting. Nonetheless, this study is rather limited in terms of the number and scope of the respondents. Further investigations using with a larger number of respondents and various areas should be done to achieve better information.

From the findings of this study, the author hoped that this study could give some guidelines to the academicians on how they could work efficiently as a team. Furthermore, this study could hopefully extend the body of knowledge in work team, particularly for academicians in the academic setting.

REFERENCES

Ab Aziz, Y. (2003). *Mengurus pasukan prestasi tinggi.* Petaling Jaya, Selangor: Prentice Hall.

Al-Jumaily, A., & Stonyer, H. (2000). Beyond teaching and research: Changing engineering academic work. *Global Journal of Engineering Education, 4*(1)*,* 89-97.

Beattie, J. S., Campbell, C. J., Crain, J., Evans, S. A. G., Ghazal, P., Keane, L., Magennis, S., Mount, A. R., Mountford, C., Su, T. J., & Walton, A. J. (2005). Interdisciplinary integrated research teams in an academic environment. *Proceedings of Engineering Management Conference 2005* (pp. 328-332).

Bishop, J. W., Scott, K. D., & Burroughs, S. M. (2000). Support, commitment and employee outcomes in a team environment. *Journal of Management, 26*(6)*,* 1113-1132.

Brown, C. J. (1999). Towards a strategy for project management implementation. *South African Journal of Business Management, 30*(2)*,* 33-39.

Campion, M. A., Medsker, G. J., & Higgs, A. C. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology, 46*(4), 823-850.

Campion, M. A., Papper, E. M., & Medsker, G. J. (1996). Relations between work team characteristics and effectiveness: A replication and extension. *Personnel Psychology, 49,* 429-452.

Colenso, M. (1997). *High performing teams in brief.* Great Britain: Butterworth-Heinemann.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative and mixed method approaches.* Thousand Oaks, California: Sage Publications.

Dobbins, G. H., & Zaccaro, S. J. (1986). The effects of group cohesion and leader behaviour on subordinate satisfaction. *Group & Organization Studies, 11*(3)*,* 203-219.

Doolen, T. L., & Hacker, M. E. (2002). Assessing organizational context in team-based organizations. *Team-Based Organizing, 9,* 67-90.

Fox, F. M., & Mohapatra, S. (2007). Social-organizational characteristics of work and publication productivity among academic scientist in doctoral-granting departments. *Journal of Higher Education*, *78*(5), 542-571.

Giegerich, D. B. (2002). Early warning signs of troubled projects. *Transactions of AACE International,* 2.1-2.9.

Hacker, M., & Doolen, T. (2007). Alignment at the top: A case study investigating this critical factor in project implementation. *Engineering Management Journal*, *19*(1)*,* 38-42.

Hariati Azizan. (2007). Boost for research. *The Star*. 19 August 2007. Sunday.

Hyatt, D. E., & Ruddy, T. M. (1997). An examination of the relationship between work group characteristics and performance: Once more into the breach. *Personnel Psychology, 50,* 553-585.

Jong, J. P. J., & Den Hartog, D. N. (2007). How leaders influence employees' innovative behavior. *European Journal of Innovation Management, 10*(1)*,* 41-64.

Jung, D. I., & Sosik, J. J. (1999). Effects of group characteristics on work group performance: A longitudinal investigation. *Group Dynamics: Theory, Research and Practice, 3*(4)*,* 279-290.

Merlo, A. P., Härtel, C., Mann, L. & Hirst, G. (2002). How leaders influence the impact of affective events on team climate and performance in R&D teams. *The Leadership Quarterly, 13,* 561-581.

Mudrack, P. E. (1989). Group cohesiveness and productivity: A closer look. *Human Relations, 42*(6), 771-785.

Pearce, J. A., & Ravlin, E. C. (1987). The design and activation of self-regulating work groups. *Human Relations, 40*(11)*,* 751-782.

Parris, M. A. (2003). Work teams: Perceptions of a ready-made support system. *Employees Responsibilities and Rights Journal, 15*(2)*,* 71-82.

Slevin, D. P., & Pinto, J. K. (1987). Balancing strategy and tactics in project implementation. *Sloan Management Review, 29*(1), 33-42.

Verma, V. K. (1997). *Managing the project team (Volume three).* USA: PMI Publications.

Vinokur-Kaplan, D. (1995). Treatment teams that work (and those that don't): An application of Hackman's group effectiveness model to interdisciplinary teams in psychiatric hospitals. *Journal of Applied Behavioral Science, 31*(3)*,* 303-327.

Yeatts, D. E., & Hyten, C. (1998). *High-performing self-managed work teams: a comparison of theory to practice.* Thousand Oaks, California: Sage Publications.

Youker, R. (1999). Managing international development projects-lessons learned. *Project Management Journal, 30*(2), 6-8.

The Narration of Ego Identity Achievement in *"The Beggar Maid"*

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ABSTRACT

Since the publication, Munro's *"The Beggar Maid: Stories of Flo and Rose"* (1978) has been examined from various aspects, and more commonly considered to be a representation of social changes and/or feminist movements. In this paper and from a new perspective, the authors critically read the story as a narration of psychosocial development and ego identity achievement of its protagonist. Investigating the psychologically significant incidents that Rose, the heroine, undergoes provides the opportunity to justify "Epilogue", the actual unpromising ending, compared to the potential cliché happy-ending some 20 pages before the last page. The theoretical framework consists of Eriksonian theory of psychosocial development, which maps the protagonist's quest to find her 'self' and resolve her identity crisis, and Marcia's theory of identity statuses which investigates the kinds of identity she develops into.

Keywords: Alice Munro, ego identity, identity achievement, identity confusion, identity development, identity foreclosure, the Beggar Maid

INTRODUCTION

Alice Munro (b. 1931), a prominent contemporary author of Canada and winner of some governmental and international awards, portrays dysfunctional relationships and life of multi-layered characters in her fiction. Her 1978 collection of interlinked short stories, *"The Beggar Maid: Stories of Flo and Rose"* (henceforth, "*The Beggar Maid"*) provides a host of examples of the main character's personal behaviour and social interactions, and also covers the pattern of her psychological growth, offering enough material for her character study and text analysis. Reading the

heroine's life through her memories, this book not only gives the record of social and individual life of the protagonist, but also of her personality development, and particularly identity development.

Utilizing Erik H. Erikson's theory of psychosocial development and James E. Marcia's theory of identity statuses, this article is an attempt to find the significance of the planned beginning and ending (especially the ending which is in contrast with normal/cliché closings) through mapping the psychological pattern of Rose, the protagonist's growth. Hence, Rose's life and her life choices, which make the story, will be defined as a quest to establish a genuine ego identity.

METHODS AND MATERIALS

Erik Erikson (1959, 1963, 1968) claims that there are precisely eight prominent turning points or stages in everyone's psychological development. In each stage, there is an opposition between the syntonic, i.e. the positive pole and the dystonic, which is the negative one. In case the crisis is solved (the individual gains a balanced perception between the polarities), s/he acquires a lesson or a virtue and proceeds in her/his psychosocial growth; otherwise, the unhealthy outcome (which could be a malignancy, i.e. an extreme perception of the syntonic, or a maladaptation, i.e. an extreme perception of the dystonic) or unresolved crisis will affect later stages, reappear again and cause troubles. These stages (Erikson, 1968, p. 94) are shown in Table 1, on the diagonal line, whereas the corresponding

virtue of each stage (1963) is presented in Table 2.

To Erikson, youths' understanding of their selves and the environment surrounding them is the most significant issue – it is also the most recurrent theme in his works. The current article is highly dependent on his epigenetic chart (Table 1), in which he demonstrates the relationships between the psychosocial struggle of adolescence (the 5th stage) and other additional minor struggles related to main stages.

Discussing this model, James Marcia suggests four identity statuses in the process of achieving a complete identity development and labels them (1993) from the lowest psychosocial development as 'identity diffusion' (when there is no search for identity), 'moratorium' (when the individual begins to investigate his/her self), 'foreclosure' (or a false commitment) and 'identity achievement' (or the ideal outcome, which is a commitment based on experience) to distinguish between the conferred personal identity and the constructed ego identity.

The main distinction noticeable between the 'foreclosed' and 'achieved' identity studied in this article is that the first one is a result of shallowness, and is not based on self-discovery or experience; it can also be a conformity caused by fanaticism or self-ignorance, and therefore, is not as deep and true as the latter. This unwelcome outcome of 'moratorium' can be scrutinized by the means of a new experience or an emotional epiphany, making an individual undergo the 'moratorium' stage one more time, which

TABLE 1
The epigenetic chart of Erikson

	1	2	3	4	5	6	7	8
VIII								**INTEGRITY vs. DESPAIR**
VII							GENERATIVITY vs. STAGNATION	
VI						INTIMACY vs. ISOLATION		
V	Temporal Perspective vs. Time Confusion	Self-Certainty vs. Self-Consciousness	Role Experimentation vs. Role Fixation	Apprenticeship vs. Work Paralysis	**IDENTITY vs. IDENTITY CONFUSION**	Sexual Polarization vs. Bisexual Confusion	Leader and Followership vs. Authority Confusion	Ideological Commitment vs. Confusion of Values
IV				**INDUSTRY vs. INFERIORITY**	Task Identification vs. Sense of Futility			
III			INITIATIVE vs. GUILT		Anticipation of Roles vs. Role Inhibition			
II		AUTONOMY vs. SHAME, DOUBT			Will to be Oneself vs. Self-Doubt			
I	TRUST vs. MISTRUST				Mutual Recognition vs. Autistic Isolation			

TABLE 2
The eight stages of psychosocial development and related virtues

Stage	Psychosocial Crisis	(Basic) Virtue
1	Trust vs. Mistrust	Hope
2	Autonomy vs. Shame and Doubt	Willpower
3	Initiative vs. Guilt	Purpose
4	Industry vs. Inferiority	Competency
5	Ego Identity vs. Role Confusion	Fidelity
6	Intimacy vs. Isolation	Love
7	Generativity vs. Stagnation	Care
8	Ego Integrity vs. Despair	Wisdom

may lead to an(other) identity foreclosure or hopefully, an identity achievement. In Marcia's theory, as also elaborated by Waterman (1993), the change is a lifelong process and one will never cease reviewing him- or her-self.

Analysis of the Text

In accordance with the chronology proposed by Erikson (Table 1), the significant events of Rose's school age will be observed with an elaboration on her relationships with Cora and Ralph, leading her to the emotional conflicts of the first two 'contrary dispositions'. The impact of this particular stage, which results in questioning her existence and social class and brings forth the struggle with the concept of 'social identity', will be discussed in her adolescence. The foreclosed identity imposed upon her by marriage results in a temporary balanced identity but does not last as Rose begins to explore her alternatives in order to gain a real knowledge of her self, i.e., an achieved identity. Marcia's theory can describe this situation the best. Getting

divorced, she is once more in moratorium stage. By underlining her chosen career and relationships, the authors will examine this as the time when she overcomes the inertia that she always felt in her matrimonial life. It is when she achieves a constructed identity.

The main character of *"The Beggar Maid"* makes mistakes, reviews herself, learns and changes mostly when she is emotionally involved in doing something. Being a school girl, she becomes attracted to a girl called Cora. From Rose's point of view, Cora is the girl other boys want to be with, a womanly femme fatale with shiny makeup, and plenty of colourful clothes. Her distinctive traits become the ideals for the identity-diffused Rose. At first, she imitates her, practices in front of the mirror to talk like her, acts like her and desires to accompany her; "It was Cora Rose loved" (p. 32). After they meet and when Cora acknowledges her presence, she finds out that it is not enough – Rose wants to be her, not with/near her; "She wanted to grow up to be exactly like Cora. She did not want

to wait to grow up. She wanted to be Cora, now" (p. 33).

Meanwhile, as revealed in the very last pages of the story, Rose is with a boy called Ralph Gillespie, who sits in front of her in the classroom. They spend time together and help each other with homework. He is the only friend Rose has at school; he is the psychologically significant peer in her life, as they experience different new things together. One day, Ralph begins to imitate the village fool. Based on the very small society of schoolchildren in West Hanratty – where "[f]ights and sex and pilferage were the important things going on" (p. 31) – acting foolish and making others laugh is the nearest thing to Erikson's notion of 'industry'. Surprised by this act, Rose observes how he overcomes his shyness, which "had always equalled her and had been one of the things that united them" (p. 204). She wants to do the same – she wants the 'courage'. But after some time, Ralph leaves the school; Rose misses the chance to go through this psychosocial stage by never doing the village fool and forgetting all about him until the end of the story. At school, there is no replacement for Ralph, and once again, she becomes a passive ordinary girl who does not dare to do things in public and thus overcomes the crisis of 'task identification'. (This crisis is directly related to the 4th stage and the virtue which Rose fails to learn).

However, Rose experiences another world at home. Despite the fact that family is the most significant relation of 'initiative vs. guilt' stage, to Rose it means nothing but merely a stepmother. Her father is absent most of the time, and her brother, Brian, is just a child. Rose spends most of the day with Flo, her stepmother, who severely criticizes Rose for not being useful, not helping around the house and being spoiled. She humiliates Rose regarding her friends; she has a special way of reading the title of books to discredit what Rose reads and her education. What Flo does brings the malignancy of inhibition. Rose, as a result, does not gain much courage to live *her* ideas at this stage.

At this time, she finds Cora the illegitimate girl who wears stylish clothes and uses glossy cosmetics. The significance of her being is the affection Rose feels toward her, which unfortunately is not mutual. Rose's dreams represent a psychological state in which she can experience what she yearns for and is deprived of in real life. She dreams of Cora and in her dreams waits till she comes and rescues her or sometimes she herself would go to save her, and then it is all "[n]ighttime cuddles, strokings, rockings" (p. 35). If Rose did not have time to establish and experience a passionate attraction to Ralph, the untouchable Cora leads to a great love which brings nothing but embarrassment. As Erikson and Marcia mention, the love at this point, regardless of how sexual it may seem, is just a process of self-discovery. This is specifically referred to when on a warm day, by chance, Cora sees her and decides to polish her nails, as she and her friends did for themselves. From this point onward, Rose begins to compare and see her own self in a new way, as if for

the first time: "[she held her hand and] saw with alarm how mottled it was, how grubby. And it was cold and trembly. A small disgusting object" (p. 34). She experiences more things with a diffused identity; she begins to dislikes her body although it does not become a crisis at this stage.

This self-doubt attracts her more to Cora. The question of industry arises again, and Rose becomes her apprentice. Then, she decides to steal some candies, jellies, gums and maple buds from Flo's shop and bestows them all upon the adorable Cora. Bringing them to school, she cannot face her and tries to put them anonymously in Cora's bag. Unfortunately something falls down; Cora's friend turns and asks what she is doing; she leaves the sweets and runs away. But it is not the end. Cora comes to the store to change the candies; she tells Flo what has happened and brings Rose a new sense of shame. The psychological load of this incident is too heavy for the young Rose. The shame she feels toward Cora is like of an apprentice acting silly in front of the superior; she feels guilty towards herself that she stole things from the store, and towards Flo who questions her love, mocks her emotions and scorns Cora even long after the incident. Her love fades; Cora joins the Air Force and marries an airman. Rose apparently "not much bothered by this loss" (p. 38), continues her life, goes to high school and experiences a class with 'towners'.

In her process of psychosocial development, the process of getting acquainted with Cora is a turning point in Rose's life. So far, she had admitted a lack in her life, but never hated herself. To her, Cora is not only a person, but also a style of talking, dressing, acting, and living. She lives in a world not much familiar to or experienced by Rose (or her family) yet. When Rose attends high school, she finds out about the boundaries of social classes more explicitly, and realizes that what she hates is not herself, but her social class and what she wants is not Cora, but a role in the upper class society. As Holton highlights, "Rose is intensely aware of how her location in this stratified community imposes a class-based identity on her, a social valuation which limits her options and negatively influences her sense of self. She thus associates the possibility of escaping her social identity with a departure from confines of the town" (1999, p. 49).

At an earlier time, Rose has clarified that though their house was located in West Hanratty, where "social structure … ran from factory workers and foundry workers down to large improvident families of casual bootleggers and prostitutes and unsuccessful thieves" (p. 6) in contrast to Hanratty, where doctors and lawyers lived, she could not accept the fact, and "thought of her own family as straddling the river, belonging nowhere" (p. 6). She knows about the social geography of the town; however, she dreams that there is an exception, that 'nowhere' exists and they live happily there. This metaphorical image expresses her dissatisfaction with her self, and her life. At this moment, even if she does not confess, she knows by heart and "by the expectations

of her working-class situation" (Holton, 1999, p. 51) that they belong to the poor class. Leaving the town behind is the only way to evade the truth.

Her moratorium begins by searching for the values of the new world, experiencing and learning from it during adolescence. In class, she desperately wants to "align herself with towners, against her place of origin, to attach herself to those waffle-eating coffee-drinking aloof and knowledgeable possessors of breakfast nooks" (40-1). She pretends to be one of them, but not just to find better peers and friends. Rose's intention "articulates a symbolic motif: that of a passage from one universe to another" (Daziron, 1985, p. 123), and the subject reappears more often in the story. She seriously wants to be one of them, so repeats what they do. This is perhaps one of the earliest roles she plays in front of others. As time passes, she sees the origin of every misery in poverty; stained underwear represents the smallest point of their lives and her father's sickness intensifies everything when they cannot afford the hospital. Because of poverty, "there was not a thing in their lives they were protected from" (p. 50). The lack of privacy caused by the attached bathroom on the corner of kitchen, which does not cover noises, is a part of her everyday life.

Now, she is determined to change in order to gain a new social identity. She memorizes Shakespeare to overcome the accent of West Hanratty. She goes to Toronto on her own; feels "Flo receding, West Hanratty flying away from her, her own wearing self discarded as easily as everything else" (p. 60), and experiences the world outside and loses her innocence. She also tries to change her appearance. This moratorium is not separate from curiosity - Rose is willing to meet new and unknown places.

"The Beggar Maid" narrates the climax of this moratorium. Rose lives with Dr. Henshawe, a former professor of English. Dr. Henshawe awakens her to truth. She wants Rose to discover her scholar side, and see 'generativity' in producing works of art, and not taking care of children or a husband. Another consequence of living with Dr. Henshawe, as Rose learns later on, is to evoke Rose's attention to another possible kind of life in which there is no poverty to threat. It is after living there that she distinguishes things in Flo's house, bought from the five-and-ten, from Dr. Henshawe's "polished floors, glowing rugs, Chinese vases, bowls and landscapes, black carved screens" (pp. 69-70). Now, she is able to see the "embarrassing sad poverty in people who never thought themselves poor" (p. 70). This realization is a fundamental part of knowing the society, or in Marcia's terminology, experiencing the alternatives which leads to a genuine decision regarding Rose's (future) place in such a society.

It is also the time when Patrick Blatchford shows up. He is apparently a personable suitor. However, in Rose's point of view, there is something "edgy, jumpy, disconcerting, about him" (pp. 68-9); he is naïve, in love, honest. Unlike Rose, he does not play roles or pretend. She does

not love him. She knows it, and she knows that his family is rich. Rose and Patrick stay together and learn more about each other. Rose realizes that they "come from two different worlds" (p. 78) but cannot ignore the privilege and respect she receives from other girls, other people, even from Dr. Henshawe. As they see each other, live, experience and learn different things together, Rose assimilates into upper class society, and wonders how she can speak like them. On the other hand, she claims that money is not, at least consciously, among her priorities. She even decides to break up with him, yet the love she receives is so great that in her mind, she replaces his image with a pleasant one. She decides, consequently, to marry him; she says she loves him, but feels a pain inside, something hard to explain, and starts to write something – a poem. This is her first creative writing, perhaps rooted in unconscious and foreseeing the future of her moratorium:

> Heedless in my dark womb
>   I bear a madman's child . . . (p. 84)

Rose is a scholar by nature, as Dr. Henshawe believes. She is concerned about words, phrases, and amazed by connotations. A part of her doubt regarding the marriage is about the future of her academic role. She, who has seen herself in this role for many years, has studied and become a scholarship student; thus, cannot find any other useful function for herself. To Rose, it is a question of being useful. Cora, her previous love, was a student of Entrance Class (which is a transitional school year for educationally

privileged students), and this was a way (if not the only way) to move away from West Hanratty and her social class. Once again, when Patrick talks of marriage the conflict between 'industry and inferiority' comes up, but she, identity-diffused, cannot find an appropriate answer as long as they are just friends. She has had and still has a lifelong dream of becoming an actress, a childhood memory shared with Ralph.

On the other hand, she wishes to change her social class. Having lived her childhood in West Hanratty and experienced life in Dr. Henshawe's house, she is now completely aware of the gap. Rose knows that there are only two possibilities for the final turns of events; she should work all her life, always depend on a scholarship or an award and still worry about the future, or marry Patrick and be secure.

As quoted by Erikson,

> [a] state of acute identity diffusion usually becomes manifest at a time when the young individual finds himself exposed to a combination of experiences which demand his simultaneous commitment to *physical intimacy* (not by any means always overtly sexual), to decisive *occupational choice*, to energetic *competition*, and to *psychosocial self-definition* (1959, p. 123).

And here, Rose finally plans to re-define her social class via marriage. After

their fifth or sixth sexual intercourse, i.e. when she experiences the private moment of an orgasm, she even surrenders to the idea of loving Patrick. In Orlofsky's terminology, she constructs a 'pseudointimate' relationship (1993) with him. Pseudointimate relationship is a false intimacy, or a mimic of a real relationship; it is similar to Marcia's foreclosed identity in shallowness and falsehood. At the moment, Rose is still struggling with the crises of the 4th and 5th stages of psychosocial development. According to Erikson, an individual is only able to deal with two stages at a time, and for Rose, there is no place for 'intimacy' (i.e. the 6th stage) at this point. Patrick, however, insists on marriage. She knows that it is wrong. Once she even breaks the engagement and claims not to love him anymore: "I don't love you [and] … I never loved you" (p. 95), but she forgets to give the ring back. After a while she considers the consequences: she would lose her social class and would have to find a new job; even the idea of it is 'frightening' to her. It is tempting and much easier to obtain the almost ready foreclosed identity proposed by Patrick (and society) than going through the process of acquiring a genuine one by herself. So, she goes back, apologizes and asks for forgiveness "because she did not know how to do without his love and his promise to look after her" (p. 98).

Another reason for 'being' with Patrick is to escape from 'internalized parents'. Flo and Dr. Henshawe are two poles of this psychological concept. Flo, as a representative of wretched lower class –the one whose life is filled with ugly, dirty, cheap objects and is 'proud of them'– reminds Rose of the social mores and lifestyle of West Hanratty; a world in which there is not even a chance of having someone like Patrick. However, as her guardian, Dr. Henshawe asks her to forget about boys. When she sees Patrick and Rose together, she warns Rose of not marrying him for money, as if there is no other reason for them being together.

After marriage she cannot overcome the 'sense of futility'. During the first three years, the fights occur periodically. Moreover, the metaphoric image of 'belonging nowhere' remains. Gaining a new social class, she is now more confident to talk about her past, relates herself to lower class and defends her old friends or acquaintances. The people of Hanratty, however, isolate her when she moves away and marries a man of upper-class family. On the other side, her lower-class family background makes her a stranger among the upper class community. Admitting the mistake, she realizes that "[t]hey could not separate until enough damage had been done, until nearly mortal damage had been done, to keep them apart, and until Rose could get a job and make her own money" (pp. 98-9). She even tries a couple of times to commit suicide. The matrimonial story of Rose at this point shows nothing but 'distantiation', which is a counterpart for intimacy. Patrick's idea about what Rose should be like (and how she should not behave) is so over-powering that she feels obliged "to repudiate, to isolate, and,

if necessary, to destroy [these] forces and people whose essence seems dangerous to [her] own" (Erikson, 1959, pp. 95-6).

Before her divorce, at the age of 23, Rose meets an artist called Clifford. He is another reason for their divorce. During their clandestine relationship, Rose reviews her past memories from West Hanratty and her dreams, and compares them with Patrick's and Clifford's life. She wants to have a creative job. She feels that Clifford's lifestyle suits her more. To start, she begins by imitating them, helping them, doing their chores and even cleaning the floor to imitate their life. This 'apprenticeship' leads to her final decision of living a life much closer to Clifford's than Patrick's. After all, these difficult situations, now she knows her capacity and the roles she can play in society, she finds a job at a radio station, starts with a TV program and also teaches at a community college, becomes an interviewer and eventually an actress.

Rose and Clifford fall in love. After Cora, the girl at high school, this is the first time Rose feels love. She experiences the hotness, the desperate need, and the joy. As Erikson suggests, new issues arise when the previous ones are solved. Now that she is done with the initial stages, she enters the sixth stage and seeks the intimacy she believes she deserves. There is a point here, however, where Erikson believes that a minor struggle of identity at this stage could be between 'sexual polarization' and 'bisexual confusion'. By studying the major intimate relationships of Rose so far, it is clear that Ralph and Patrick are her

close friends, while Cora and Clifford play the role of a beloved. Regarding Cora, the furthest point they get is to hug and kiss in Rose's dream, and regarding Clifford, they have sex only when Jocelyn (Clifford's wife) is present, too. It is a part of her new moratorium to experience all without any obligation for commitment. 'Genital love' is what happens between lovers with complementary ego identities, but all Rose and Clifford experience is 'genital activity' which according to Erikson "may help two individuals to use one another as anchors against regression" (1968, p. 71), but nothing more. It assists the young Rose to find herself, the area she is useful in and also motivates her to start her life anew, but not more. To avoid the foreclosed identity exposed by her new social class, she breaks loose. The group-identity she was seeking for and receives because of Patrick does not satisfy her. Jocelyn is the main (if not the only) person she is in touch with. Let us remember what Marcia asserts that "the development of identity occurs in relationship to others" (1983, p. 221). Rose gradually starts to identify with Jocelyn. It is another critical moment when Rose refuses to accept the foreclosed identity and turns to Jocelyn and Clifford.

According to Erikson, one of the most important steps to acquire an ego identity is to obtain a "habitual use of a dominant faculty, to be elaborated in an occupation" (1986, p. 150). By distancing from Patrick and starting to find a job she always wants to have; Rose advances in her psychosocial development and becomes one step closer to

resolve the crisis of industry vs. inferiority stage. The narrative continues in "Simon's Luck". Here, she is an actress, who is totally satisfied with her 'occupational decision', and preoccupied with her 6th stage of psychosocial growth. She is in search of love – a man who could love and stay, fill her loneliness and make her life complete. For the first time, she envies other (married) people and wants to have a family. She is old, and set apart from the mainstream. She compares herself with other people, remembers her past relations and concludes that others have been successful, have "shed a wife, a family, [and] a house" (p. 160). As Kroger (2007) explains, one needs to obtain two aspects of identity to survive: an "individual … as well as [a] group-based [identity]" (141). In this phase, she is not much concerned about herself, but a close group of friends, or perhaps a family to belong to.

Simon now appears, has sex and is willing to stay. From the very first moment, there is a connection between the two of them. Rose believes in him, so his eventual disappearance moves her seriously. It is the 'great psychological trauma' of her life, and quite expectedly makes her question the virtues she has learnt, criticizes her life and doubts again. This breakdown leads to the most significant psychological change in her life. She physically and symbolically turns away from her old self, flees from her past, decides to quit her job, and asks for an answer to her problem, i.e. always loving the wrong man. She eventually reaches a "false epiphany" (Foy, 2004, p. 89) and

abandons her quest for intimacy unsolved; she escapes from "[h]er father's beating, Patrick's control, Clifford's rejection of her, Tom's ready acceptance" (Struthers, 1981, p. 250) and Simon's ignorance, so that she would be able to find total independence.

She goes back to Hanratty, to visit Brian and his wife, in order to discuss Flo. By putting her in the 'Country Home' (nursing home), Rose frees herself from Flo. She finally becomes able to overcome the humiliation repeatedly expressed by Flo. At the end, she subdues the sense of 'internalized parents' and begins living for her own self.

Back in Hanratty, she meets Ralph. She remembers past days and misses "his feet and his breathing and his finger tapping her shoulder" (p. 204). She remembers their time together, when they were both equally in need of one another, equally shy or messy. After all these years, in which she has developed her identity, she suddenly identifies with him. She distinguishes his surface, which is available to all, from his deep layers. "Underneath he was self-sufficient, resigned to living in bafflement, perhaps proud" (p. 209). However, he is unable to communicate as if "they were prevented" (p. 209). Therefore, what Rose begins to feel might be her false impression of reality, but whatever it is, she believes it to be true and finds Ralph an answer for her quest.

CONCLUSION

The identification with Ralph reaches the highest point when he dies. This is the time

when Rose reviews their past memories, appreciates his childhood 'courage' and 'power', and internalizes this sense of difference as a lack in her own personality. The images that Munro depicts on the last pages are about Rose's menopause, and the deaths of Simon and Ralph – who are the only two men she identifies with. Rose's last conversation with Ralph, though wordless, conveys "a wave of kindness, of sympathy and forgiveness" (p. 209) that solves the last part of her identity confusion, eases her life, takes away her always-present doubts and finally calms down her lack of certainty that "[e]verything she had done could sometimes be seen as a mistake" (p. 209). The "ambiguous homecoming" (Howells, 1998, p. 51) offers Rose an identity, based on her past experiences and rooted in her childhood. Coming back to the social class she was grown up in, which she is not ashamed of anymore, Rose finally finds herself and her 'place'.

The story ends with these words: "What could she say about herself and Ralph Gillespie, except that she felt his life, close, closer than the lives of men she'd loved, one slot over from her own?" (210) – conveying the future of Rose; apparently settled down, socially successful, and personally alone, until an accident happens and puts an end to her life.

REFERENCES

Daziron, H. C. (1985). *Angels of Vision on Alice Munro's Short Fiction* (Doctoral dissertation). Retrieved from ProQuest Digital Dissertations.

Erikson, E. H. (1959). Identity and the Life Cycle. In *Psychological Issues, 1*, 1-171.

Erikson, E. H. (1963). *Childhood and Society*. USA: W.W. Norton & Company, Inc.

Erikson, E. H. (1968). *Identity: Youth and Crisis*. London: Faber.

Foy, N. (2004). *Our Unfixed Vision: The Undermining of Vision in Contemporary Canadian Fiction* (Doctoral dissertation). Retrieved from ProQuest Digital Dissertations.

Holton, D. L. (1999). *Class and Stratification in the Works of Alice Munro and Margaret Laurence* (Doctoral dissertation). Retrieved from ProQuest Digital Dissertations.

Howells, C. A. (1998). *Alice Munro*. UK: Manchester University Press.

Kroger, J. (2007). *Identity Development: Adolescence Through Adulthood*. USA: Sage Publications, Inc.

Marcia, J. E. (1983). Some Directions for the Investigation of Ego Development in Early Adolescence. *The Journal of Early Adolescence, 3*(3), 215-23.

Marcia, J. E. (1993). The Ego Identity Status Approach to Ego Identity. In J. E. Marcia (Ed.), *Ego Identity: A Handbook for Psychological Research*. USA: Springer-Verlag.

Munro, A. (1978). *The Beggar Maid: Stories of Flo and Rose*. USA: Vintage Books.

Orlofsky, J. L. (1993). Intimacy Status: Theory and Research. In J. E. Marcia (Ed.), *Ego Identity: A Handbook for Psychological Research*. USA: Springer-Verlag.

Struthers, J. R. (1981). *Intersecting Orbits: A Study of Selected Story Cycles by Hugh Hood, Jack Hodgins, Clark Blaise, and Alice Munro, in Their Literary Contexts* (Doctoral dissertation). Retrieved from ProQuest Digital Dissertations.

Waterman, A. S. (1993). Developmental Perspective on Identity Formation: From Adolescence to Adulthood. In J. E. Marcia (Ed.), *Ego Identity: A Handbook for Psychological Research.* USA: Springer-Verlag.

Conceptualising the Theory of Absorptive Capacity with Team Diversity

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ABSTRACT

This paper examines the role of absorptive capacity and team diversity and proposes an integrative model of the university research team that incorporates relevant insights from knowledge diversity and team diversity. Within this context, the authors discussed a conceptual model that shows theory-derived relationships between the components of absorptive capacity that consists of knowledge recognition, knowledge assimilation, and knowledge application with various aspects of diversity. The proposed results indicate that the ability of a research team to recognize the value of new, external information, assimilate it and apply it to research outputs is critical to its output capabilities. The outcomes consist of Process Performance and Product Performance which reflected that the diversity knowledge has been diffused and applied in the research domains. This paper helps to promote a better understanding of absorptive capacity and delineate the critical importance of team diversity for research team's success.

Keywords: Absorptive capacity, team diversity, and knowledge diversity

INTRODUCTION

There is a prevailing research culture in many universities either locally or internationally. The culture insists on isolated, individual work, particularly when working towards a research project. This individuality arises from the mathematical history of algorithmic computer science research (Gibson, 2005). Unlike many academic areas, research in most social sciences and humanity requires a breadth of understanding across many academic research areas, and applied theory may act as a concrete foundation for further research, and human factors are paramount.

Purpose

This conceptual paper rejects this individualist culture. It is viewed a future-

oriented research team must obtain both breadth and depth of talent. This breadth combined with limited resources means we must choose a research topic wisely so it benefits both the individual and the group. Thus, a systematic approach must be taken to define research areas and there will be a thought leader for each area. Areas interact so synergy is achieved, and are constrained to critical issues in order to encourage active and committed input from the team. An area leader is responsible for academic leadership and exploring inter-area synergy. Publications are expected to be co-authored.

From a research standpoint, this raises the issue of how to assess academic contributions in an environment where the thought leaders' ideas in an area may undergo significant revision or indeed lead to novel contributions from within the team. This paper explores the concept of absorptive capacity with team diversity to promote effective academic research.

In this paper, it is argued that the ability of a research team to recognize the value of new, external information, assimilate it, and apply it to research outputs which is critical to its output capabilities. This capability is labeled as a research team's absorptive capacity and it is largely suggested as a function of the team's level of prior related knowledge. The discussion focuses on the team's absorptive capacity including, in particular, prior related knowledge and diversity of its background. In another word, research teams need to emphasize and more effectively exploit knowledge-based resources that already exist within the team

(Damodaran & Olphert, 2000; Davenport & Prusak, 1998) before exploiting the external knowledge.

What is Absorptive Capacity?

According to Cohen and Levinthal (1990), the firm's ability to absorb new knowledge and practices is largely dependent upon the prior related knowledge stock. Its absorptive capacity consists of its abilities "to recognize the value of new information, assimilate it, and apply it to commercial ends" or "to evaluate and utilize outside knowledge" (Cohen & Levinthal, 1990, p.128). As absorptive capacity is based on the firm's prior knowledge, it could be seen as an accumulated, knowledge-based asset stock. Our reconceptualization of this particular model focuses on the learning of external knowledge that allows the university to develop research domain with a highly diverse industry base. Learning tends to be a path-dependent activity in the sense that new knowledge acquisition is largely determined by the existing knowledge base, on both individual researcher as well as the entire research team. Accumulated prior knowledge enhances the ability to assimilate knowledge related to the existing knowledge base. In that sense, university that has a large knowledge base is well equipped to understand new scientific knowledge and its potential to embark on bigger research project. Similarly, it is argued that a university's diversity knowledge (or its familiarity with and prior knowledge of a highly diverse industry base) antecedes its ability to recognize the value of this

diversity knowledge, assimilate it, and apply it so that research development and research publication can be realized. This model suggests that team diversity influences a university research team's ability to develop absorptive capacity.

Components of Team Diversity

Scholars have studied diversity in terms of geographic markets, technology, culture, identity groups, functional expertise, educational level and industry tenure and experience (Hamilton, 2004; Chowdhury, 2005). Among the common themes that have received the most attention in the literature are international diversification, group dynamics and strategic decision-making (Hamilton, 2004). Nonetheless, the research from each of these streams tends to support the same conclusions which the team diversity tends to lead to increases in perspectives, cognitive resources, and problem solving approaches that improve decision-making and to problems with informal communication and social integration at the same time.

Team diversity is defined as "any attribute that people use to tell themselves that another person is different" (Jehn, 1999). The definition of demography is traditionally conceptualized in terms of visible differences in age, gender, and race. Individuals may also differ on less visible characteristics such as level of education, tenure with the company or functional background (William & O'Reilly, 1998; Jehn & Katerina, 2004). Decision-making researchers consider diversity as differences

in experience and knowledge (Tensaki & Boland, 1996). It is important to note that difference in group composition is an important issue in Information System research; some of which has focused on gender, age mix, or personality profiles (Pollock, 2009). Jehn (1999) categorized team diversity into three types, namely, informational diversity (ID), social category diversity (SD), and value diversity (VD). Informational diversity (ID) refers to the variation in knowledge base and perspective that members bring to the software team. Social diversity (SD) is the explicit difference among team members in social category membership, such as gender, age, and ethic. Value Diversity (VD) means that members differ in terms of what they think the real task, goal, target, or mission should be.

Nonaka and Takeuchi (1995) indicated that teams whose members had heterogeneous education backgrounds seemed to have better performance because the diversity of knowledge would facilitate information exchange and communication from different viewpoints. Tenkasi and Boland (1996) used the term "knowledge diversity" instead of informational diversity, and noted that the domain experts in a knowledge-intensive firm must develop their perspectives, understandings, and knowledge base separately. Only a few researchers have investigated how the minority status or diversity of team members relates to knowledge sharing. Ojha (2005) showed that team members who considered themselves a minority based on gender,

marital status, or education were less likely to share knowledge with team members. Sawng *et al.* (2006) found that R&D teams in large organizations with high female-male ratios were more likely to engage in knowledge sharing. In fact, there are a few studies showing the importance of heterogeneous team contributing to knowledge sharing (Phillips, Mannix, Neale & Gruenfeld, 2004; Thomas-Hunt, Ogden & Neale, 2003).

The Importance of Diversity Knowledge

According to resource-based theory, knowledge is strategically the most important resource of the firm. However, Cohen and Levinthal (1990) suggest that a firm's performance or ability to sustain a competitive advantage is not strictly based on its ability to obtain knowledge but a function of its prior possession of relevant knowledge. In other words, for a firm to fully capitalize on new knowledge, there must be some relatedness between the new knowledge it obtains and its existing knowledge stock.

Earlier in this paper, diversity knowledge is defined as a research team's familiarity with and prior knowledge of a highly diverse industry base. A reversal of the argument would suggest that research teams with a high level of diversified knowledge will have the appropriate contextual knowledge (i.e. familiarity) necessary to make the new knowledge acquired from such domains fully intelligible.

The Social Learning Theory proposed by Albert Bandura (1977) postulates that learning occurs within a social context, people learn by observing the actions of others within that context, and people learn most from those with whom they identify. The implication is that because the learning of staff in diversified research team has likely taken place within the social context of racial, ethnic, and cultural diversity, they should already possess diversity knowledge. Moreover, because they have learned from those with whom they identify (their own or other culturally diverse groups) they possess enough familiarity to render any new knowledge acquired from specific domains with a highly diverse industry base. Arguments also suggest that research team with a high level of diversity will have a knowledge base that is sufficiently adapted to the newly acquired knowledge from such domains, thereby facilitating the absorption process.

Thus, it is broadly agreed that a diverse work group that has diversified knowledge will generate a wider pool of ideas and identify non-traditional constructs that can lead to new knowledge (Ancona & Bresman, 2007; Cavarretta, 2008).

*Recognizing the Value of
Diversity Knowledge*

Research team's effectiveness can be measured through team performance. Some indicators could be based on acknowledgment and attribution of team leadership and the resulting publications. Other metrics could be the industry involvement and case studies. The team leader is expected to recognize the value of

diversity knowledge in order to seek ways to acquire it. Therefore, it is suggested that the research team work on an area the leader is responsible for but is expected to welcome contributions and insights from other team members. There is synergy between areas, and it is expected robust contribution both from within and across areas. Eventually, this will lead to many co-authored papers. New avenues for research will be explored based on existing overseas and local approaches.

Although a research team with a high level of team diversity is proposed by previous authors as being in a strategic position to take advantage of diversity knowledge, being a research team leader, he or she does not guarantee that diversity knowledge will be viewed as being valuable to the team. Indeed, recognizing the value of knowledge is not automatic but needs to be fostered to allow the absorption process to begin. Therefore, being a research team leader, he or she plays a key role in judging the potential and thus valuing of new knowledge as well as recognizing the value of diversity knowledge.

Assimilating Diversity Knowledge

Cohen and Levinthal (1990) proposed assimilation as the processes that allows firms to analyze, interpret and understand the knowledge obtained from external sources, and occurs as new knowledge is integrated into existing cognitive structures. Knowledge sharing is argued to be the fundamental activity that initiates knowledge assimilation within the firm. Knowledge is viewed as being a personal activity because it is embedded in individuals, and that knowledge assimilation via knowledge sharing is about making the embedded knowledge flow smoothly within the team. It has been noted that the personal nature of knowledge increases the need for motivation in sharing knowledge to facilitate the assimilation process. This motivation comes in the form of research team leader's ability and willingness to cultivate a climate that is conducive to knowledge sharing within the team.

As noted earlier, a climate conducive to knowledge sharing is necessary to initiate the assimilation process. In research team with diversity, it has been suggested that a positive climate (such as a high degree of tolerance towards mistake and acceptance of racial, ethnic and cultural differences) is conducive to knowledge sharing and thus to the knowledge assimilation process (Bock *et al*., 2005). However, motivation and commitment on the part of a team leader are necessary to create and sustain a positive diversity climate.

More importantly, research team members in this new area will be naïve, undergoing a steep learning curve, and exploring many wrong paths. Thus, it is important to have the freedom to move quickly as well as adopt and discard approaches rapidly. Learning progresses best by taking standpoints and testing ideas. In the initial stage, papers should be written only for compliance purposes and as an exercise. It is likely that many papers will later be contradicted as mistakes are

discovered. Later research will be built on the foundation of strong applied knowledge of theory. This research gets us to the leading edge with the tools and experiences required to structure approaches, assess significance, and understand external contributions. At this point, papers should be significant, ready for publishable in leading journals, and of interest to practitioners.

Forming research alliances will enhance the process of assimilating diversity knowledge. It is important to form alliances with complementary research groups that assist us in terms of process research, decision systems and the application domain (Gibson, 2005). Process systems tell us when to take an action or decision, what information exists at this point, and the information flow. It acts as the system integration. Decision support systems tell us how to make choices, apply rules, and negotiate optimal outcomes among independent agents within the context of process. Finally, application domain is to evaluate and exercise process and decision systems. New and existing knowledge is integrated and assimilated within the research team.

Despite the advantages mentioned above, there are multinational organizations and international subsidiaries involving employees with different national cultures and languages which can pose challenges for knowledge sharing (Ford & Chan, 2003; Minbaeva, 2007). Chow *et al.* (2000) discovered that the participants from the Chinese culture tended to share information for the good of the organization, even when sharing was potentially and personally disadvantageous. In addition, Chow *et al.* (2000) found that Chinese participants were less likely than American participants to share their own experience with someone considered as "out-group" members.

Applying Diversity Knowledge

Applying external knowledge has been described as a firm's ability to diffuse knowledge, integrate it with the firm's activities, and generate new knowledge from it. Within the research team context, the component of absorptive capacity is measured by team performance. The concept of "Inputs-Process-Outputs" to explore the key factors for group effectiveness was proposed by Gladstein (1984). More specifically, Henderson (1988) considered team performance by productive efficiency, effectiveness, and timeliness. Efficiency is the ratio of output to input, and effectiveness is the quality of work produced. In the context of project teams, efficiency is a subjective measure of team operations, and the team's adherence to allocated resources. Effectiveness is measured by the quality of work produced and the interaction with people outside the team. However, some researchers argue that it is inadequate to only use productivity to represent performance, especially in knowledge-driven processes (Nissen *et al.*, 2000). Therefore, a popular model for analysing group performance proposes three phases for measuring team performance, namely, input, group process, and output. The group input, process, output model has been the foundation in the study

of groups for forty years (McGrath, 1964, cited in Corey *et al*., 2010).

Group input factors include group size, group composition and the KSAs (knowledge, skills and ability) of the group members. These factors combine to influence the decision making process. Though group composition can incorporate many variables of interest, including diversity, but diversity has been operationalized as many characteristics in groups research. Variables have included heterogeneity of experience, heterogeneity of decision, and differences in gender, race and age.

A great deal of research exists has described the limits of group process and process losses (Health & Gonzalez, 1995; Nissen *et al*., 2000). Other researchers have suggested that group process leads to process gains (Bedard & Maroney, 2000). Lastly, Nidumolu (1995) argued that output performance should be observed in two key aspects, namely, process performance and product performance. Process performance is a performance metric for the software development process and can be described by the (1) learning that occurs during the course of the project, (2) the degree to which management controls the project, and (3) the quality of the interactions between the IS team and users during the development process. Product performance is a performance metric that captures the performance of the finished product and can be described by the (1) technical performance of the software, (2) the degree to which the software conforms to user needs, and (3) the degree to which the software is flexible in

supporting new products and changing user needs (Nidumolu, 1995; Na *et al*., 2004). In short, Process Performance (PP) measures how well the software development process was undertaken. Product performance (PO) measures the resulting product actually delivered by the project. These two key features of performance were incorporated into the current study.

In this study, Process Performance (PP) was examined through the formation of our research team. The team may consist of a research leader. Supporting this team are a few research assistants. This gives a total of ten people working on interlinked research. An alliance was established as a part of the Process Performance. The Process Performance includes the following: (1) learning that occurs during the process of the project, (2) the degree to which research leader manages the project, and (3) the quality of the interactions between the research team members. On the other hand, the Product Performance (PO) measures the output of the written papers outlining the strategic direction, research areas, and research synergy. The two outcomes (namely, PP and PO) which reflect diversity knowledge have been diffused and applied in many different industry domains.

Researchers are usually given vague encouragement to achieve something "significant" or have "high quality publications" without any precise explanation of what it means. Purdue University Computer Science Department (2009) has developed a guide to its junior researchers by proposing a few measures:

i. Journal paper approach – measures the total number of papers published. A researcher who generates a new idea writes a paper which is then reviewed by peers and eventually published in an archive journal. Thus, the number of papers is a measure of productivity.

ii. Rate of publication approach – measures the ratio of the total papers published to the time in which they were published. Paper count is insufficient because it does not measure productivity. Someone may take a lifetime to publish 10 papers whereas others may publish 10 papers in one year.

iii. Weighted publication approach – measures the sum of the weights assigned to published papers, because some papers represent more intellectual achievement than the others.

iv. Direct funding approach – measures the total amount of the grant funds acquired by a researcher.

v. Bottom line approach – measures the profit generated by patents or products that result from the research.

DISCUSSION AND FUTURE DIRECTIONS

The journey to becoming a university with strong research team is clearly not easy to achieve. This paper contributes to research team composition by increasing our conceptual understanding of how team diversity is incorporated with absorptive capacity to produce team effectiveness. In this study, the authors have presented a framework (Fig. 1) to exploring the relationship between team diversity with three dimensions of absorptive capacity. In addition, the three stages of absorptive capacity have also been differentiated while their respective relationships with team diversity have also been demonstrated. What is implied in the proposed model is that racially, ethnically, and culturally diverse staff have familiarity with and prior
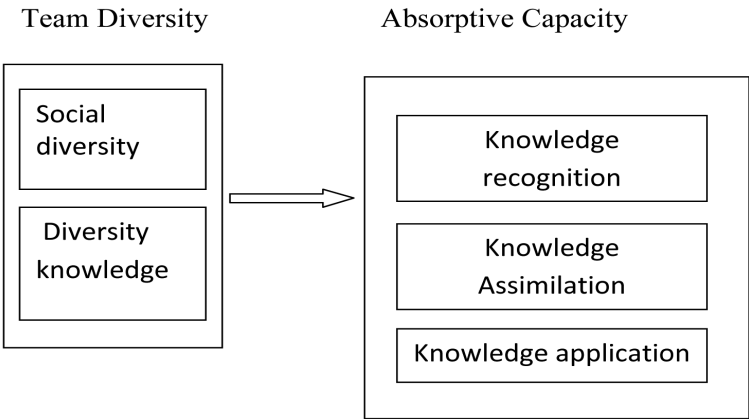
Fig. 1: A Conceptual Framework

knowledge of a highly diverse knowledge base. Thus, a question to be answered by future research is, 'What is percentage of a research's total team force that has to come from another country for it to be considered diversity?' An associated issue raised concerns over the proportion of these diverse groups that actually have familiarity with and prior knowledge of the industry domains with a highly diverse knowledge base. Hence, how are we going to measure knowledge diversity, whether it is large enough to affect the team's ability to assimilate and apply it to the extent suggested in the conceptual model proposed in this study?

The results of this discussion provide a direction for creating and managing diverse research teams to enhance team performance. Research leaders can enhance team performance by leveraging members' knowledge differences and managing diversified team carefully if the team members have very different values. This paper has apparently helped to promote a better understanding of absorptive capacity and to delineate the critical importance of team diversity for research team success.

REFERENCES

Ancona, D. G., & Bresman, H. (2007). *X-teams: how to build teams that lead, innovate, and succeed*. Boston, Mass.: Harvard Business School Press.

Bandura, A. (1977). *Social Learning Theory*. New York: General Learning Press.

Bedard, J. C., & Maroney, J. J. (2000). *When are two auditors better than one? Group decision making in auditing*. Retrieved May 5, 2010 from

http://www.luca.com/cpajournal/2000/0200/d56200.html

Bock, G. W., Zmud, R. W., Kim, Y. G., & Lee, J. N. (2005). "Behavioral intention formation in knowledge sharing: examining the roles of extrinsic motivators, social –psychological forces, and organizational climate". *MIS Quarterly, 29*(1), 87-111.

Cavarretta, F. (2008). Linking team diversity to extreme team performance. *INSEAD*.

Chow, C. W., Deng, F. J., & Ho, J. L. (2000). The openness of knowledge sharing within organizations: A comparative study of the United States and the People's Republic of China. *Journal of Management Accounting Research, 12*, 65−95.

Chowdhury, S. (2005). Demography diversity for building an effective entrepreneurial team: is it important? *Journal of Business Venturing*, *20*, 727-746.

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, *35*(1), 128-152.

Corey, M. S., Corey, G., Corey, C., & Brooks/Cole Publishing Company. (2010). *Groups : process and practice* (8th ed.). Belmont, Calif.: Brooks/Cole.

Cummings, J. N. (2004). Work Groups, Structural Diversity, and Knowledge Sharing in a Global Organization. *Management Science, 50*(3), 352-364.

Damodaran, L., & Olphert, W. (2000). Barriers and facilitators to the use of knowledge management systems. *Behavior & Information Technology, 19*(6), 405-413.

Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*. Boston, MA: Harvard Business School Press.

Ford, D. P., & Chan, Y. E. (2003). Knowledge sharing in a multi-cultural setting: A case study. *Knowledge Management Research & Practice, 1*(1), 11−27.

Gladstein, D. L. (1984). Groups in context: a model of task group effectiveness. In M. S. Corey, G. Corey, & C. Corey (Eds.), *Groups: Process and Practice* (pp. 56-57). Brooks/Cole Cengage Learning, Inc.

Gibson, J. (2005). A research strategy for investigating business process management approaches. *AJIS, 13*(1), 45-57.

Hamilton, M. A. (2004). *The performance of difference: mobilizing heterogeneous knowledge* (Report No.2004/2005 No.11). College of Business Administration, University of Rhode Island.

Heath, C., & Gonzalez, R. (1995). Interaction with Others Increases Decision Confidence but Not Decision Quality: Evidence against Information Collection Views of Interactive Decision Making. *Organizational Behavior and Human Decision Processes, 61*(3), 305-326.

Henderson, J. C. (1988). Involvement as a predictor of performance in US planning and design. In M. S. Corey, G. Corey, & C. Corey (Eds.), *Groups: Process and Practice* (pp. 77-78). Brooks/Cole Cengage Learning, Inc.

Jehn, K. A. (1999). Why differences make a difference: a field study of diversity, conflict, and performance in workgroups. *Administrative Science Quality, 44*(4), 741-63.

Jehn, K. A., & Katerina, B. (2004). A field study of group diversity, workgroup context, and performance. *Journal of Organizational Behavior, 25*(6), 703-29.

Lane, P., Stalk, J., & Lyles, M. (2001). Absorptive capacity, learning and performance in international joint ventures. *Strategic Management Journal, 22*(12), 1139-1162.

McGrath, J. E. (1964). *Social psychology, a brief introduction*. New York,: Holt.

Minbaeva, D. (2007). Knowledge transfer in multinational corporations. *Management International Review, 47*(4), 567−593.

Na, K., Li, X., Simpson, J. T., & Kim, K. (2004). Uncertainty profile and software project performance: a cross-national comparison. *Journal of Systems and Software, 70*, 155–163.

Nidumolu, S. R. (1995). The effect of coordination and uncertainty on software project performance: residual performance risk as an intervening variable. *Information System Research, 6*(3), 191-219.

Nissen, M. E., Kamel, M. N., & Sengupta, K. C. (2000). Integrated Analysis and Design of Knowledge Systems and Processes. *Information Resources Management Journal, 13*(1), 24-43.

Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company*. New York: Rinehart and Winston.

Ojha, A. K. (2005). Impact of team demography on knowledge sharing in software project teams. *South Asian Journal of Management, 12*(3), 67−78.

Phillips, K. W., Mannix, E. A., Neale, M. A., & Gruenfeld, D. H. (2004). Diverse groups and information sharing: The effects of congruent ties. *Journal of Experimental Social Psychology, 40*(4), 497-510.

Pollock, M. (2009). Investigating the relationship between team role diversity and team performance in information systems teams. *Journal of Information Technology Management, 20*(1), 42-54.

Purdue University Computer Science Department. (2009). Retrieved June, 15, 2009, from http://www.cs.purdue.edu/homes/comer/essay.research.measure.html.

Sawng, Y. W., Kim, S. H., & Han, H. S. (2006). R&D group characteristics and knowledge management activities: A comparison between ventures and large firms. *International of technology Management, 35*(1-4), 241-261.

Tenkasi, R. V., & Boland, R. J. (1996). Exploring knowledge diversity as a basis for integration in knowledge intensive firms: a new role for information technology. *Journal of Organizational Change Management, 9*(1), 79-91.

Thomas-Hunt, M. C., Ogden, T. Y., & Neale, M. A. (2003). Who's really sharing? Effects of social and expert status on knowledge exchange within groups. *Management Science, 49*(4), 464-477.

Williams, K. Y., & O'Reilly, C. A. (1998). Demography and diversity in organizations: a review of 40 years of research. *Research in Organizational Behaviour, 20*, 77-140.

PERTANIKA
JOURNALS

The Relationship between Parenting Style and Social Responsibility of Adolescents in Banda Aceh, Indonesia

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ABSTRACT

Theory and research have shown that parents have significant influence on their children's social outcome. The present study was therefore conducted to determine the relationship between parenting style and social responsibility of adolescents residing in Banda Aceh, Indonesia. A total of 331 (male =119, female 212) students from four high schools in Banda Aceh were selected using Multistage Cluster sampling. The Indonesian version of Parental Authority Questionnaire (PAQ) and Social and Personal Responsibility Scale (SPRS) were used to measure parenting style and social responsibility, respectively. Findings showed that authoritarian and permissive parenting styles as significantly associated with improved adolescents' social responsibility. Surprisingly, the study revealed no significant correlation between authoritative parenting style and adolescents' social responsibility. The male adolescents in the study appeared to be more socially responsible than their female counterparts. Inconsistent with the other studies, the current study noted that non-authoritative parenting is positively related to adolescents' social responsibility. Additionally, there may be variation in social responsibility by gender. The implication is discussed.

Keywords: Adolescent, gender, parenting style, social responsibility, Aceh

INTRODUCTION

Much of the recent trends in the literature have reflected growing interest in studying social skills of adolescents. However, a majority of the studies focused mainly on adolescents' interpersonal relationship with peers (e.g. Daniels & Leaper, 2006;

Ciarrochi & Heaven, 2008; Erath, Flanagan, & Bierman, 2008; Barker, 2009; Jonkmann, Trautwein, & Lüdtke, 2009). There is paucity in the literature that examines adolescents' social adjustment in a wider context, such as in a community. Thus, studying adolescents' social skills within the community is considerably important, since this is the period of time when they begin to interact with the larger social context outside family and peers.

Social responsibility is one social skill that helps adolescents to define who they are and their roles as a part of a community member (Berman, 1990). It is defined as a person's concern for others' welfare, sense of duty, avoids destructive behaviour, civic involvement, and responsible attitude towards others (Scales, Blyth, Berkas & Kielsmeier, 2000). In other words, social responsibility is related to the development of adolescents' basic social skills, while allowing them to be active and responsible in their community. Adolescents who are socially responsible are less likely to be involved in a destructive behaviour (Youniss, McLellan & Yates, 1997). Further, previous studies (see for example, Scales *et al.*, 2000; Reed, Jernstedt, Hawley, Reber & DuBois, 2005) have documented that social responsibility is positively associated with adolescents' self-efficacy and self-regulation. Adolescents who are socially responsible are also more likely to have higher achievement orientation than others who do not (Wentzel, 1991; Nakamura & Watanabe, 2001). This is because social responsibility relates to a variety of positive outcomes, and it is important to illuminate the factors under which social responsibility develops. The overarching aim of this study, then, was to focus on how parenting style contributes to social responsibility among school-going adolescents in Aceh, Indonesia.

The Role of Social Responsibility on Adolescent Development

The major task of adolescent is to attain stable identity and to become productive adult (Santrock, 2008). Social responsibility is a vital skill for adolescents in achieving this task. It may help adolescents to define who they are, where they fit in the social world, and build confidence in their sense of agency (Berman, 1990; Youniss *et al.*, 1997). In addition, social responsibility will prevent adolescents from involving themselves in negative behaviour because it allows them to discover their potential, responsibility and commit to moral-ethical ideology (Youniss *et al.,* 1997). Social responsibility also enables adolescents to have a high achievement orientation (Nakamura & Watanabe, 2006). Some previous studies (Wentzel, 1991; Scales *et al.*, 2000; Reed *et al.*, 2005) have shown that social responsibility is positively associated with adolescent's academic achievement.

Adolescent Social Responsibility in the Context of Aceh

Aceh is one of the provinces in Indonesia, and it is located in the northern most top of Sumatera Island and has Banda Aceh as the capital city. Aceh was formerly known

as "Veranda of Mecca" to reflect it as the starting and last point of departure for Muslim going for pilgrimage (*hajj*). Hence, the culture of Aceh is mostly influenced by the Islamic values. The people of Aceh have suffered for 29 years of armed conflicts and political violence. In December 2004, a massive earthquake and tsunami devastated the western coast of Aceh, including parts of the capital city of Banda Aceh, whereby about 150,000 people died and a half million relocated in a province with a population of roughly 4.4 million people (Grayman, Good & Good, 2009). The incredible lost sustained by this natural disaster finally consolidated the peace agreement in Aceh.

The effects of tsunami and conflict have made deteriorating social and economic conditions and subsequently generated increasing social problems in Aceh. Based on the data by the National Narcotics Agency of Aceh province (Badan Narkotika Propinsi Aceh), the cases of drug abuse in Aceh, especially Banda Aceh, increased about 52 percent from a year before, i.e. from 913 cases to 1,371 cases (Badan Narkotika Nasional/ National Narcotics Agency, 2009). Furthermore, the cases of HIV/AIDS in Aceh also increase from year to year. The data also showed that there were only two cases in 2005, which then rose to 19 in 2007 and 40 in 2009 (Departemen Kesehatan RI/ Ministry of Health of Indonesia, 2009). Consequently, these harmful environments make young people in Aceh to become potentially more engaged in health problems and deviance behaviour.

Engaging adolescents in a community is one way to avoid adolescents from being involved in negative behaviour (Youniss *et al.*, 1997). This community engagement will enhance adolescents' sense of responsibility and productivity, which can be nurtured to replace destructive ways and increase awareness about negative consequences of misbehaviour. Adolescents' ideas and participations in community activities also play significant roles in the process of enhancing community empowerment. As discussed previously, social responsibility is one social skill that is relevant to promote adolescent's awareness about community issues. Therefore, concern for social responsibility amongst adolescents in Aceh is obviously important as their voices and community participations could be helpful in reducing the spread of social ill in Aceh, as well as the community rebuilding process of Aceh.

Parents as a Key Agent of Adolescent's Social Responsibility Development

Empathy, altruism, guilt, and resistance to temptation are relevant constructs for social responsibility development. These constructs develop from earlier age as a result of parent–child relationship. Hence, parent-child interaction is thought to be the well springs of social responsibility. Basically, responsibility is related to internalization and self-regulation. Child's compliance to parental demands is early manifestation of internalization [i.e., a gradual shift from other (parent) to self (child) behaviour regulation]. Internalization of values on

child is made from consistent demands through parents' use of inductive reasoning and moderate power assertion. Meanwhile, self-regulation arises mainly from parental warmth and responsiveness (Hurtup & Van Lieshout, 1995). Parents' use of consistent demands and warmth are significantly associated with the higher score on child social responsibility (Baumrind, 1971).

Parental influence on child's social responsibility development does not decline as children mature into adolescence (Gunnoe, Hetherington, & Reiss, 1999; Carlo, McGinley, Heyes, Batenhorst, & Wilkonson, 2007). Yet, at this time, parents have primary role in helping adolescents to form their views of others and their responsibilities to the society. Parents and other family members are important in helping adolescents to understand the elements of the social construct, especially on how they view the world and others in it. When adolescents are respected by parents and feel that their voice is taken seriously, their perspective-taking ability is broadened and they begin to realize that they have something of worth to add not only to family discussion, but to the society as well (Wray & Flanagen, 2007).

Parenting Styles and Adolescent Social Responsibility

Early study on parenting typology was examined by Diana Baumrind. She was the first to study the relationship between parenting style and child outcomes. Baumrind (1966) classified parenting behaviour into three typologies, namely, authoritative, authoritarian and permissive, based on two orthogonal factors known as responsiveness and demandingness. Responsiveness refers to the extent to which parents foster children's individuality and self-assertion by being attuned, supportive, and acquiescent to children's requests with warmth, autonomy support, and reasoned communication. Demandingness refers to the claims parents make on children to become integrated into society by behaviour regulation, direct confrontation, as well as maturity demands (behavioural control) and supervision of children's activities or monitoring (Baumrind, 1967; 1997).

Parents who are classified as parenting in authoritative style are highly responsive and demanding, but low in intrusive. These parents provide clear and firm direction toward children, but it is moderated by warmth, flexibility and verbal take and give. In addition, they encourage communication with their children and validate the child's point of view. In contrast, authoritarian parents are highly demanding and unresponsive. Authoritarian parents tend to value unquestioning obedience, discourage verbal take and give, and use punitive to direct the children misbehaviour. Permissive parents are characterized by high responsiveness but low demandingness. These parents are emotionally involved toward their children, but they allow the children to regulate their own activities as much as possible, with no control and they rarely use punishment (Baumrind 1966; 1967).

Existing literature has documented that authoritative parenting style is significantly associated with positive developmental outcomes among children (Belsky, 1984; Baumrind, 1991). This parenting style has been linked to adolescent social responsibility as well. The interaction between parents' demand and nurturance promotes the attributes of social responsibility. In more specific, parents' use of consistent demands with verbal reasoning and explanation promotes high level of their children's moral reasoning and internalization of values, whereas parental warmth motivates them to comply and self-regulate (Durkin, 1995; Carlo *et al.*, 2007). In addition, authoritative parents have an open communication with their children, in which parents listening to the children's point of view, as well as expressing their own make their children to feel competence and have high self-confidence (Maccoby & Martin, 1983). Meanwhile, higher level of self-competence, self-regulation, empathy, and internalization of values promotes higher level of a child's social responsibility (Scales *et al.*, 2000; Conrad & Hedin, 1981).

Nonetheless, authoritarian parents do not significantly predict a child's social development. Higher level of parents' assertions and value unquestioning obedience affects negatively on their children's self-confidence and self-reliance. Consequently, children have negative perception towards themselves academically and socially but they are more obedient and conformity toward others. On the other hand, permissive parents who allow their children to regulate their own activities promote help their children to have high self-confidence, focus on their friends and social activities. However, they are also more likely to have problems in self-perception, academic competence, impulsive and misbehaviour as impacts of lack parental supervision (Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Blatt-Eisengart, & Cauffmann, 2006). Maccoby and Martin (1983) stated that permissive pattern of parenting on the whole has more negative than positive effects on their child behaviour.

Although the literature reviewed above provides support for the notion of the significant relationship between parenting style and adolescent social responsibility, the studies mainly focused on Western families. On the contrary, there is a glaring absence of literature on the relationship between parenting style and adolescent social responsibility in Asian societies, such as Aceh, where parental roles and parent-child relationships differ from those in the Western context. Therefore, the goal of the current study was to fill this gap in the literature.

Gender Differences in Social Responsibility

There is evidence indicating that females tend to exhibit greater level of social responsible behaviour as compared to their male counterpart (Entwisle, Alexander, Cadigan, & Pallas, 2000; Scales *et al.*, 2000; Nakamura & Watanabe, 2006; Maliki, Asain, & Kebbi, 2010). An understanding

of these findings may be obtained from a consideration of socialization and gender roles differences between the males and females. Females are socialized to be more interdependent, nurturing, compassionate, and helpful in care giving roles whereas males are socialized to be more independent and competitive. Therefore, because females are socialized to value the needs of others, they tend to exhibit more helping behaviour and pro-social compared to males. In contrast, a meta analysis study conducted by Eagly and Crowley (1986) revealed that men are more likely to help others compared to females. According to Lin and Hyde (2001), this inconsistency in the finding may be explained by the fact that psychosocial differences among males and females are heterogeneous and interact with situational and cultural factors.

Summary of the Hypotheses

The purpose of the study was to investigate the association between parenting style and adolescent social responsibility. It was hypothesized that: (1) adolescents who reported their parents as authoritative would score high in social responsibility, while adolescents who reported their parents as authoritarian and permissive would score low in social responsibility, and (2) there is a significant difference in the social responsibility between the female and male adolescents.

METHODS

Research Design

The current study utilized the descriptive and correlational designs. A descriptive design enables researchers to provide explanation for a phenomenon at the time of the study. In this study, personal and family characteristics of the respondents were reported. Meanwhile, the correlational design facilitates the determination of the relationship between parenting style and adolescents' social responsibility. Through this correlational design, both the direction and the strength of the association between the variables studied could be identified (Howitt & Cramer, 2008).

Sample

A total of 331 adolescents from two-parent families and four high schools in two districts (namely, Kuta Alam and Syiah Kuala) of Banda Aceh were identified using Multi-Stage Cluster sampling. The schools are Sekolah Menengah Pertama (SMP) 8, and Sekolah Menengah Atas (SMA) Lab School in Syiah Kuala, and Madrasah Tsanawiyah Negeri (MTSN) 1, and Madrasah Aliyah Negeri (MAN) 1 in Kuta Alam (SMP and MTSN are junior high school; SMA and MAN are senior high school). Each school consists of three grades (first, second and third grades), in which every grade consists of some classes. From each grade, a class was randomly selected and all the students from these selected classes were invited to participate in the study.

Instruments

This study used two instruments comprising Parental Authority Questionnaire (Buri, 1991) and Social and Personal Responsibility Scale (Conrad & Hedin, 1981), in which the scales were adopted from the Western instruments. Thus, the instruments were translated from English to Indonesian and then retranslated into English. This forward-backward translation procedure is essential in order to establish that the items in the scales are as adequately reliable for the new respondents in Aceh. Before collecting the actual data, all the scales were tested in a pilot study to examine their reliability and validity. The scales were pretested on 96 students who fit with the characteristics of the population. The questionnaire consisted of general demographics, parenting style, and social responsibility scales. Demographic information included sex, age, number of siblings, parents' age, parents' total years of education, and family income (per month).

Parenting Style

Parental Authority Questionnaire (Buri, 1991) was used to assess parenting style. The scale consists of 30 items for each parent in which authoritative, authoritarian and permissive scores were yielded for both the mother and the father. The Parental Authority Questionnaire (PAQ) is rated on a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The scale is scored by summing the individual items to compare subscale scores. The scores on each subscale range from 10 to 50. The highest score on one of the subscales indicates the parents' parenting style. Table 1 presents the sample items of the scale and their reliability in this present study.

As shown in Table 1, the PAQ has acceptable level of internal consistency (i.e. more than 0.5, as suggested by Kerlinger & Lee, 2000). In more specific, the subscales within the Parental Authority Questionnaire

TABLE 1
Sample Items and Reliability of Parental Authority Questionnaire

Scale	Sample Item	Reliability			
		Pilot Study (N=96)		Actual Study (N=331)	
		Mother	Father	Mother	Father
Authoritative Style	As I was growing up, one family policy was established; my parent discussed the reasoning behind the policy with the children in the family.	.53	.66	.66.	.71
Authoritarian Style	As I was growing up, my parent would get very upset if I tried to disagree with them.	.55	.60	.65	.63
Permissive Style	As I was growing up, my parent seldom gave me expectations and guidelines for my behaviour.	.59	.59	.69	.68

showed varying degrees of reliability ranging from .53 to .66 in the pilot study and from .63 to .71 in the actual study.

Social and Personal Responsibility Scale

Social and Personal Responsibility Scale is used to measure social responsibility (Conrad & Hedin, 1981). The original version of the Social and Personal Responsibility Scale (SPRS) consists of 21 items with two side of responses (i.e. on the left and the right sides; e.g. Almost always true for me/Sometimes true for me "Some teenagers are good at helping people - BUT- Other teenagers don't see helping others as one of their strong points" Sometimes true for me/Almost true for me) per item. First, students ask to decide which side of the responses mostly describe them before giving any answer. Based on the pilot test, this format caused confusion among some students when giving their responses. Therefore, the researchers reworded and reformatted the scale into a five-point Likert scale that ranged from 1 ("strongly disagree") to 5 ("strongly agree"). The total score was derived by summing up all item scores after reverse coding negative items. A higher total score indicate higher level of social responsibility. The sample items of the scale and its reliability are presented in Table 2 below.

Data Collection

Permission to collect data from each school was sought from the respective school principals prior to distribution of the study's questionnaires. The questionnaires were given to the respondents during the class hour. The researcher initially read and explained the instructions on how to fill in and answer the questionnaire to the respondents. The respondents then individually answered the questionnaire consisting of personal and family characteristics and their related scales (Parental Authority Questionnaire and Social and Personal Responsibility Scale). Based on the data gathered, the scores for each scale were summed up.

TABLE 2
Sample items and reliability of social and personal responsibility scale

Sample Items	Reliability	
	Pilot Study (N=96)	Actual Study (N=331)
I am like some teenagers who feel bad when they let down people who depend on them.		
I am like some teenagers who think people should only help those they know like close friends and relatives.	.62	.77
I am like some teenagers who are good at helping people.		
I am like some teenagers who are interested in doing something about school problems.		

Data Analysis

Data collected were analyzed using the SPSS. Descriptive statistics were also utilized to describe the respondents' background information (e.g. personal and family characteristics). Descriptive results were reported in percentages, measures of central tendency (mean and median), as well as measures of central of dispersion (standard deviation and range). Meanwhile, correlational analysis was used to analyze the relationship between parenting style and adolescent social responsibility. Finally, independent sample t-test was carried out to analyze gender differences for the social responsibility among male and female adolescents.

RESULTS

Description of the Respondents' Demographic Characteristics

A majority of the respondents are females (64%) from junior high school (55%). More than half of them were in their middle adolescence (Mean=14.07 and SD=1.77). As for the family size, most of the respondents (73.1 %) come from a moderate family size comprising of 3 to 5 siblings and with a mean value of 2.27 (SD =1.38) (see Table 3).

Further, as presented in Table 4, nearly half of the respondents had parents who were in the middle age group (M$_{mother}$=42.66 and SD=5.13; Mean$_{father}$=48.35 and SD=5.73). Most of the respondents' parents seemed to be well-educated. On average, both parents had achieved at least 14 years of formal education. In terms of family income, majority (69.2%) of the respondents' families had income that ranged between USD 277 and below, followed by USD 277.01 – USD 498 per month (USD 1= Rp.9050). These data indicate that more than half of the respondents come from the low to middle income families, as the standard minimum for living cost is USD 111 per month (PT. Post Indonesia, 2008).

TABLE 3
Personal Profiles of the Respondents

Variable	n	%
Sex		
Male	119	36
Female	212	64
School Level		
Junior High School	182	55
Senior High School	149	45
Age		
12 and below	83	25.1
13-15	171	51.7
16 and above	77	23.3
Mean	14.07	
SD	1.77	
Min	11	
Max	18	
Number of Siblings		
2 and below	63	19
3-5	242	73.1
6 and above	26	7.9
Mean	2.27	
SD	1.38	
Min	1	
Max	8	

Note. SD = Standard Deviation

Parenting Style and Social Responsibility

The relationship between parenting style and social responsibility was explored using the Pearson's product moment correlation. The result showed that authoritarian (r_{mother}=.19, p<0.01 and r_{father}=.20, p<0.01) and permissive (r_{mother}=.36, p<0.01 and r_{father}=.33, p<0.01) parenting styles were significantly associated with adolescent's social responsibility (*see* Table 5). As opposed to the hypotheses, the correlation coefficients indicated that there were positive relationships between authoritarian and permissive parenting styles with adolescent's social responsibility. This also means that the authoritarian and permissive parenting styles promoted adolescents toward social responsible behaviour. However, no significant relationship was found between authoritative parenting style and adolescent's social responsibility.

TABLE 4
Family Profiles of the Respondents

Variable	n	%
Parents' Age		
Mother		
31-37	48	14.5
38-44	158	47.7
45-51	113	34.1
52-58	12	3.6
Mean	42.66	
SD	5.13	
Min	31	
Max	58	
Father		
36-42	54	16.3
43-49	143	43.2
50-56	102	30.8

Table 4 (*continued*)

57-64	32	9.7
Mean	48.35	
SD	5.73	
Min	36	
Max	64	
Parents' Education		
Mother		
No Education	1	3
SD (Primary School)	16	4.8
SMP (Junior High School)	22	6.6
SMA (Senior High School)	106	32
Diploma	45	13.6
S1 (Bachelor)	116	35
S2 (Master)	24	7.3
S3 (PhD)	1	3
Father		
No Education	-	-
SD (Primary School)	17	5.1
SMP (Junior High School)	23	6.9
SMA (Senior High School)	93	28.1
Diploma	23	6.9
S1 (Bachelor)	105	31.7
S2 (Master)	24	7.3
S3 (PhD)	21	6.3
Parents' Total Years of Education		
Mother		
6 and below	17	5.1
7-12	128	38.7
13-18	164	49.5
19 and above	22	6.6
Mean	14.09	
SD	3.48	
Min	0	
Max	24	
Father		
6 and below	17	5.1
7-12	117	35.3
13-18	138	41.7
19 and above	59	17.8

Table 4 (*continued*)

Mean	14.94	
SD	4.19	
Min	6	
Max	29	
Family Income (USD)*		
<USD 277	132	39.9
USD 277,01- USD 498	97	29.3
>USD 498	102	30.8

Note. SD = Standard Deviation
USD1=Rp.9050

TABLE 5
Correlation between Parenting Style and Social Responsibility

Variables	r	p
Mother Authoritative (n=311)	.01	.95
Mother Authoritarian (n=318)	.19**	.00
Mother Permissive (n=320)	.37**	.00
Father Authoritative (n=317)	-.04	.48
Father Authoritarian (n=316)	.20**	.00
Father Permissive (n=317)	.33**	.00

**p<0.01

Gender Differences for Social Responsibility

The mean difference of the respondents' social responsibility was assessed via *t*-test. The mean score of the social responsibility for males (*M*= 68.15) was found to be higher than that of the females (*M*=66.86), as shown in Table 6. The finding indicated that there was a significant difference in the social responsibility among male and female adolescents [t (320) =2.24, *p*<.05].

TABLE 6
T-test of Social Responsibility by Gender Status

	Mean	t(df)	Sig.
Social Responsibility		2.24(320)	.03*
Male	68.15		
Female	66.86		

*p<.05

DISCUSSIONS

The main purpose of this study was to examine whether there was any significant relationship between parenting style and adolescent social responsibility. In addition, this study also sought to explore if there was any significant difference between the male and female adolescents in relation to social responsibility. In this study, authoritative parenting style was shown to be unrelated to the social responsibility of adolescents. Meanwhile, authoritarian and permissive parenting styles were found to be correlated with improved adolescent social responsibility. The first hypothesis, which predicted a positive relationship between authoritative parenting style and adolescent social responsibility, was therefore rejected. This finding is incongruent with the finding obtained by several prior studies (e.g. Baumrind, 1971; Gunnoe *et al.*, 1999; Carlo *et al.*, 2007; Maccoby & Martin, 1983; Steinberg, Lamborn, Darling, Mounts & Dornbusch, 1994; Kaufmann, Gesten, Santa Lucia, Salcedo, Rendina-Gobioff, & Gadd, 2000; Spera, 2005) who found authoritative style as an optimal approach in promoting child competencies. However, this result is rather consistent with the studies

conducted in other cultures which revealed authoritarian and permissive parenting styles as conducive for adolescent's adjustment.

The significant relationship found between the authoritarian parenting style and adolescents' behaviour corresponded to the findings from prior works conducted in China and the Arab societies. These studies revealed that authoritarian parenting is positively related to adolescents' positive outcomes, such as academic achievement, mental health and self-esteem (Chao, 1994, 2001; Dwairy, Achoui, Abouserie, & Farah, 2006; Rudy & Grusec, 2006). On the contrary, authoritarian parenting was found to have negatively contributed to adolescents' well-being in the Western population (Lamborn *et al*., 1991; Steinberg *et al*., 2006). Meanwhile, a cross-cultural perspective on child socialization goals was considered for the inconsistency in this finding.

In the individualist culture, the people are expected to make their own wishes known and work to satisfy their own needs, thus parents in this group promote children's assertion of their will and more autonomy. Hence, in promoting social competence of the child, individualist parents would use authoritative techniques to internalize the values on their children. In contrast, individuals in the collectivist culture emphasize on self-restrain in which their goals and needs are viewed as subordinate to the goals and needs of the in-group. Therefore, parents tend to promote interdependence than autonomy. Both the cooperation and interdependence

environments motivate the children to be involved with and meet others' needs that will lead their sense of self-worth and promote social responsibility (Rudy, Grusec, & Wolfe, 1999).

Moreover, authoritarian parenting in collectivist is normative whereas authoritarian parenting in individualist culture means it is against the culture's norms because self autonomy and self-reliance are the focuses of socialization in this particular culture. Children also interpret the meaning of the authoritarian style on the basis of what is normative. When children accept parental control as normal, they do not feel rejected by their parents. Parental acceptance promote child's well-being and in turn, it is positively associated with child competencies (Rudy *et al*., 1999; Rudy & Grusec, 2006). Therefore, authoritarian parenting in the collective culture is not considered as harmful to child's adjustment.

Meanwhile, the salutary effect of the permissive parenting style on adolescent social responsibility is supported by other studies conducted in Asian and South European countries. In particular, these studies found that adolescents who were raised by permissive parents had higher levels of self-reliance, self-esteem and coping skills (Steinberg *et al*., 1994; Wolfrad, Hempel, & Miles, 2003; Martinez & Garcia, 2007; Garcia & Gracia, 2009). These findings are in line with the argument stated by Lamborn *et al.* (1991) and Steinberg *et al*. (2006), in which adolescents with permissive parents showed high self-reliance, focused on their friends and were active in social

activities, but they also showed higher levels of substance abuse and school problems at the same time. These simply suggest that permissive parenting may promote child's social skills and at the same time contributes to the child's misbehaviour and lack of school achievement.

Permissive parenting style is characterized with a high level of parental warmth and low parental control. Higher level of parental warmth, which is characterized with parental emotional involvement and reasoning practice, may help the child in internalizing the values (Martinez & Garcia, 2008). Responsibility is related to internalization, and thus, it may positively be associated with social responsibility.

The cultural context is another plausible reason why permissive parents may promote adolescent social responsibility. In the Aceh culture, people in the community have the responsibility to educate the children to become competent adults. In other words, child socialization process is not only held by the parents, but by the society as well. In particular, the society has the responsibility to control the children's misbehaviour in keeping moral/custom values (Badruzzaman, 2006). Therefore, parental control is replaced by the society, in which the children learn about the rules and how they should act from the society and subsequently avoid them from engaging in negative behaviour.

Further analysis found that the level of social responsibility differed between the male and female adolescents in this study.

Hence, the second hypothesis of the study was accepted. This finding reflected the existing gender differences in social setting. In more specific, the male adolescents scored highly on the social responsibility, illustrating that the male adolescents in Banda Aceh feel more responsible toward the issues in their community as compared to their female counterpart.

LIMITATIONS AND FUTURE DIRECTION

It is important to note that this study has some limitations. First, the population of the study merely included the school-going adolescents in Banda Aceh, and this further implied that the finding of this study could only be generalized in this particular population. Moreover, the data for this study were gathered using self-administered questionnaire, in which reliability and validity of the information obtained dependent solely upon the honesty of the respondents in responding to the questionnaire. Self-bias might have influenced the accuracy of the information given by the respondents. Thus, the authors suggest that further investigation be done using a mixed method approach as doing so could probably help provide a better understanding of the causal relationship between parenting style and adolescent social responsibility.

In addition, all the measures were self-report questionnaires which were based on the perspective of the adolescents only, and thus, objective validation of these measures through other data sources was not obtained.

Future research therefore needs to involve both parents' and adolescents' perceptions in completing the parenting style measurement. Moreover, it would be interesting to compare the parents' perspective and adolescents' perceptions. Finally, this study did not explore the difference between the combinations of maternal and paternal parenting styles which are related to adolescent social responsibility. Thus, it is important for future studies to examine the combinations of both the maternal and paternal parenting styles in relation to adolescent social responsibility. Future research may also divide the parenting style into specific dimensions such as warmth and support, reasoning, physical coercion, verbal hostility, and indulgence. Using the specific dimension of the parenting style enables an examination of how specific parenting behaviour would influence the social development of adolescents.

CONCLUSION

In line with the literature, the findings from the present study have supported the idea that parents are still a significant agent of social adjustment for adolescents. The study also noted that parenting behaviour and child outcome might also be influenced by cultural values. It has shown that the authoritarian parenting in the culture of Aceh is not considered as harmful to the development of their adolescents' social responsibility. Further, the present study also suggests that a particular parenting dimension, i.e. parental warmth, has favourable effects in the realm of the social responsibility

development of the adolescents. Thus, the findings from this study would increase parents' awareness towards the importance of their involvement in enhancing their adolescents' social responsibility skills and subsequently making adaptation to improve the quality of their parenting approach. With this information, practitioners or psychologists alike may better understand that the role of parenting on a child's outcomes is contextually based and that such an understanding will encourage them to be sensitive to contextual factors (i.e. cultural values) when clinically working with parents and in assisting children.

REFERENCES

Badan Narkotika Nasional/National Narcotics Agency. (2009). *Data kasus tindak pidana Narkoba*. Retrieved on July 1, 2010 from http://www.bnn.go.id.

Badruzzaman, I. (2006). *Anak dalam adat Aceh*. Retrieved on June 12, 2009, from http://www.acehinstitute.org/opini_opini_badruzzaman_anak_dlm_adat_aceh.html.

Barker, V. (2009). Older adolescents' motivations for social network site use: The influence of gender, group identity, and collective self esteem. *Cyber Psychology and Behavior*, *12*(2), 209-213.

Baumrind, D. (1997). The discipline encounter: Contemporary issues. *Aggression and Violent Behavior, 2*(4), 321-335.

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence, 11*(1)*, 56-95.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph , 4*(1), 1-103.

Baumrind, D. (1967). Child care practice anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, *75*(1), 43-88.

Baumrind, D. (1966). Effect of authoritative parental control on child behavior. *Child Developmental Psychology, 37*(4), 887-907.

Belsky, J. (1984). The determinants of parenting: A process model. *Child Development , 55*(1), 83-96.

Berman, S. (1990). Educating for social responsibility. *Educational Leadership*.

Buri, J. R. (1991). Parental authority questionnaire. *Journal of Personality Assessment, 57,* 110-119.

Carlo, G., McGinley, M., Heyes, R., Batenhorst, C., & Wilkonson, J. (2007). Parenting styles or practices? parenting, sympathy, and prosocial behaviors among adolescents. *The Journal of Genetic Psychology, 168*(2), 147-176.

Chao, R. K. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development, 72*(6), 1832-1843.

Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development, 65*(4), 1111-1119.

Ciarrochi, J., & Heaven, P.C.L. (2008). Learned social hopelessness: The role of explanatory style in predicting social support during adolescence. *Journal of Child Psychology and Psychiatry*, *49*(12), 1279-1286.

Conrad, D., & Hedin, D. (1981). *Instruments and scoring guide of the experiential education evaluation project.* University of Minnesota, Center for Youth Development and Research.

Daniels, E., & Leeper, C. (2006). A longitudinal investigation of sport participation, peer acceptence, and self esteem among adolescent girls and boys. *Sex Role, 55*(11-12), 875-880.

Departemen Kesehatan RI/Ministry of Health of Indonesia. (2009). *Statistik kasus HIV/AIDS di Indonesia*. Retrieved on July 1, 2010 from http://www.depkes. go.id.

Durkin, K. (1995). *Developmental social psychology: From infancy to old age.* Malden, MA: Blackwell.

Dwairy, M., Achoui, M., Abouserie, R., & Farah, A. (2006). Parenting styles, individuation, and mental health of Arab adolescents: A third cross-regional research study. *Journal of Cross-Cultural Psychology, 37*(3), 262-272.

Eagly, A. H., & Crowley, M. (1986). Gender and helping behavior: A meta-analytic review of the social psychological literature. *Pyschological Bulletin, 100*(3), 283-308.

Entwisle, D. R., Alexander, K. L., Cadigan, D. and Pallas, A. (2000). The schooling process in the first grade: Two samples a decade apart. *America Educational Research Journal*, *23*, 587-613.

Erath, S. A., Flanagan, K. S., & Bierman, K. L. (2008). Early adolescent social adjustment: Associations with friendship and peer victimization. *Social Development*, *17*(4), 853-870.

Garcia, F., & Gracia, E. (2009). Is always authoritative the optimum parenting style? Evidence from Spanish families. *Adolescence, 44*(173), 101-131.

Grayman, J. H., Good, Mary-Jo D., & Good, B. J. (2009). Conflict nightmares and trauma in Aceh. *Cultural Medical Psychiatry*, *33*(2), 290-312.

Gunnoe, M. L., Hetherington, E. M., & Reiss, D. (1999). Parental religiosity, parenting style, and adolescent social responsibility. *Journal of Early Adolescence, 19*(2), 199-225

Howitt, D., & Cramer, D. (2008). *Introduction to research methods in psychology* (2nd Ed.). England: Pearson.

Hurtup, W. W., & Van Lieshout, C. F. (1995). Personality development in social context. *Annual Review Psychology, 46*, 655-687.

Jonkmann, K., Trautwein, U., & Ludtke, O. (2009). Social dominance in adolescence: The modelling role of the classroom context and behavioral heterogeneity. *Child Development*, *80*(2), 338-355.

Kaufmann, D., Gesten, E., Santa Lucia, R. C., Salcedo, O., Rendina-Gobioff, G., & Gadd, R. (2000). The relationship between parenting style and children's adjustment: The parents' perspective. *Journal of Child and Family Studies, 9*(2), 231-245.

Kerlinger, F. M., & Lee, H. B. (2000). *Foundations of behavioral research* (4th Ed.). Stamford: Wadsworth.

Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 63*, 1049-1065.

Lin, M. C., & Hyde, J. S. (2001). Gender, mathematics and science. *Educational Research*, *18*, 17-27.

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In E. M. Hetheringthon, & P. H. Mussen, *Handbook of child psychology.* New York: Wiley.

Maliki, A. E., Asain, E. S., & Kebbi, J. (2010). Background variables, social responsibility and academic achievement among secondary school students in Bayelsa state of Nigeria. *Study Home Community Science*, *4*(1), 27-32.

Martinez, I., & Garcia, J. F. (2008). Internalization of values and self-esteem among Brazilian teenegers from authoritative, indulgent, authoritarian, and neglectful homes. *Adolescence, 43*(169), 14-29.

Martinez, I., & Garcia, J. F. (2007). Impact of parenting styles on adolescents self esteem and internalization of values in Spain. *The Spanish Journal of Psychology, 10*(2), 338-348.

Nakamura, M., & Watanabe-Muraoka, A. M. (2006). Global social responsibility: Developing a scale for senior high school students in Japan. *International Journal for the Advancement of Counselling, 28*(3), 213-226.

PT Pos Indonesia. (2008). *Bantuan langsung tunai (BLT)*. Retrived on July 20, 2009 from http://www.posindonesia.co.id.

Reed, V. A., Jernstedt, G. C., Hawley, J. K., Reber, E. S., & Dubois, C. A. (2005). Effects of a small-scale, very short term service-learning experience on college students. *Journal of Adolescence, 28*, 359-368.

Rudy, D., & Grusec, J. E. (2006). Authoritarian parenting in individualist and collectivist groups: Associations with maternal emotion and cognition and children's self esteem. *Journal of Family Psychology, 20*(1), 68-78.

Rudy, D., Grusec, J. E., & Wolfe, J. (1999). Implications of cross-cultural findings for a theory of family socialisation. *Journal of Moral Education, 28*(3), 299-310.

Santrock, J. W. (2008) *Adolescence* (12th Ed.). New York: McGraw-Hill.

Scales, P. C., Blyth, D. A., Berkas, T. H., & Kielsmeier, J. C. (2000). The effects of social learning on middle school students' social responsibility and academic success. *Journal of Early Adolescence, 20*(3), 332-358.

Spera, C. (2005). A review of the relationship among parenting practices, parenting style and adolescent school achievement. *Educational Psychology Review*, *17*(2), 125-146.

Steinberg, L., Blatt-Eisengart, & Cauffman, E. (2006). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful homes: A replication in a sample of serious juvenile offenders. *Journal of Reseacrh on Adolescence, 16*(1), 47-58.

Steinberg, L., Lamborn, S. D., Darling, N., Mounts, N. S., & Dornbusch, S. M. (1994). Over-time changes in adjustment and competence among adolescents from Authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 65*, 754-770.

Wentzel, K. R. (1991). Social competence at school: Relation between social responsibility and academic achievement. *Review of Educational Research, 61*(1), 1-24.

Wolfradt, U., Hempel, S., & Miles, J. N. (2003). Perceived parenting styles, depersonalisation, anxiety and coping behavior in adolescents. *Personality and Individual Differences, 34*, 521-532.

Wray, L. D., & Flanagen, C. A. (2007). *Value development and civic engagement.* Retrieved February 18, 2009, from http://www.apa.org/pi/cyf/fall 05.pdf.

Youniss, J., McLellan, J. A., & Yates, M. (1997). What we know about engendering civic identity. *American Behavioral Scientist*, *40*(5), 620-631.

SOCIAL SCIENCES & HUMANITIES

Vocabulary Learning Strategies of Malaysian ESL Students

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ABSTRACT

One of the most important challenges that learners face in second language learning is learning vocabulary. Vocabulary has been recognized as crucial to language use in which learners' insufficient knowledge of vocabulary may lead to difficulties in their second language learning. Thus, in learning second language vocabulary, students need to be trained to use appropriate vocabulary learning strategies. This study examined vocabulary learning strategies(VLSs)used by Malaysian ESL students majoring in Teaching English as a Second Language (TESL) at Universiti Putra Malaysia. It is important to note that this is a population which has been rarely included in any previous studies on vocabulary learning strategies. Based on the aim of this study, it was decided that the best method for this investigation and to better understand the use of VLSs by these students was to adopt qualitative research design. For this purpose, open-ended interviewswereconducted individually with eight students at the Faculty of Educational Studies in UPM. The concluded strategies such as learning words through reading, the use of monolingual dictionary, the use of various English language media, and applying new English word in their daily speaking that are related to memory, determination, metacognitive strategies are popular strategies and learners are keen in using them.

Keywords: Vocabulary Learning Strategies (VLSs), LLS, ESL

INTRODUCTION

Acquiring a second language involves different areas such as motivation, learners' needs, learning environment, learning strategies and language awareness. It is becoming increasingly difficult to ignore second language learning strategies. Learning in any event strategies are

defined by Chamot and Kupper (1989, p. 9) as "techniques which students use to comprehend, store, and remember information and skills."

Learning strategies have been used for thousands of years as mentioned by Oxford (1990) who stated that mnemonic or memory tools were used in the ancient times to facilitate narrators remember their lines. Meanwhile, grammar studies on language learning strategies started in the mid 1960s. Subsequently, the past twenty years have seen increasingly rapid advances in the field of research intosecond language learning strategies (Wenden& Rubin, 1987; O'Malley &Chamot, 1990; Oxford, 1990).

Oxford (1990, p. 8) defines language learning strategies as "specific actions taken by the learners to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations." Meanwhile, specificstrategies used by second language learners for the acquisition of new words in the second language are called 'vocabulary learning strategies' (Gu, 1994). Language learning strategies (LLSs) areasub-category of general learning strategies, and vocabulary learning strategies (VLSs) are consideredas a part of language learning strategies (Nation, 2001).

The research to date has tended to focus on vocabulary learning strategies rather than language learning strategies. In fact, several studies have produced taxonomies of vocabulary learning strategies (Schmitt & Schmitt 1993; Gu & Johnson, 1996; Schmitt, 1997; Nation, 2001; Fan, 2003).

First, Schmitt and Schmitt (1993) divided learning vocabulary into remembering a word and learning a new word. Secondly, Gu and Johnson (1996) classified second language (L2) vocabulary learning strategies as cognitive, metacognitive, memory and activation strategies. Thirdly, Schmitt (1997) improved vocabulary learning strategies based on Oxford (1990) by dividing them into determination (i.e. not seeking another person's expertise) strategies, social (seeking another person's expertise) and remembering category comprises social, memorization, cognitive and metacognitive strategies. Finally, Fan (2003) who refined Gu and Johnson (1996)'s classification, categorized vocabulary learning strategies into a "primary category" which contains dictionary strategies and guessing strategies and the "remembering category" which integrates repetition, association, grouping, analysis and known words strategies.

Classifications of Language Learning Strategies

There are many and various classifications of language learning strategies. O'Malley *et al.* (1985) declared the use of 24 strategies employed by learners of English as a second language in the United States. They divided these strategies into three main categories, namely, "Metacognitive", "Cognitive", and "Socioaffective" strategies. In fact, there is another accepted classification suggested by (Oxford, 1990) who had distinguished between the direct and indirect strategies. She added that direct strategies contain "Memory", "Cognitive",

and "Compensation" strategies while indirect strategies include "Metacognitive", "Affective", and 'Social" strategies. Each of these is divided into a number of subscales. Oxford (1990) distinguishes several aspects of learning strategies into the following:(1) relate to communicative competence, (2)let learners become self-directed, (3) increase the role of teachers, (4) are problem-oriented, 5) special behaviours by the learners, (6) include many aspects of the learners as well as the cognitive approach, (7) support learning both directly and indirectly, (8) are not always observable, (9) are teachable, (10) are flexible, and (11) may be influenced by a variety of factors(p.131).

Oxford and Crookall (1989) describe language learning strategies as "learning techniques, actions, learning to learn, problem-solving, or learning skills" (p.37). These researchers came to an end that no matter what learning strategies are called, strategies couldmake learning more efficient and effective and the strategies used by learners could also lead to more proficiency or competence in a second language.

Oxford classified an extensive category of language learning strategies under two super ordinate categories - the Direct and Indirect strategies. Fig. 1 presents Oxford's (1990) classification of these strategies.

With regards to direct strategies (which are more directly associated with learning and the use of the target language in making good judgment that they require the mental processing of the language), these are the Memory strategies which "[...] store and retrieve new information"; Cognitive strategies which "[...] enable learners to understand and produce new language by many different means", ranging from repeating to analyzing expressions to summarizing and Compensation strategies which "[…] allow learners to use the language despite their often large gaps in knowledge" (Oxford,1990, p. 37). As for the Indirect strategies (which help the learning process internally, i.e. which support and manage language learning without directly involving the target language), there are the Metacognitive strategies which "allow learners to control their own cognition";
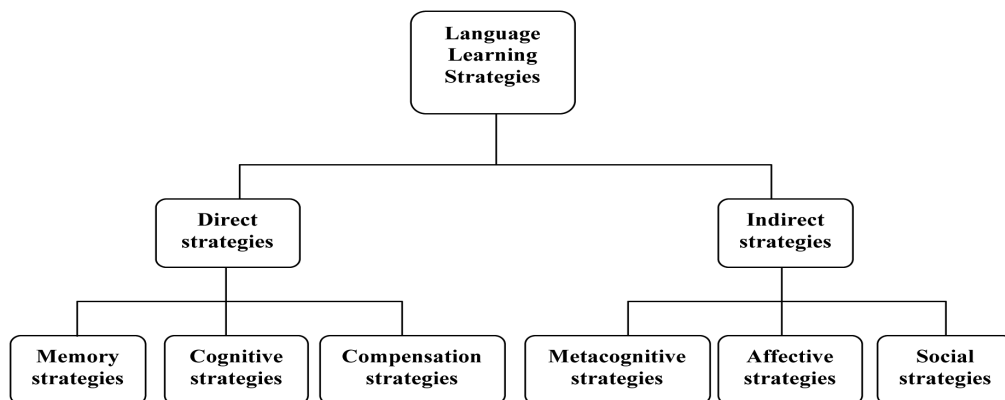
Fig. 1: A summary of Oxford's (1990) classification of LLS

Affective strategies which "help to regulate emotions, motivations, and attitudes"; and Social strategies "help students learn through interaction with others" (Oxford, 1990, p. 135). However, Schmitt (1997) classified vocabulary learning strategies based on Oxford's taxonomy.

Vocabulary Learning Strategies

Vocabulary learning strategies (VLSs) are steps taken by the language learners to acquire new English words. There is a wide range of different vocabulary learning strategies as demonstrated by the classifications of vocabulary learning strategies proposed by different researchers (Stoffer, 1995; Gu & Johnson, 1996; Nation, 2001). In addition, there is a wide-ranging inventory of vocabulary learning strategies developed by Schmitt(1997). While a variety of definitions of the vocabulary learning strategies have been suggested, this study uses the definition suggested by Schmitt (1997), who defines two main groups of strategies, as follows:

1. Discovery strategies: strategies that are used by learners to discover learning of words;

2. Consolidation strategies: a word is consolidated once it has been encountered.

Schmitt (1997) further categorized vocabulary learning strategies into five sub-categories, namely:

1. Determination strategies: these are individual learning strategies;

2. Social strategies: these are the strategies when learners learn new words through interaction with others;

3. Memory strategies: these are the strategies whereby learners link their learning of new words to mental processing by associating their existing or background knowledge with the new words;

4. Cognitive strategies: these are the strategies that do not engage learners in mental processing but are more mechanical means.

5. Metacognitive strategies: these are the strategies related to processes involved in monitoring, decision-making, and evaluation of one's progress.

After viewing these different classifications, the prudent study used Schmitt's taxonomy as a basis of investigation. It was developed based on Oxford's (1990) classification of language learning strategies. The classification of strategies perhaps is before the most wide-ranging in vocabulary learning strategy usage. Although Schmitt's five major strategies maintain their applications in an ESL/EFL environment due to the fact that he established his taxonomy from using Japanese L2 learners. Similarly, the present study used Malaysian second language learners as the subjects of the study. The use of VLSs counts on a number of factors such as proficiency, motivation, and culture (Schmitt, 2000). This is because culture and environment can influence their preferences

for exacting learning strategies (Schmitt, 2000).

However, far too little attention has been paid to vocabulary learning strategies used by ESL undergraduate students in Universiti Putra Malaysia (UPM). Hence, the aim of this study was to determine the type of vocabulary learning strategies used by ESL students.

Cognitive Theory

The cognitive orientation describes second language learning as a complex cognitive skill which, similar to other such skills, engages cognitive systems (such as perception, and information processing) to overcome limitations in human mental capacity which may inhibit performance (Ellis, 2000, as cited by Višnja, 2008). One of the important concepts of cognitive theory which influences vocabulary learning strategies is learning strategies. This study was conducted to examine the vocabulary learning strategies which provide understandings of what vocabulary learning strategies are all about.

Inter-Relationships between VSL and LLS

'Language learning strategies' form a sub-class of 'learning strategies' in general, whereas 'vocabulary learning strategies' constitute a sub-class of language learning strategies. There are researchers (Oxford & Scarcellat, 1994; Schmitt, 1997) who have acknowledged that in addressing vocabulary learning strategies, one should not lose sight of their correlation with language learning strategies.

A considerable number of researchers (e.g. Wenden & Rubin, 1987; O'Malley & Chamot, 1990; Oxford, 1990; Schmitt, 1997) have asserted that VLS forms a sub-class of the framework for language learning strategies and for this reason, it is applicable to a wide variety of language learning (LL) tasks, sighting from the more remote ones (such as vocabulary, pronunciation and grammar) to integrative tasks like reading comprehension and oral communication.

A few studies, including the one by Schmitt (1997), have manifested that LLS are not inherently 'good' for various factors; for example, the contexts in which the strategies are used, the frequency of use, the combination with other strategies, language portability, background knowledge, the texts, target language, LL proficiency level, and language characteristics.

The importance and popularity of vocabulary learning strategies in the group of language learning strategies in terms of their actual use is reflected by the fact that the vast majority of language learning strategies listed in taxonomies such as in Oxford's (1990), are either vocabulary learning strategies (all the strategies in the memory category), or can be used for vocabulary learning tasks. In spite of this, research into language learning strategies tend to neglect vocabulary learning strategies and prefer to focus on language learning as a whole. Vocabulary learning strategies, however, areone of the most significant current discussions in language learning strategies, which will be explained in following section.

In learning any language, vocabulary is the focal point of acquisition. As put forward by McCarthy (1992), "without words to express a wider range of meanings, communication in L2 just cannot happen in any meaningful way" (p.50). Vocabulary has been gradually recognized as crucial to language use in which insufficient vocabulary knowledge of the learners led to difficulties in second language learning.

Meanwhile, Nation (2000) describes the 'learning burden' of a word as the amount of effort that a learner puts in learning the word. According to him, "different words have different learning burdens for learners with different backgrounds and each of the aspects of what it means to know a word can contribute to its learning burden" (p. 23). Thus, in the case of learning the vocabulary in the second language, students need to be educated with vocabulary learning strategies. They are mostly persuaded to use basic vocabulary learning strategies (Schmitt, 1997). However, teachers may help to decrease students' learning burdens by providing some organized vocabulary learning strategies for them.

This research investigated the application of vocabulary learning strategies by undergraduate ESL students (sophomore) majoring in teaching English as a second language at UPM (Universiti Putra Malaysia). Thus, with a small sample size and the nature of the study (qualitative study) caution must be applied, as the results of this research may not be generalized to other ESL students at UPM.

The present study also attempted to explore the use of vocabulary learning strategies (VLSs) experiences in process by undergraduate ESL students at Universiti Putra Malaysia. Thus, this study aimed to answer the following question: "What are the vocabulary learning strategies actively employed by undergraduate ESL students in learning the English language?"

METHODOLOGY AND MATERIALS

The purpose of the present study was to examine the use of vocabulary learning strategies (VLS) by Malaysian ESL students at university level. The aim of this study was to investigate the use of vocabulary learning strategies (VLSs) by ESL students and also the methods that they applied to learn new words in English.

It was decided that the best method for this investigation so as to better understand the use of VLSs by these students was to adopt the qualitative research design. Cresswell (1994) identified qualitative research as an investigative method for understanding a phenomenon based on separate methodological traditions of inquiry that elicit human conditions or social problem. In addition, the researcher is the main instrument of data analysis. Personally, the researcher is interested in this topic because she has been taught in an EFL (English as a foreign language) context, where it was very difficult to gain access to teaching and learning materials of the English language.

The data collection method suggests that in a certain sense, this study could also be seen as a phenomenological study utilizing the descriptive approach, as the number of the participants involved was rather small and that the data were collected from open questions. However, according to (Creswell, 2007), "phenomenologist focus on describing what all participants have in common as they experience a phenomenon (p.56). In phenomenology, the investigator tries to discover and comprehend a phenomenon and understand the meaning of a concept. One of the concepts in this study is the ESL learners' choice of vocabulary learning strategies that are considerable as more meaningful, enjoyable, faster and practical to learn new English words.

Nonetheless, the phenomenology qualitative study design allows an understanding and an identification of the phenomena through how they are perceived by the actors in a situation (Lester, 1999). In addition, phenomenology research provides a deep understanding of a phenomenon as experienced by a number of individuals (Creswell, 2007).

The study was conducted in Universiti Putra Malaysia. The university is located in Selangor and was formally established in 1931. It is ranked among the best universities by The Times Higher Education Supplement (THES) produced annually in Malaysia. More focus was centred on the Faculty of Educational Studies and the Department of Language and Humanities Education.

Merriam (1988) explained that interview is one of the major sources to obtain qualitative data from the subjects. Hence, interview is one of the most popular means to investigate, research and inquire data from a phenomenon. In this study, interviews were conducted individually with eight students (three males and five females) between August 25th and October 5th, 2009, at the Faculty of Educational Studies in UPM to gain a deep understanding of the subjects' varied backgrounds in their vocabulary learning, and the strategies that they used to learn new words in English.

RESULTS AND DISCUSSION

The results show that ESL learners in UPM are not aware of most of the vocabulary strategies mentioned in the present study. On the other hand, they were found to have usually used vocabulary learning strategieson either a medium or a low frequency. The common and specific strategies used by participants are discussed in the following sections.

Common Strategies Used

Schmitt's (1997) taxonomy of vocabulary learning strategies was utilized in categorizing the vocabulary learning strategies demonstrated by the data obtained in the current study. The findings of the study showed that Malaysian ESL students used determination, cognitive, social and metacognitive, which are the most common strategies comprehensively employed by the participants of the present investigation. All the students used at least one of the most popular strategies, such as using monolingual dictionary, guessing from

textual contexts, and learning through English language media.

The strategies which require the use of reliable materials and tools are also among the highly used group, e.g. reading English language texts, using English-language media, and watching TV. Most of the strategies mentioned by the subjects in this study require only low level of mental processing. The subjects seemed to rely on the strategies which mostly require rehearsal and meaning determination without any type of deep processing. The strategies which were mentioned by the participants are listed according to their categoriesand are further explained in the next section.

Learning New Words through Reading

The first common strategy used by participants was guessing from the textual context which is under the determination category. In determination strategy, one guesses from textual contexts such as "*I was reading story books and I learnt new words from there."* All the interviewees mentioned that they learned new words through reading newspapers, text books, and novels. For instance, Jamal said, "*I used to reading newspaper every day*".

A possible explanation for this finding is that in the Malaysian education system, the teachers use the same teaching method such as using English newspapers to improve and assist the learning of new vocabulary in most of the English language classrooms. The finding is consistent with the study of Haggan (1990) who found the use of newspapers a successful method in EFL

classes. However, an acceptable explanation for using this particular strategy, which is also true for the current study, has been provided by Oxford and Scarcellat (1994) as "by far the most useful strategy is guessing from various given contexts" (p.237).

Use of Dictionary

Another common strategy is using a monolingual dictionary (E.g. English to English dictionary) which is under the category of determination strategies, and this was mentioned by five subjects as one of the common strategies they use. This habit, however, was not a common strategy among the participants at the primary level of this study. Only one student mentioned the use of the dictionary as his first option to find out meanings of the new words because his parents did not facilitate him. "*My parents didn't help me to learn new words. So I had to refer to dictionary"*. The popularity of this strategy was expected simply because the use of a monolingual dictionary is a common practice among second language learners. The dictionary gives detailed guidance on pronunciation, grammar, and usage with explanations written in a controlled, simplified vocabulary. Other than that, dictionaries also provide examples of words used in various contexts (Carter, 1987).

Monolingual dictionaries were designed for native users but publishers later developed this type of dictionaries for L2 students as well (Oxford & Scarcellat, 1994). An explanation for the common use of a monolingual dictionary among these

students in UPM is that the new curriculum in Malaysia is focusing on independent learners. Moreover, this method is widely performed in the English language classes in Malaysia. This finding is in agreement with the finding of Noor and Amir (2009) who have shown the commonly used dictionary strategies among Malaysian students.

In addition in Malaysian classrooms, the teachers encourage the students to refer to their dictionary most of the time, and the students are expected to learn new words on their own. Another reason that can be accounted for the result is related to the process of learning language, i.e. as the participants become mature, the more advanced they become. This advocates Ahmad's study (1989) on poor and good language learners among ESL students in Khartoum.

In other words, the use of monolingual dictionary in this study is consistent with the study of Ahmad (1989). An explanation that he presented, which is also true for the subjects of the present study, is that more successful learners at the upper proficiency levels have moved on from using bilingual dictionaries to using monolingual ones, in which they make use of some of the information in such dictionaries beyond merely just the definitions.

Applying New English Words in Their Daily Speaking

A more significant finding obtained in this study was that the respondents applied new English words in their daily speaking. It can be considered as a social strategy.

This means they practice new words with friends in the university (as mentioned by five subjects), ask questions in the classrooms (two subjects), and interact with native speakers (one subject). A possible explanation for this is probably these students benefitted from the receptive and productive knowledge of vocabulary learning in second language.

These findings are consistent with those of Nation (2001) and Webb (2005) who found the receptive and productive roles of vocabulary learning in second language. Moreover, Monderia and Wiersm (2004) explain the receptive vocabulary learning as learning the meaning of a second language word to target language, and productive vocabulary learning makes the learner able to translate a word from L1 to L2. Another possible explanation was identified by Webb (2005) who indicated that the greater part of vocabulary is learned receptively through reading or listening and production through writing and speaking.

Use of Media

Another important finding of this investigation shows thatthe use ofEnglish language media (songs, movies, internet, computer games, TV programs, etc.) is also among the strategies with the highest frequency by the students, as indicated in the following:

> *"I learn new vocabulary through reading and watching television"*(Jim)

"I learn new words through watching television especially American movies. ... I remember that I learnt some words through games"(Jasmine)

"...And through watching English language movies, with Malay subtitles" (Jamal)

Besides, using materials which involve authentic language use is also listed among the frequently strategies used. A possible explanation is that the popularity of this metacognitive strategy may be related to the accessibility of the materials. Moreover, authentic materials are good in terms of learning new words in context. As mentioned in the literature review, strategies involving authentic language use are demonstrated by (Stoffer, 1995). This category was the first of Stoffer's (1995) classification and later Schmitt (1997) included this particular strategy in his taxonomy as a sub-category of metacognitive strategies. This result may be explained by the fact that the highly developed technology is becoming an important part of vocabulary learning and second language learning process.

Social Strategies

It is interesting to note that in all eight subjects of this study, none described learning words with the help of others. The participants only shared their problems with others when they could not find any other sources to learn those unknown words from. These results are similar to the results of the study by Schmitt (1997) who showed that using social strategies is rather popular. Moreover, the data also revealed that social strategies are frequently used by the subjects of this study.

Individual Vocabulary Learning Strategies Used by Subjects

Meanwhile, other strategies used by the subjects of this study to understand the meaning of the new words were using flash card, "*I used the flash card*" (Sarah), underlining the words, *"I underline that word firstly I want to understand the meaning of the word"*(Jasmine)*,* and using word lists, *"...and provide the word list"* (Rose)*.*

Word list and flash cards are included in the sub-category of the cognitive strategies. This finding is consistent with Schmitt and McCarthy's study (1997) which showed learning words from lists is only the primary stage, whereby there should be further contact to the words with other VLSs. One reason for this is that many studies have shown that the act of forgetting a word occurs immediately after its initial encounter (Seibert, 1927). For this reason, word list is an easy way to remember new words. This was also explained by Oxford and Scarcellat (1994) as, "rote memorization of word lists is popular in some cultures from which the L2 students come from, particularly the Asian cultures" (p.239).

The special strategy that Jim applied to learn new words was imaging word meaning. According to Schmitt (1997), this

strategy is under the category of memory strategy. It is difficult to explain this result, but it may be related to the way that Jim had been instructed in his drama class, i.e. his teacher encouraged him to imagine the meaning of words. In addition, he used to read pictorial low level story books and instead of referring to any other resources, he imaged those words based on the pictures presented in the books. *"When I was yang I read low level story books that's big pictures and big words I read those words and imagine those words by see the relevant pictures."*

Another special strategy used by Jasmine was watching Asian (Japanese, Korean, and Chinese) shows to learn the words of those languages where by the words were translated into the English language. However, this result has not been previously described. A possible explanation for this is probably that her enjoyment of learning new vocabulary and learning the two languages' words of the language simultaneously.

In brief, the results of the study have shown that ESL students who are learning the English language in their native country are using vocabulary strategies which are mostly direct and simple that involves low level mental or unconscious processing. They are largely memory and meaning determination strategies which may involve reading of English materials, the use of dictionaries, and engaging the other English medium media and written texts.

CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

The study has discovered that the ESL students perceive vocabulary as a branch of language learning. Strategies such as learning a word through reading, monolingual dictionary, English-language media, and applying new English word in their daily speaking are related to memory, determination, metacognitive strategies respectively and are popular strategies and the learners are keen in using them. One the other hand, strategies which require cognitively deeper processing, such as putting English labels on physical objects, listening to tapes of word lists and writing down the new words and their meanings on cards were not mentioned by the participants of this study.

Based on the results, some implications can be observed. First of all, an advantage of this study is that it will increase the public awareness on the importance of vocabulary learning strategies in second language learning and teaching. Oxford *et al*. (1990) mentioned that "vocabulary is not explicitly taught in most language classes" (p. 9).

The results of the current study can help language teachers to improve their teaching methods. Second, teachers who are interested in their students' performance in learning the English vocabulary can introduce the vocabulary learning strategies and techniques to their students by designing useful tasks and giving relevant assignments. Based on the interviews conducted, most of the students were unfortunately not aware of

the existence of numerous strategies used to learn words other than using dictionaries and rote memorization.

Future studies on vocabulary learning strategies can be carried out from two viewpoints; first, studies on the individuals' differences of language learners from the primary to university level can be conducted through qualitative and quantitative approaches. Next, studying the effects of culture, home environment, peer groups, effective teaching methods and classroom atmosphere on vocabulary learning strategies may probably be very helpful to get a better understanding of the relevant strategies.

REFERENCES

Ahmed, M. (1989). Vocabulary Learning Strategies. In P. Meara (Ed.), *Beyond Words* (pp. 3-14). London: CILT.

Carter, R. (1987). Vocabulary and second/foreign language teaching. *Language Teaching,20*(1), *3-16.*

Chamot, A., & Kupper, M. B. (1989). Learning Strategies in Foreign Language Instruction. *Foreign Language Annals, 22*(1), 13-22.

Cresswell, J. (1994). *Research Design: Qualitative and Quantitative Approaches.* London: SAGE.

Ellis, R. (2000). *Instructed Second Language Acquisition.* Oxford, UK and Cambridge, USA: Blackwell.

Ellis, R. (1994). *The Study of Second Language Acquisition.* UK: Oxford: Oxford University Press.

Ellis. R. (1985). *Understanding Second Language Acquisition.* Oxford: Oxford University Press.

Gu, P. Y. (2003). Vocabulary Learning in a Second Language: Person, Task, Context and Strategies. *Teaching English as a Second or ForeignLanguage TESL-EJ., 7*(2).

Gu, P. Y. (1994). Vocabulary Learning Strategies of Good and Poor Chinese EFL Learners. *The Twenty-Eighth Annual Convention and Exposition* (p. 27). Baltimore.

Gu, P. Y., Hu, G., & Zhang, L. J. (2005). Investigating Language Learner Strategies among Lower Primary School Pupils in Singapore. *Language and Education.19*(4), 281-303.

Haggan, M. (1990). Hitting The Headlines. *English Teaching Forum, 28,* 41-42.

McCarthy, M. (1992). *The Vocabulary (2nd Edn.).* Oxford University Press (OUP).

Merriam, S. (1988). *Case Study Research in Education.* San Francisco: Jossey-Bass.

Monderia, A. J., & Wiersm, B. (2004). Receptive, Productive, and Receptive, Productive L2 Vocabulary Learning: What Difference dose it Make?. In B. A. Laufer-Dvorkin, *Vocabulary in a Second Language: Selection, Acquisition, and Testing* (pp. 80-100). University of Groningen.

Nation, I. S. (2001). *Learning Vocabulary in Another Language.* Cambridge: Cambridge University Press.

Nation, I. S. (2000). What Is In A Word? Vocabulary Devolopment in Classroom In A Multilingual N.McWilliam. *Studies in Second Language Acquisition, 22*(1), 126-127.

Noor, M. N., & Amir, Z. (2009). Exploring the Vocabulary Learning Strategies of EFL learners. Language and Culture: Creating and Fostering Global Communities. *7th International Confronce by the School of Studies and Lingustics Faculty of Social Sciences and Humanities* (pp. 313-327),. University Kebangsaan Malaysia (UKM), Malaysia.

O'Malley, L., & Chamot, A. (1990). *Learning Strategies in Language Acquisition.* New York: Cambridge University Press.

O'Malley, L., Chamot, A., Stewner-Manzanares, J., Kupper, C., & Rocco P. R. (1985). Learning Strategies Used by Beginning And Intermediate ESL Students. *A Journal of Research in Language Studies*, (35), 21- 46.

Oxford, R. (1990). *Language Learning Strategies. What Every Teacher Should Know.* Boston, Heinle: Heinle Publishers.

Oxford, R. (2003). Toward A More Systematic Model Pf L2 Learner Autonomy. In P. Palfreyman, & R. Smith (Eds.), *Learner Autonomy Across Cultures:Language Education Perspectives* (pp. 75-91). Great Britain: Palgrave Macmillan.

Oxford, R. L., Crookall, D., Cohen, A., Lavine, R., Nyikos, M., & Sutter, W. (1990). Strategy Training For Language Learners: Six Situational Case Studies and A Training Model. *Foreign Language Annals, 22*, 197-216.

Oxford, R. L., & Crookall, D. (1989). Research on Language Learning Strategies: Methods, Findings, and Instructional Issues. *Modern Language Journal, 73*, 404-419.

Oxford, R. L., & Scarcellat, M. (1994). Second Language Vocabulary Learning Among Adults: State of the Art in Vocabulary Instruction. *Elsevier Science Ltd*., *22*(2), 231-243.

Schmitt, N., & Schmitt, D. (1993). Identifying And Assessing Vocabulary Learning Strategies. *Thai TESOL Bulletin,5*(4), 27-33.

Schmitt, N. (2000). *Vocabulary in Language Teaching.* Cambridge, UK: Cambridge University Press.

Schmitt, N. (1997). Vocabulary Learning Strategies. In N. Schmitt and M. McCarthy,*Vocabulary: Description, Acquisition and Pedagogy.* Cambridge: Cambridge University Press.

Stoffer, L. N. (1995). University Foreign Language Students'choice Of Vocabulary Learning Strategies As A Related To Individual Differnce Variables. In S. Sahbazian, *Perceived Vocabulary Learning Strategies of Turkish University Studens*.Unpublished doctoral dissertation, Alabama: University of Albama.

Višnja, P. (2008). *Vocabulary Learning Strategies and Foreign Language Acquisition.* Great Britain: Cromwell Press Ltd.

Webb, S. (2005). Receptive and Productive Vocabulary Learning The Effects of Reading and Writing on Word Knowledge. *SSLA,* 27, 33-52.

Wenden, A., & Rubin,J. (Eds.). (1987). *Learner Strategies In Language Learning*. New York: Prentice Hall.

Attitude towards Learning Oral Arabic as a Foreign Language among Malaysian Students

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ABSTRACT

The Arabic course in UiTM is an elective course offered to undergraduate students. Students' attitude towards language learning has been identified to influence the learning process. This study was aimed to determine (1) students' attitude level in learning oral Arabic at Universiti Teknologi MARA (UiTM) Malaysia, and (2) the differences in attitude level among students with different prior experience and gender. It was a mixed method of quantitative and qualitative study using questionnaire and interviews. The questionnaire was adapted from Attitude/Motivation Test Battery (AMTB) involving 445 subjects who had been selected using stratified random sampling technique. As for qualitative data, 13 interviews were conducted. This study found that (1) the attitude level among UiTM students was high. It was also discovered that the cognitive and affective components were high while conative was moderate. (2) There were statistically significant differences in the attitude level among the students with different prior experience and gender. In specific, more experienced learners and female learners were found to have higher positive attitude as compared to their counterparts. It was thus recommended that the teaching approach used should be appropriate to students' prior experience and gender. Appropriate approach is therefore vital in moulding students' behaviour, as this will consequently affect their performance in learning spoken Arabic. The uses of collaborative learning strategies as well as portfolio and e-portfolio assessments are suggested based on the individuals' performance.

INTRODUCTION

The Arabic course as a third language in UiTM is an elective subject offered to undergraduate students. Starting from June 1999, UiTM has improved the third language courses to become one of the university's requirement subjects, making it compulsory to all first degree students. This means the students need to choose one of the third language courses offered and complete it before their graduation. Meanwhile, two hours is allocated for Arabic language classes every week. Cumulatively, within three semesters of the course, the students will have six credit hours and this equals to approximately 84 hours of meeting, with 28 hours of meeting in every semester (the Academic Affairs Division, 2009).

However, the students' learning backgrounds were different in terms of their prior experiences in learning Arabic and the faculties they belonged to. Some of them had years of experience in learning Arabic at school, while others did not have any experience at all. For them, learning Arabic at UiTM was the first step. During formal teaching, all these students were combined in the same classroom consisting of mixed abilities and experienced learners. According to previous research (Ghazali Yusri, Nik Mohd Rahimi, & Parilah, 2010b; Ghazali Yusri & Nik Mohd Rahimi, 2009), a combination of classes comprising of students with mixed abilities has some negative effects towards some students. In addition, according to the Causal Attribution Theory, individual factors such as prior experience and knowledge are expected to influence the level of self-efficacy for learning and students' perceptions to succeed in their learning (Pintrich & Schunk, 1996). The different gender has also been found to influence the level of motivation and attitude among students (Bembenutty, 2007; Lundeberg & Mohan, 2008; Ray, Garavalia, & Murdock, 2003).

LITERATURE REVIEW

The attitude towards a language refers to the perception of a community towards that language such as whether a particular language is interesting and easy to learn. It can also be influenced by some factors related to economic, social, politic, culture and religiosity (Norizah, 2005). According to Socio-Educational Theory (Gardner, 1985), attitude is part and partial of motivation. There are two types of attitude in language, namely, the attitude towards language learning and the attitude towards language community. The former refers to the attitude towards the language itself and the language teachers, while the latter refers to the attitude towards a language community such as Arab or Malay. Gardner (1985) divided attitude into three main components, namely, cognitive, affective and conative. The cognitive component refers to a person's belief towards a language, while the affective component refers to his emotional reaction according to his previous belief towards the language, and the conative component is associated with his behavioural actions

towards his belief. According to Yorio (1986), perception and belief can influence learners conatively towards learning. For instance, if students' perception towards a subject is low, they will not give their full focus and effort towards that particular subject. Alkusairy (1998) found that the main problems faced by Malaysian students in speaking Arabic were fear and shyness of making mistakes due to their low self confidence.

On the contrary, experienced learners were expected to positively influence less experienced learners (Burke, 2007; Holmes, 2003) due to the collaborative learning activities (Burke, 2007; Ghaith & Diab, 2008; Holmes, 2003; Ohta & Nakaone, 2004; Rodríguez-Sabater, 2005; Stepp-Greany, 2002, 2004; Yoshida, 2008; Zha, Kelly, Park, & Fitzgerald, 2006) and also their use of peer learning strategy (Lynch, 2006; Pintrich, Smith, Garcia, & McKeachie, 1991; Van Meter & Stevens, 2000; Yoshida, 2008). Meanwhile, dialogues among students can also solve many learning problems (Ohta & Nakaone, 2004) which cannot be solved if they study on their own. Therefore, according to Burke (2007), high ability learners should not be separated from low ability learners in order to initiate communications among them. Moreover, the number of students in a class should not be high and in fact, it should not exceed 25 students.

PROBLEM STATEMENT

Oral skills consist of listening and speaking. Generally, research in oral skills has been carried out widely either at the international level (see for instance, Brown & Yule, 1983; Buck, 2001; Bygate, 1987; Chiang & Dunkel, 1992; Elkhafaifi, 2005; Finnochiaro & Brumfit, 1983; Fulcher, 2003; Haycraft, 1984; Hughes, 2002; James, 1998; Rost, 2002) or at the national level (see for example, Baskaran, 1990; Khatijah Rohani & Abdul Aziz, 1987; Raminah & Rahim, 1986). At the national level, there were studies either solely on listening Arabic (Nik Mohd Rahimi, 2004) or speaking Arabic (Zawawi, 2008). Meanwhile, at UiTM level, previous research (see Norhayuza, Naimah, Sahabudin, & Ibrahim, 2004; Sahabudin, 2003) generally concluded that UiTM students were still weak in oral Arabic. Azman and Ahmad Nazuki (2010), on the other hand, stressed on the importance of the use of transliteration in learning Arabic at UiTM to help students in mastering the language.

There were two previous studies investigating UiTM students' attitude in oral Arabic context (Ghazali Yusri *et al.*, 2010b; Ghazali Yusri & Nik Mohd Rahimi, 2009). However, these studies were entirely based on qualitative data and not meant to generalize the findings into UiTM population. Therefore, this study is a further investigation on UiTM students' attitude to previous studies (Ghazali Yusri, *et al.*, 2010b; Ghazali Yusri & Nik Mohd Rahimi, 2009) in a broader perspective. It was aimed to investigate students' attitude level in UiTM by using quantitative data descriptively and inferentially, supported by insight findings through interviews.

This paper discusses some classroom implications that might be considered to improve the Arabic language instructional practices in UiTM. Meanwhile, there are other previous studies investigating some components of self-regulated learning strategies among UiTM students in oral Arabic context such as motivation and test anxiety (Ghazali Yusri, Nik Mohd Rahimi, & Parilah, 2010a) and the effect of different courses on the use of self-regulated learning strategies (Ghazali Yusri & Nik Mohd Rahimi, 2010).

RESEARCH QUESTIONS

This study addressed two main research questions:

1. To what extent did students have positive attitude in learning oral Arabic at UiTM?

2. Are there significant differences in the attitude level among students with different prior experiences and gender?

METHODOLOGY

This study was aimed to investigate students' attitude in learning oral Arabic at Universiti Teknologi MARA (UiTM) Malaysia. It was a mixed method of quantitative and qualitative study using a self-report questionnaire - *The Attitude/Motivation Test Battery* (AMTB) - developed by Gardner *et al*. (1985) and interviews with 13 students. This study only used the AMTB scales, which were related to the attitudes towards learning French and were then adapted to

measure students' attitude towards learning Arabic. Students responded to a seven-point Likert scale from 'not at all true of me' to 'very true of me'. Before distributing the questionnaires to the students, the scales were translated into the Malay Language because all the students are Malays. All items were also modified according to the research objective to measure their oral Arabic skills. The questionnaires were also referred to some parties for validity purposes, and these included: (1) three language experts for translation validity; (2) five experts for content validity; and (3) three students for face validity. A study had also been conducted to determine the internal consistency of the items. The alpha value for these scales was .72, which was accepted by scholars (Sekaran, 2003).

A sample of 445 students was selected from a population of 2600 students from the third level of the Arabic course as a third language at UiTM. According to Krejcie and Morgan (1970), this number is suitable to generalize the findings into a population. The samples were selected based on the stratified random sampling because the students came from different faculties. A disproportionate sampling technique was also used because the number of students' enrolment in the course was different from one faculty to another. The collected data were analysed using SPSS version 11.5. In order to analyze means of the scales descriptively, their interpretation is as given in Table 1 below.

TABLE 1
Categories of means for seven Likert scales
(Adapted from Nik Mohd Rahimi, 2004)

Mean score	Category
5.01 to 7.00	High
3.01 to 5.00	Moderate
1.00 to 3.00	Low

Meanwhile, this study was also supported by 13 series of interviews with the students. The students were selected based on purposeful sampling technique using maximal variation sampling technique. It also took into consideration their prior experience in learning Arabic and the faculty clusters they belonged to. The acquired interview data were transcribed verbatim and analysed using NVIVO7 software in order to establish the relevant themes which were then referred to the experts for *Cohen Kappa* agreement. Before the interview, all the respondents were informed that the interview scope was only on oral Arabic context and not other language skills.

RESULTS

Table 2 shows that students' attitude was high (M=5.14, SD=.909). The study also found that affective component was high (M=5.46, SD=.977) and it was even higher than cognitive (M=5.12, SD=1.241) and conative (M=4.51, SD=1.455). Meanwhile, the affective and cognitive components were also at a higher level compared to conative, which was moderate.

A one-way between groups analysis of variance (one-way ANOVA) was conducted to explore the impacts of prior experience on students' level of attitude. The students were divided into four groups according to their prior experiences. The first group (N=110) comprised students without any experience, the second group (N=122) consisted of students with six years of experience in primary school, the third group (N=96) had students with nine years of experience (six years in primary school and three years in secondary school) and the fourth group (N=127) had students with 11 years of experience (six years in primary school and five years in secondary school). The different numbers of the samples between the groups did not exceed the ratio of 1:1.5, which was crucial to compare means between the groups (Coakes & Steed, 2001; Hair, Black, Babin, Anderson, & Tatham, 2006). The Levene's test for homogeneity of variances for the data was p=.020 (p<.05), showing that the homogeneity of variance assumption was violated. However, according to some scholars (see for instance, Coakes & Steed, 2001; Field, 2000; Hair, *et al.*, 2006; Tabachnick & Fidell, 2001), this study could still be carried out due to the large number of the samples used (N=455).

TABLE 2
Mean and Standard Deviation of Attitude towards Learning Oral Arabic

Scales	M	SD
Affective	5.46	.977
Cognitive	5.12	1.241
Conative	4.51	1.455
Overall attitude	5.14	.909

Table 3 shows that there was a statistically significant difference in the attitude based on students' prior experience: F (3, 451)=13.025, p=.000. A post-hoc analysis (as shown in Table 4) was conducted using Tukey to determine the difference between the groups. It was found that group 4 (M=5.44, SD=.823) and group 3 (M=5.31, SD=.833) were significantly higher than group 1 (M= 4.82, SD=1.027) and group 2 (M=4.96, SD=.808) (as shown in Table 5).

Apart from that, a Mann-Whitney U test was also conducted to explore the impact of gender on the students' level of attitude. This non-parametric test was an alternative for t-test and was chosen because the difference between the males and females exceeded the ratio of 1:1.5, which was vital to compare means between the groups (Coakes & Steed, 2001; Hair, *et al.*, 2006). Table 6 shows that there is a significant difference between the males and females (N=455) = -3.229, p=.001 (p<.05), of which the females' mean rank (240.60) was higher than that of the males (196.82).

TABLE 3
One-way ANOVA - Tests of the Between-Subject Effect

Effect	Dependent Variable	F value	df1	df2	Sig.[*]
Prior experience	Attitude	13.025	3	451	.000*

*significant at p< 0.05

TABLE 4
Post hoc analysis - the Multiple comparison between the groups

Groups I	Groups J	Mean Difference (I-J)	Std. Error	Sig.[*]
1	2	-.1440	.11501	.594
	3	-.4904	.12217	.000*
	4	-.6283	.11393	.000*
2	3	-.3465	.11934	.020*
	4	-.4843	.11089	.000*
3	4	-.1378	.11830	.649

*significant at p< 0.05

TABLE 5
Descriptive analysis of the effects (prior experience) for attitude

Effect	Dependent Variables	Groups	N	M	SD
Prior experience	Attitude	1	110	4.82	1.027
		2	122	4.96	.808
		3	96	5.31	.833
		4	127	5.44	.823

TABLE 6
Mann-Whitney U test for attitude

Effect	Dependent Variables	Z value	Asymp. Sig. (2-tailed)	Groups	N	Mean Rank
Gender	Attitude	-3.229	.001	Male	131	196.82
				Female	324	240.60

DISCUSSION

This study found that the students' attitude towards learning oral Arabic was high. This study also revealed that the affective and cognitive components were high compared to conative which was moderate. This finding indicated that students' attitude was high emotionally and cognitively, but not in the conative component. This situation was justified through the interviews. Through the interviews, some respondents showed their positive attitude towards learning oral Arabic. Cognitively, they thought that Arabic is unique and beautiful. They were also enthusiastic and amazed to speak Arabic even though this was mostly using easy sentences and words. Moreover, based on the interviews, some factors were identified to have caused students' attitude to become conatively moderate. Firstly, peers' perception towards Arabic practices. Some of them, especially the non Arabic course takers, seemed to have a negative impression towards students who were practising oral Arabic outside the classrooms, and thus, making those students to feel upset and not at ease to speak Arabic. They preferred to speak Arabic with their regular speaking partners, and this might limit their chances of using the language orally. This finding is similar to that of Ghaith and Diab (2008)

who found that students hesitated to use their language in their learning environment when they were feeling depressed and annoyed. If students' community perception towards Arabic language practices becomes positive, the students' conative attitude towards speaking will also be positive as well, and this will further encourage them to speak Arabic. This finding is similar to the previous studies conducted by Taha (2007), Ghaith and Diab (2008), and Young (2005).

Taha (2007) investigated students' attitude towards Arabic after the September 11 incident. He concluded that international students' attitude towards Arabic was more positive as compared to American students due to their higher use of the language. Ghaith and Diab (2008) concluded that students who were enthusiastic in their learning and their interactions with their peers and teachers showed a more positive attitude towards language learning. On the other hand, Young (2005) stated that faculties which offered more interaction opportunities among students would also contribute to a more positive attitude among students in language learning. Through interviews, the oral Arabic use among UiTM students was still not encouraging, and they admitted the lack of usage in oral practices. Some students also admitted that they only

studied the course when exams were just around the corner.

Another factor contributing to the moderate level of conative was the difficulties in mastering Arabic language, especially among less experienced students. Based on the interviews conducted, less experienced students affirmed that Arabic language was difficult to learn, even though they were enthusiastic to learn it. Therefore, the difficulty factor seemed to have caused this component to be at a moderate level as compared to cognitive and affective.

Meanwhile, there were some factors which led to high level of cognitive and affective components among the students, and these were religiosity, culture and language status in the Malay community (Csizer & Dörnyei, 2005; Norizah, 2005). Based on interviews, all the respondents affirmed that oral Arabic was important to them. Although some other students did not agree with the importance of the language, it was found that this was due to the low credit hours allocated for the subject and not due to the language itself. The importance of the language to them might be due to the respondents' religion, which is Islam. All the respondents are Muslims and they have been exposed to the importance of Arabic through their religious rituals, such as reciting al-Quran and prayers. In addition, the cultural factor in Malaysia, which uses this language very frequently in daily activities, might also cause them to get used to Arabic. In fact, learning Arabic in Malaysia cannot be separated from its culture, especially in the Malay Muslim community. Islam has been

identified as the main motivation in learning Arabic (Kaseh, Nik Farakh, & Zeti Akhtar, 2010) and this has also become one of the learning strategies used very frequently by students (Kamarul Shukri, Mohd Amin, Nik Mohd Rahimi, & Zamri, 2009). This noble and sacred status contributes to a high positive attitude among students affectively and cognitively, and this is similar to the finding reported in some previous studies (see Csizer & Dörnyei, 2005; Norizah, 2005; Rueda & Chen, 2005).

Although quantitative data showed that students' cognitive and affective attitude was high, through interviews, it seemed that there were some students who did not realize the importance of the Arabic course. They only put their effort to do revisions on the subject for the purpose of sitting for their test. It was even more interesting to discover that these respondents were less experienced students who should have logically put more effort in order to compete with more experienced students. This finding is similar to that of Lynch (2008) who concluded that it was due to students' failure to internalize the professional ethics of their major. Based on interviews, some factors were identified to have contributed to this consequence. Firstly, the low credit hours for the Arabic courses (i.e. two credit hours per semester) did not influence much on the students' CGPA as compared to other courses having higher credit hours. Therefore, students with high extrinsic motivation would not prioritize this subject and exhibit low attitude towards learning oral Arabic cognitively and affectively

as well as conatively, even though they admitted the importance of this language at the same time. Dornyei (2001) warned that one of the factors demotivating students from participating in learning tasks was performing activities, which did not have any meaningful value in their life - in this case, their CGPA - at least from their perception. Based on the interviews, extrinsically motivated students seemed to limit their target to just pass the course with minimal grades because they seemed to calculate the low effect of the subject on their CGPA, which carried only two credit hours.

The second factor was related to Arabic lecturers. It has been discussed before that Arabic is the official language of Islam. Muslim students respect this language as it is associated to Islam. Therefore, this respect was also shown to the lecturers teaching this subject. Through the interviews conducted, the students had a positive perception towards their Arabic lecturers. They assumed that the lecturers found it very hard to fail them in the subject. Thus, making them feel comfortable, at least to pass the course and not to repeat it in the next semester. However, the number of students with this kind of perception seemed to be insignificant based on the quantitative data which stated a high positive attitude among the overall students, but this type of students did exist among students.

This study also found that there were significant differences in the attitude of the students with different prior experiences. It could be concluded that the longer the

experience of a student in learning Arabic, the more positive the attitude that he/she would exhibit towards oral Arabic learning. Experience seemed to contribute in nurturing their attitude towards learning Arabic. From their experience, they knew the value of learning oral Arabic and this level had increased after years of learning experience. This attitude also increased to a certain level when they continued their studies at UiTM. On the contrary, less experienced students seemed to start nurturing their attitude from day one of their formal learning at UiTM. This was relatively late as compared to the students of the other group. Therefore, their level of attitude was significantly lower. In a class of learners with mixed prior experiences, students could be expected to react differently towards the learning process, depending on their different levels of attitude. In particular, the students with a higher level of attitude were expected to participate actively in the learning process.

Through interviews, the effect of experience was explained further. In terms of subject's difficulty, experience seemed to have given advantage to experienced learners, especially when the lessons started from the very basic Arabic. They felt that Arabic was easy to learn and they could actually master some topics that they were going to learn because they had learnt it previously at school. This kind of belief might have a positive effect towards their expectation to succeed in the course and thus increase their effort and resilience (Brophy, 1998). This result is consistent with a previous study on UiTM's motivation level

(Ghazali Yusri, Nik Mohd Rahimi, Parilah, & Wan Haslina, in press).

This particular advantage, on the other hand, seemed to be a disadvantage point for less experienced learners. They felt that Arabic was difficult to learn and therefore decreased their level of expectancy as well as their involvement in learning (Pintrich & Schunk, 1996). At the same time, they also felt anxious, with low self confidence and were afraid of making mistakes in learning. This finding is consistent with the Causal Attribution Theory (Pintrich & Schunk, 1996) which stated that personal factors, such as experience and knowledge, influence students' attitude and motivation towards learning. It is also similar with the finding of Alkusairy (1998) who concluded that among the problems faced by Malaysian students in speaking Arabic were their anxiety and shyness, as well as their low confidence and fear of making mistakes while speaking.

When these less experienced students were placed together with experienced ones in a classroom, they would feel more anxious because they were surrounded by learners with high ability and this could cause them to feel the inability to compete with their peers. Even though some previous studies (Burke, 2007; Holmes, 2003) have indicated that a class of mixed ability learners seems to give positive impacts on less ability students, but this study found a reversed impact. This feeling might due to the competitive learning situation in UiTM, which is mainly based on competition and grade comparison. The negative impacts of competitive learning situation have been discussed by many scholars such as Pintrich and Schunk (1996) and Ames (1981). They concluded that students' motivation would increase if they could perform better than their peers, and it would decrease if it happened to be vice versa. Therefore, when less experienced students start comparing their performance with other experienced peers, their motivation and attitude will become lower because they feel that they cannot compete with their counterparts.

Meanwhile, learning oral Arabic should be in a collaborative environment, whereas learning success belongs to all and not to individuals (Dornyei, 2001; Economides, 2008; Holmes, 2003; Pintrich & Schunk, 1996). Students share their success or failure as a reflective to their grouping tasks, and thus can positively influence on their self-perception and attitude (Burke, 2007; Ghaith & Diab, 2008; Holmes, 2003; Ohta & Nakaone, 2004; Rodríguez-Sabater, 2005; Stepp-Greany, 2002, 2004; Yoshida, 2008; Zha *et al*., 2006). One of the factors that contributes to a competitive learning environment is the nature of oral tests which compare students' grades. During oral tests, lecturers are to give grades to their students based on a set of standard oral questions, which make no difference among the students of different abilities and prior experience. Students compete with each other to get better results. Therefore, it will put some students, especially the less experienced ones, under pressure as they have to compete with those with more experiences and higher ability. To overcome

this problem, this study suggests that the grading system be done not in a comparing manner, but based on students' individual assessment and personal improvement in learning oral Arabic. The evaluation is done for individuals and students are responsible for their learning progress and improvement, regardless of their prior experience and knowledge by using portfolio (Rhee & Pintrich, 2004) or e-portfolio assessment (Chang, Wu, & Ku, 2005) concepts.

On the other hand, this study also found that there was a statistically significant difference in the students' attitude according to their gender; the females were shown to exhibit a higher degree of attitude or a more positive attitude than their male counterparts. Therefore, lecturers should also be concerned about gender composition in their classes. They could expect their female students to perform better because of their attitude level, which was statistically shown to be significantly different and higher than the male students. Consequently, this study recommends that the lecturers conduct group activities in the classroom, and group members should be mixed in terms of their gender. In other words, collaborative grouping activities between male and female students should be implemented to nurture positive attitude towards learning (Ames, 1981; Brophy, 1998; Cajkler & Addelman, 2000; Dornyei, 2001; Pintrich & Schunk, 1996), whereas less positive attitude students are expected to be influenced by other high positive attitude students.

CONCLUSION

In conclusion, UiTM students' attitude towards learning Arabic as their third language is generally at a high level. However, conative component was found to be moderate for some reasons that have been discussed earlier. Meanwhile, cognitive and affective components among the students were high due to the reasons which were figured out during the interviews. This study also found that female students and students with more experience were significantly higher in their attitude towards learning oral Arabic as compared to their other counterparts. Some pedagogical implications have been recommended; these include using appropriate teaching approaches based on students' prior experiences and gender, collaborative learning strategies and portfolio or e-portfolio assessments, which are based on individual performance.

REFERENCES

Alkusairy, M. A. (1998). Pendekatan komunikatif bagi pengajaran bahasa Arab sebagai bahasa asing. In J. Long (Ed.), *Inovasi dalam perkaedahan pengajaran bahasa, sains sosial dan teknologi maklumat* (pp. 126-140). Bangi: Penerbit Universiti Kebangsaan Malaysia.

Ames, C. (1981). Competitive versus cooperative reward structures: The influence of individual and group performance factors on achievement attributions and affect. *American Educational Research Journal, 18*(3), 273-287.

Azman Che Mat, & Ahmad Nazuki @ Marzuki Yaakob (2010). Kegunaan transliterasi dalam pengajaran dan pembelajaran bahasa Arab. *GEMA Online Journal of Language Studies, 10*(2), 19-35.

Baskaran, L. (1990). Pengajaran kemahiran bertutur. *Jurnal Dewan Bahasa, 4*, 260-264.

Bembenutty, H. (2007). Self-regulation of learning and academic delay of gratification: Gender and ethnic differences among college students. *Journal of Advanced Academics, 18*(4), 586-678.

Brophy, J. (1998). *Motivating students to learn*. New York: McGraw-Hill.

Brown, G., & Yule, G. (1983). *Teaching the spoken language: An approach based on the analysis of conversational English*. Cambridge: Cambridge University Press.

Buck, G. (2001). *Assessing listening*. Cambridge: Cambridge University Press.

Burke, B. M. (2007). Creating communicative classrooms with experiential design. *Foreign Language Annals, 40*(3), 441-462.

Bygate, M. (1987). *Speaking*. Oxford: Oxford University Press.

Cajkler, W., & Addelman, R. (2000). *The practice of foreign language teaching* (2nd ed.). London: David Fulton Publishers.

Chang, Y. J., Wu, C. T., & Ku, H. Y. (2005). The introduction of electronic portfolios to teach and assess English as a foreign language in Taiwan. *TechTrends, 49*(1), 30-35.

Chiang, C. S., & Dunkel, P. (1992). The effect of speech modification, prior knowledge, and listening proficiency on EFL lecture learning. *TESOL quarterly*, 345-374.

Coakes, S. J., & Steed, L. G. (2001). *SPSS: Analysis without anguish: Version 10.0 for windows*. Brisbane: John Wiley & Sons Australia Ltd.

Csizer, K., & Dörnyei, Z. (2005). Language learners' motivational profiles and their motivated learning behavior. *Language Learning, 55*(4), 613-659.

Dornyei, Z. (2001). *Motivational strategies in the language classroom*. United Kingdom: Cambridge University Press.

Economides, A. A. (2008). Culture-aware collaborative learning. *Multicultural Education & Technology Journal, 2*(4), 243-267.

Elkhafaifi, H. (2005). The effect of pre-listening activities on listening comprehension in Arabic learners. *Foreign Language Annals, 38*(4), 505-513.

Field, A. (2000). *Discovering statistics using SPSS for Windows*. London: SAGE Publications.

Finnochiaro, M., & Brumfit, C. (1983). *The functional-notional approach: From theory to practice*. New York: Oxford University Press.

Fulcher, G. (2003). *Testing second language speaking*. London: Pearson Education Limited.

Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold Publishers.

Gardner, R. C., Clement, R., Smythe, P. C., & Smythe, C. L. (1985). *The attitude/motivation test battery: Technical report*. Canada: University of Western Ontario.

Ghaith, G., & Diab, H. (2008). Determinants of EFL achievement among Arab college-bound learners. *Education, Business and Society: Contemporary Middle Eastern Issues, 1*(4), 278-286.

Ghazali Yusri, & Nik Mohd Rahimi (2010). Self-regulated learning strategies among students of Arabic language course and intensive Arabic course in MARA University of Technology Malaysia (UiTM). *International Journal of Applied Educational Studies, 8*(1), 57-67.

Ghazali Yusri, Nik Mohd Rahimi, & Parilah M. Shah (2010a). Kebimbangan ujian dan motivasi dalam kalangan pelajar kursus bahasa Arab dalam

konteks kemahiran lisan. *ASEAN Journal of Teaching & Learning in Higher Education, 2*(2), 50-63.

Ghazali Yusri, Nik Mohd Rahimi, & Parilah M. Shah (2010b). Sikap pelajar terhadap pembelajaran kemahiran lisan bahasa Arab di Universiti Teknologi MARA (UiTM). *GEMA Online Journal of Language Studies, 10*(3), 15-33.

Ghazali Yusri, Nik Mohd Rahimi, Parilah M. Shah, & Wan Haslina Wah (in press). Motivation in learning oral Arabic skills among students with different prior experience and gender. *Pertanika Journal of Social Sciences & Humanities.*

Ghazali Yusri Abd Rahman, & Nik Mohd Rahimi Nik Yusoff (2009). Sikap pelajar tiada asas terhadap kemahiran lisan bahasa Arab di Universiti Teknologi MARA. *ILANNS 2009.*

Hair, J. F. J., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). New Jersey: Pearson Prentice Hall.

Haycraft, B. (1984). *The teaching of pronounciation.* Essex: Longman Group LTD.

Holmes, R. (2003). Collaborative projects: A study of paired work in a Malaysian university. *Innovations in Education and Teaching International, 40*(3), 254-259.

Hughes, R. (2002). *Teaching and researching speaking.* London: Longman.

James, C. (1998). *Errors in language learning and use: Exploring error analysis.* New York: Longman Pub Group.

Kamarul Shukri Mat Teh, Mohd Amin Embi, Nik Mohd Rahimi Nik Yusuf, & Zamri Mahamood (2009). Strategi metafizik: Kesinambungan penerokaan domain strategi utama pembelajaran bahasa. *GEMA Online Journal of Language Studies, 9*(2), 1-13.

Kaseh Abu Bakar, Nik Farakh Sulaiman, & Zeti Akhtar Mohd Rafaai (2010). Self-Determination Theory and motivational orientations of Arabic learners: A principal component analysis. *GEMA Online Journal of Language Studies, 10*(1), 71-86.

Khatijah Rohani Mohd. Yunus, & Abdul Aziz Abdul Talib (1987). Ujian pertuturan dan kefahaman pendengaran. In A.W. Chik (Ed.), *Isu-isu dalam pengukuran dan penilaian bahasa Malaysia* (pp. 23-41). Kuala Lumpur: Dewan Bahasa dan Pustaka.

Krejcie, R.V., & Morgan, D. W. (1970). Determining samples size for research activities. *Educational and Psychological Measurement, 30*(3), 607 - 610.

Lundeberg, M., & Mohan, L. (2008). Gender Issues and Schooling. 21st Century Education: A Reference Handbook. Sage Publications. Retrieved 27 April 2010, from Sage Publications: http://www.sageereference.com/education/Article_n81. html.

Lynch, D. J. (2006). Motivational factors, learning strategies and resource management as predictors of course grades. *College Student Journal, 40*(2), 423-428.

Lynch, D. J. (2008). Confronting challenges: Motivational beliefs and learning strategies in difficult college courses. *College Student Journal, 42*(2), 416-421.

Nik Mohd Rahimi Nik Yusoff (2004). *Kemahiran mendengar bahasa Arab: Satu kajian di Sekolah Menengah Kerajaan Negeri.* (Unpublished Doctoral dissertaion). Universiti Kebangsaan Malaysia, Bangi.

Norhayuza Mohamad, Naimah Abdullah, Sahabudin Salleh, & Ibrahim Abdullah (2004). Kajian penilaian modul BA UiTM (2002) peringkat ijazah. Institut Penyelidikan, Pembangunan & Pengkormesialan UiTM.

Norizah Ardi (2005). *Sikap terhadap bahasa Melayu dan penggunaannya di kalangan pelajar*

universiti di Selatan Thailand. Unpublished Ph.D. Universiti Malaya, Kuala Lumpur.

Ohta, A. S., & Nakaone, T. (2004). When students ask questions: Teacher and peer answers in the foreign language classroom. *IRAL, International Review of Applied Linguistics in Language Teaching, 42*(3), 217-237.

Olaussen, B. S., & Braten, I. (1999). Students' use of strategies for self-regulated learning: Cross-cultural perspectives. *Scandinavian Journal of Educational Research, 43*(4), 409-431.

Pintrich, P. R., & Schunk, D. H. (1996). *Motivation in education: Theory, research and applications*. Englewood Cliffs: Prentice-Hall Inc.

Pintrich, P. R., Smith, D. A. F., Garcia, T., & McKeachie, W. J. (1991). *A manual for the use of the Motivated Strategies for Learning Questionnaire (MSLQ)*. Michigan: University of Michigan. Retrieved 17 October 2008 from http://eric.ed.gov/ PDFS/ED338122.pdf.

Raminah Hj. Sabran, & Rahim Syam (1986). *Kaedah pengajaran bahasa Malaysia* (2 ed.). Petaling Jaya: Penerbit Fajar Bakti Sdn. Bhd.

Ray, M., Garavalia, L., & Murdock, T. (2003). Aptitude, motivation, and self-regulation as predictors of achievement among developmental college students. *Research & Teaching in Developmental Education, 20*(1), 5-21.

Rhee, C. R., & Pintrich, P. R. (2004). Teaching to facilitate self-regulated learning. In O. S. Tan, A. Chang, & J. Ee (Eds.), *Thinking about thinking* (pp. 31-47). Singapore: McGraw Hill Education.

Rodríguez-Sabater, S. (2005). Utilizing undergraduate peer teaching assistants in a speaking program in Spanish as a foreign language. *Foreign Language Annals, 38*(4), 533-543.

Rost, M. (2002). *Teaching and researching listening*. London: Longman.

Rueda, R., & Chen, C. B. (2005). Assessing motivational factors in foreign language learning: Cultural variation in key constructs. *Educational Assessment, 10*(3), 209-229.

Sahabudin Salleh. (2003). *Masalah penguasaan bahasa Arab komunikasi di kalangan pelajar Melayu: Satu kajian kes*. Unpublished MA. Universiti Malaya, Kuala Lumpur.

Sekaran, U. (2003). *Research methods for business: A skill-building approach* (4 ed.). United States of America: John Wiley & Sons, Inc.

Stepp-Greany, J. (2002). Student perceptions on language learning in a technological environment: Implications for the new millennium. *Language, Learning & Technology, 6*(1), 165-180.

Stepp-Greany, J. (2004). Collaborative teaching in an intensive Spanish course: A professional development experience for teaching assistants. *Foreign Language Annals, 37*(3), 417-426.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4 ed.). Boston: Allyn and Bacon.

Taha, T. A. (2007). Arabic as "a critical-need" foreign language in post-9/11 era: A study of students' attitudes and motivation. *Journal of Instructional Psychology, 34*(3), 150-160.

The Academic Affairs Division. (2009). Academic regulations: Diploma and bachelor degree (Honours) programmes (amendment 2009). Retrieved on 4 Mei 2010 from http://www.hea.uitm.edu.my/images/stories/downloads/academic_regulations/Academic%20Regulations%20Diploma%20Degree%202009.pdf

Van Meter, P., & Stevens, R. J. (2000). The role of theory in the study of peer collaboration. *The Journal of Experimental Education, 69*(1), 113-127.

Yorio, C. (1986). Consumerism in second language learning and teaching. *Canadian Modern language Review, 42*(3), 668-687.

Yoshida, R. (2008). Learners' perception of corrective feedback in pair work. *Foreign Language Annals, 41*(3), 525-541.

Young, M. R. (2005). The motivational effects of the classroom environment in facilitating self-regulated learning. *Journal of Marketing Education, 27*(1), 25-40.

Zawawi Ismail. (2008). *Penilaian kemahiran bertutur bahasa Arab dalam kurikulum bahasa Arab komunikasi di Sekolah Menengah Kebangsaan Agama*. Unpublished Ph.D. Universiti Kebangsaan Malaysia, Bangi.

Zha, S., Kelly, P., Park, M. A. K., & Fitzgerald, G. (2006). An investigation of communicative competence of ESL students using electronic discussion boards. *Journal of Research on Technology in Education, 38*(3), 349-367.

Understanding the Perception Concerning Medication and Types of Adherence Behaviour in Hypertensive Patients

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ABSTRACT

Hypertension is a significant public health problem. Despite the availability of effective treatment, non-adherence to treatment has been identified as the main cause of failure in controlling hypertension. The fragmented pattern of research related to adherence is unavoidable because it is a complex phenomenon and affects not only the health of patients but also their entire lives. The research gap in this field is the absence of the patients' perspective and a dearth of qualitative research. The aim of this study was to understand the patients' perception concerning medication and the extent that these perceptions are reflected in adherence behaviour. This is a qualitative exploratory study on hypertensive patients in a community health clinic in the state of Selangor, Malaysia. It was found that the participants perceive prescribed Western Medicine (WM) from the clinic as scientifically proven but has undesirable side effects. Therefore, Complementary and Alternative Medicine (CAM) are used to counteract the harmful effects of WM. The types of adherence behaviour found include faithful follower, self-regulator and intentional non-adherer. The reason to engage in particular adherence behaviour indicates a contextual relationship with the perception concerning the medication. Thus, it was concluded that patients acquire knowledge phenomenologically to cope with hypertension. Therefore, to improve self-management and self-efficacy in adherence with treatment, patient-tailored education and an empowerment approach should be introduced.

Keywords: Adherence, hypertension, medication, perceptions, qualitative research

INTRODUCTION

Hypertension is an important modifiable risk factor for cardiovascular disease and a significant public health problem (WHO, 2003). According to the latest Malaysian National Health and Morbidity Survey in 2006 (NHMS III, 2006), the prevalence of hypertension among adults aged 30 years and above was 42% compared to 32.9% in 1996. With the alarming increase in the prevalence of hypertension, the medical costs of hypertension and its complications impose a considerable financial burden on the local healthcare system. Despite the availability of effective treatment, non-adherence to treatment has been identified as the main cause of failure to control hypertension (WHO, 2003). Based on the researcher's experience in caring for patients in the hospital and conducting home visits for patients who are suffering from hypertension complications, it was found that the majority of them did not take medication as advised by medical personnel. To confirm this phenomenon of poor adherence, conversations with the patients' family members verified that the patients were having difficulties in following the treatment. Thus, the question arises – Why do patients engage in non-adherence behaviour?

In this study, the researchers explored patients' perceptions concerning medication and the extent that these perceptions are reflected in their adherence behaviour. The themes generated from the research will assist healthcare professionals (HCPs) in gaining insights into issues concerning patients' adherence. Hence, therapeutic intervention can be planned to improve hypertension care.

CONCEPT OF ADHERENCE

Adherence is defined as the extent to which a person's behaviour in taking medication, following a prescribed diet and carrying out lifestyle changes corresponds with agreed recommendations from a healthcare provider (Haynes, 1979; WHO, 2003), whereas non-adherence implies disobedience or refusal to adhere to the medical advice given (Vermeire, Hearnshaw, Royen, & Denekens, 2001). To reinforce the medical view of non-adherence, the aim of medical intervention is to overcome patients' non-adherence, which is based on the assumption that, "if health care advice is based on scientific evidence that the treatment will benefit the patient, it is rational to assume that patients will follow this advice" (Russell, Daly, Hughes, Hoog, 2003, p. 282). However, adherence is a complex behavioural process that is strongly influenced by the environment in which the patient lives, and the psychological and social support system. Furthermore, adherence only occurs when a patient's illness and way of life are compatible with the prescribed treatment. Kyngas and Lahdenpera (2000) stated that adherence is not simply a matter of obeying instructions, and that a non-adherent behaviour exists at different levels and is expressed in different ways.

LITERATURE REVIEW

Studies have shown that non-adherence has several causes such as the duration of the treatment, the number of medications prescribed, and the cost and frequency of dosing (Griffith, 1990; Morris & Schulz, 1992; Pound *et al*., 2005), as well as the adverse effects of anti-hypertensives (Johnson, William & Marshall, 1999; Svensen, Kjellgren, Ahlner, & Saljo, 2000). These constitute the key factors that determine poor adherence among hypertensive patients. Patients assess the long-term effects of medication and the value of continuing. Meanwhile, the fear of dependency on and tolerance are important points that make people reduce the prescribed doses (Donovan & Blake, 1992; Morgan, 1996; Pound *et al*., 2005). Non-adherence tends to be higher when medical regimens are more complex (Hingson, Scotch, Sorensen, & Swazey, 1981). However, adherence behaviour shows an inconsistent relationship between social demographic factors, such as age and marital status (Conrad, 1985).

Patients who have been reproached by their doctor because of self-regulation concerning medical advice do not return to the same doctor (Robertson, 1992). Moreover, patients never reveal their thinking or behaviour if it contradicts with the doctors' advice because of their powerless position as patients, but they actively adjust their medication regimen without the doctor's knowledge (Roger *et al*., 1998). Meanwhile, Horne and Weinman (1999) state that patients' beliefs about their medication are strongly related to the way they use them, and that their experience of illness and subjective understanding concerning the medication greatly influence their adherence behaviour (Conrad, 1985). In addition, patients do not believe that all treatments recommended as necessary by their doctor are in their best interests (Robertson, 1992). The fragmented pattern of research concerning a complex phenomenon, such as adherence, is unavoidable because adherence affects patients' lives and not merely their health.

Most adherence research has focused on the measurement of determinants of non-adherence quantitatively. The research gap in this field is because of the lack of the patients' perspective and an absence of qualitative research (Vermire *et al*., 2001). This is because quantitative researchers use questionnaires and are detached from the participants in collecting data. What is missing here is an understanding of the way patients think and feel about the received treatment and their impacts on their behaviour. If we wish to help patients to adhere to treatment for better disease outcome, we must understand what patients are doing and why. Thus, to fill the gap in the qualitative study, especially in the local setting (Lee, Chin, Loong, & Hejar, 2008), the aim of this study was to generate qualitative data related to the perception of patients concerning medication, the type of adherence behaviour and why patients take on a particular type of adherence behaviour.

RESEARCH QUESTIONS

The study was guided by the following research questions:

1. How do patients perceive the medication prescribed for them?

2. What types of behaviour in adherence to medication do patients engage in?

3. What makes them engage in a particular type of adherence behaviour?

METHODOLOGY

Research Philosophy

This qualitative study advocated the theoretical perspective of interpretivism. The social world is dynamic and social reality is multifaceted. Context and culture are unique to the individual. To comprehend how a patient copes with the illness experience, the researcher entered the social world of the patient by adopting the position of 'bottom-up' in which the researcher acts, as the learner rather than an expert, and the participants need to teach the researcher how to understand their world. Interpretivists consider that social actors' subjective meanings, motives, goals, choices and plans can be understood by constructing models of typical meaning used by typical actors who are engaged in typical courses of action in typical situations (Schutz, 1972; Blaikie, 2007). To achieve this, the researcher used approximation and abstraction to interpret social actors' concepts into technical concepts and interpretations that stay as close as possible to the social actors. Throughout the hermeneutic process, these generations of technical language evolve through an iterative process of immersion in these social worlds and reflection on what is discovered (Giddens, 1976).

Participants

The participants came from the three major ethnic groups in Peninsular Malaysia, aged between 38 and 60 years. 10 Malay Muslims [Female (F) =5, Male (M) =5], 10 Chinese Buddhists (F=5, M=5) and six Indian Hindus (F=3, M=3). The education levels of the participants are Diploma (n=3), secondary school (n=10) and primary school (n= 13). The researcher selected the participants from a policlinic sponsored by the Ministry of Health in the southern region of Selangor, Malaysia. The clinic is situated in a semi-urban township surrounded by modern residential development and villages. A purposive sampling technique was used initially, followed by theoretical sampling. The inclusion criteria were that they are registered with the clinic and aged above 38, which are applicable in the local context (NHMS III, 2006); hypertension has been diagnosed as the main disease and they have been on medication for at least one year. Previous studies (Wissen, Litchfield & Maling, 1998; Kyngas & Lahdenpera, 2000; Gascon, Sanchez-Ortuno, Llor, Skidmore, & Saturno, 2004) show that patients on one year of medication are able to relate their experiences with medication usage through routine medical consultation. Apparently, patients who have other main illnesses with a complex medication regimen may not be able to identify the exact effect of anti-hypertensives (Conrad, 1985; Svensson

et al., 2000; Bane, Hughes, Cupples, & McElnay, 2007). This study obtained ethical approval from the Faculty of Medicine and Health Sciences, Universiti Putra Malaysia.

Data Collection, Data Analysis and Trustworthiness of the Study

Of the 26 semi-structured interviews, 19 were audio-recorded, while 7 participants refused to be recorded. Although taking notes of important statements as soon as each interview is completed is considered the least effective method to use in interviews (Merriam, 1998), social processes are dynamic and responses from participants can never be predicted. Each interview lasted about one hour and was scheduled for two sessions on different dates. The interviews were transcribed and analysed concurrently after each interview to determine the theoretical shape and recognize the saturation (Mason, 2002). Before the analysis of the data, the researcher used forward and backward translation (Brislin, 1970) to achieve equivalence of meaning between two different languages. Meanwhile, the Nvivo 7 computer package was used to assist with the organization of qualitative data. The data collected were analysed using the constant comparison method. Prolonged engagement, member debriefing and member checking (Lincoln & Guba, 1985) were used in improving the credibility of the study. To enhance dependability, an audit trail was used to maintain the detailed record of how the data were collected.

FINDINGS AND DISCUSSION

Two themes were evolved from the categories of perception of medication. The first theme was Western Medicine: Scientifically proven versus undesirable side effects, and the second theme was Complementary and Alternative Medicine (CAM): Energising effect and no harmful effect. Meanwhile, three types of adherence behaviour were identified – faithful follower, self-regulator and intentional non-adherer. The participants have provided reasons for the particular type of behaviour. The findings and discussion sections were carried out concurrently. In addition, the narratives of the participants were used to illustrate the findings and as support arguments in the discussion.

Perception of Medicine

Patients do not develop a perception of treatment in a vacuum; instead, they construct the meaning of medication through the dynamic interaction between the illness experience and the perception of the treatment outcome (Donvan & Blake, 1992; Hornes & Weimann, 1999; Gabe, Bury, & Elston, 2004).

The participants mentioned two types of medication they consumed. The medication from the community health clinic is called Western Medicine (WM) while that obtained from elsewhere, such as Traditional Chinese Medicine (TCM), Traditional Medicine (TM), and dietary supplements are grouped under Complementary and Alternative Medicine (CAM). Before the researcher probed the usage of CAM, the participants

spontaneously related their experience with WM by comparing the differences between the WM and CAM. The perception of medicine was divided into two themes as follows:

Theme One: Western Medicine - Scientifically Proven versus Undesirable Side-Effects

The health belief model (Becker & Maiman, 1975) explains participants who choose to take WM are perceived as being susceptible to the severity of hypertension complications; however, faith in the doctor and confidence in WM motivate them to take preventive action. The doctor's explanation and advice concerning the illness serve as a cue for them to adhere to the medication. A 39-year-old male Indian electrical technician narrated:

> WM is scientifically proven and safe to consume. I only need to take the tablet and take everywhere I go. High blood pressure can kill you anytime! So, you must get a qualified doctor to see you in the government clinic. I am confident about the medication given because the doctor already explained to me about high blood pressure and the medication he gave is to reduce my blood pressure and thereby the chances of getting a stroke or heart disease. I believe him as I also read about hypertension in the newspaper.

Dick and Lombard (1997) found that knowledge about the clarity of diagnosis and treatment advice will influence adherence behaviour. Obviously, HCPs play an important role in influencing patients' adherence behaviour. Before the perception of invulnerability to disease complication is formed, health educators must expose the patients to the susceptibility and seriousness of an illness. This does not mean scare tactics but helping them to face reality and grasp the meaning of self-care. A positive way of doing this is by instilling the benefit of the health behaviour, through which patients internalize and understand the logic leading to the perception of personal susceptibility (Butler, 2001).

In contrast, patients also perceive that WM has side effects, and it is not natural, harmful to health in the long run, too strong and the effect is rapid. When the participants experience side effects but have a limited choice of other treatments, they seek CAM like dietary supplements to neutralise or minimise the long-term harmful effects from WM. A 54-year-old female Malay factory worker said:

> I do not believe totally in WM! It is not natural and made by many chemical things that we do not understand. The most important is the side effects. I feel the side effects when the doctor said there were none, I feel tired, ankles swollen until I cannot put my shoes on for work. Many of my friends say that when you do not have a choice in taking WM, then you need to take dietary supplements like Jelly Gamat to remove the

harmful substances from WM that accumulate in your body.

The types of dietary supplement taken by patients varied according to ethnicity; the Malay participants use Teh Orang Kampung, Jelly Gamat and, Spirulina, unknown "Akar kayu" and "Jamu". The Chinese participants take Herbalife, Ginseng, Spirulina and Chinese traditional herbs. The Indian participants did not mention the name of the CAM used but they said they use traditional Indian medicine plants or flowers.

Theme Two: Complementary and Alternative Medicine (CAM) - Energising Effect and No harmful Effect

The participants perceive that CAM is made of natural substances and that the human body can absorb it without any problem. Because of the history of Traditional Chinese Medicine (TCM) and its successful record, patients have no reason to distrust it. Moreover, TCM has energising effects compared to WM. A 55-year-old male Chinese mechanical technician who supported TCM commented:

> I trust TCM, this is not just hearsay but because of its history. How can you not believe in TCM when everything is recorded with facts and evidence? From ancient times until now, how many people use TCM to heal them from many illnesses? TCM gives me energy and makes me feel steady even when exerting like going upstairs. My young colleagues ask me why

I can go up without showing any sign of tiredness or breathlessness. I did not tell them that my secret is taking TCM.

A 60-year-old Malay man, a rubber-tapper who moved from a village to stay with his son in a city, also provided evidence concerning the benefits of CAM:

> I tell you a secret that I never tell the doctor, I have experienced the effects from using "SNE", this medicine is not that strong like WM. It heals slowly with no side effects. After taking it for two years, I can help in the stall by making drinks and selling "Nasi Lemak". The goodness of "SNE" is that I can walk around without feeling tired as when I use WM. Before this, when taking WM I was so weak and without energy to do anything.

The participants advocate CAM because they are made of natural compounds and the most important factor that influences adherence behaviour is the energizing effect, which is not found in WM. Nevertheless, the participants lack the courage to explain their use of CAM to the doctor. Humpel (2006) cautioned that concomitant use of CAM compromises the efficacy of WM, either enhancing or delaying their activity. Moreover, their use may mask a correct diagnosis and thereby endanger patients' lives. Thus, continual use of CAM can have detrimental effects. Pollock and

Grime (2000) stated that doctors need to recognize that patients have their own way of taking medicine to suit their own social context. If HCPs can help them to use CAM, it would be safer than using them indiscriminately. This process only happens when the patients feel free to talk about their use of CAM to the doctor and the CAM practice is authorized and open. Giveon, Liberman, Klang and Kahan (2004) added that doctors should question the use of CAM as an integral part of history taking during consultation.

Types of Adherence Behaviour

Evidently, the perception of medication influences behaviour in adhering to medication. Three types of adherence behaviour are demonstrated – faithful follower, self-regulator and intentional non-adherer. The participants who trust WM take their medication faithfully, while those participants who doubt WM but uphold CAM tend to use WM to a lesser extent. Details are depicted in Table 1 below:

Using a non-judgemental way of probing, the researcher explored different justifications behind the act of following medication. In addition to the perception of medication influencing adherence behaviour, some serendipitous reasons were found to explain the motives for particular adherence behaviour.

Reasons for Choosing a Particular Type of Adherence Behaviour

The reasons for engaging in a particular type of adherence behaviour illustrate that patients are not a blank sheet but have complex ideas in coping with the treatment, which acts as unspoken tacit knowledge in influencing decision making in adherence to medication (Conrad, 1985). Three types of adherence behaviour are illustrated below:

Faithful Follower

A faithful follower perceives that taking WM does not disrupt their daily activities, and that WM is symbolized as being the choice of educated people who are able to appreciate its scientific nature. A 39-year-old Malay, who holds a diploma and works as a renovation contractor, mentioned:

TABLE 1
Perception of medication and the types of adherence behaviour

Perception of medication	Type of adherence behaviour (number of participants)
WM is trusted and scientifically proven	i) Faithful follower

WM is harmful, CAM is natural, slow in action but no side effects	ii) Self regulator with different patterns of regulating treatment:
	     -Deliberately reduces dosage
	     -Alternates use with CAM
	     -Takes medication when symptoms indicate need
	     -Takes WM only before seeing doctor
	iii) Intentional non-adherer

I put my medication beside my toothpaste, every morning I take it after I brush teeth. I never forget because it is always in front of me. Therefore, before I eat breakfast, I swallow the medication. …… I need this medication to make myself healthy, it is easy, no need to cook or boil it. Who has time to boil medication? I simply do not follow TM, only people who are not educated take TM.

On the other hand, studies have shown that patients' characteristics such as age, sex education, occupation, income, marital status, race, religion, ethnic background, and urban versus rural living have not had a definite influence on adherence behaviour (Haynes, 1979; Kaplan & Simon, 1990). In addition, WHO (2003) has reported that nearly everyone has difficulty adhering to medical treatment, particularly when the treatment involves self-administration care. Noticeably, the meaning of the above participant who is following WM constantly perceives himself as an educated person and TM followers as non-educated people. This phenomenon can be explained as individual thinking, and reasoning on set targeted goals and activities cannot motivate behaviour until they have personal meaning, that is, until they connect the cognitive representation with the self (Kuhl, 2000).

The participants take medication as instructed not because of the fear of dying, as emphasised by HCPs, but because the quality of their family members' life is paramount and they do not want to burden their family members with hypertension complications, such as stroke. Evidently, fear per se is not the source of motivation for health-promoting action (Cameron & Leventhal, 2003). One 48 year-old Chinese housewife recalled:

I never ask myself why I take medication everyday, when you are sick, you must take something to heal you……. if I do not take? How? I ask the doctor how long I have to take this medication, he told me I have to take it until I die, if I do not I will die early, what choice do I have? I am not scared of dying as it is better than getting a stroke, where you cannot walk or eat! I do not want to burden my family members.

Another situation that makes the participants take medication as prescribed is because their social relationships can serve to set the reference values that individuals strive to achieve (Brisstte, Scheier, & Carver, 2002; Thoits, 1986). To illustrate this, an employer regards a hypertensive patient as normal if he adheres to medication regularly. Thus, the employee will alter his behaviour so as to move himself towards the reference state. Therefore, social relationships can affect the coping skills in managing health conditions. A 52 year-old male Indian clerk stated:

Why do I take medication? I never thought of it. It is normal to take medication… Five years ago I look for this job, my boss ask me "do you take medicine for your hypertension?" I told him yes. He took me to work because he think I was normal and can do work like normal people if I take medication regularly. Now every three months I will ask for a morning from my boss to come for follow up and take medication. They all know hypertension is a common illness and if you take medicine you are ok.

A perceptible point from the second and third participants' narratives above, "I never ask myself why I take medication everyday" and "Why do I take medication? I never thought of it" imply that much of the activity of social life is routinely conducted and taken for granted, unreflective manner. It is only when enquiries are made about their behaviour by others (such as researchers) that social actors are forced to consciously search for or construct meanings and interpretation (Blaikie, 2010). This phenomenon reflects that the participants have been engaging in a particular medication taking behaviour for a long time and never questioned the rationale for their actions. However, people always have background knowledge, which is unarticulated, and many beliefs and theories that suggest a course of action are moderated information from their social network.

Self-regulator

Self-regulation is a process that is carried out independent of the input and expertise of others (Cameron & Leventhal, 1987). Self-regulation in medication taking involves a patient's conscious efforts to modify thoughts, emotions and behaviour in order to achieve a health goal within a changing environment (Britten, 1994). Participants test medication by gradually reducing doses, and using non-pharmacological treatment and TM to regulate blood pressure with the goal of detaching from WM because of its harmful effects. Below are the narratives of three self-regulators.

One 48 year-old Malay male insurance sale supervisor who is a diploma holder in business and administration commented:

I take it on alternate days, alternate weeks or alternate months, I have not been taking medication for 6 months, nothing happen! Everything is okay. I take TM sometimes. I exercise and take more vegetables to see whether it works in reducing my blood pressure. It is better, because I don't want to be dependent on WM so much.

Throughout the years of experience in taking medication, self-regulation behaviour is shaped and reshaped by the social environment. The participants use the experience of gastric bleeding and loss of hearing after long-term use of WM from their friends to determine whether to continue using WM. The social

network provides a platform for the ongoing exchange of information concerning the care treatment process (Pescosolido, 1992). A 54 year-old Chinese male construction contractor narrated:

> I have seen some of my friends that take WM long-term end up with bleeding in the stomach or loss of hearing. All this is because the chemical substances in WM damage their body. I have to be careful; I will only take it when my blood pressure goes up. I know when to eat! Therefore, I keep WM as a backup measure to help me when I need it but not for long-term treatment.

Nevertheless the patient's 'self' is the primary agent of self-regulation (Cameon & Leventhal, 2003). As illustrated in this study, patients make use of their subjective judgment concerning hypertension symptoms to predict when to take medication. Baumann and Leventhal (1985) hypothesized that these 'common sense' representations of hypertension are based on the cultural and linguistic factors and on personal experience of acute illness history and that hypertension must have an acute symptom like headache. However, it would be erroneous to encourage patients to believe they can successfully treat blood pressure elevations by monitoring symptoms related to blood pressure change because hypertension can be asymptomatic.

The participants, who only take medication a few days before their appointment to see the doctor, expressed that one must know how to survive emotional hurt by a doctor when he admonishes them for their self-regulating medication regimen. A 46 year-old Chinese housewife told of her experience:

> At one time, I told the doctor the truth that I did not take the medication regularly; he raised his voice and said that if I do not take the medicine, there is no point in coming to see him; he will have fewer patients to see and a reduced workload. I felt hurt. I know he is a doctor, who am I? Patients must follow what the doctors advise. From that day onwards, I normally take medicine a few days before the follow up date so that my blood pressure will be normal on the appointment date. Therefore, the doctor will not say anything but just continue treatment. You have to know how to survive with this type of condition.

Pollock and Grime (2000) argue that doctors need to accept the fact that self-regulation is inevitable, and that the problem is that patients never disclose it because of their awareness of their powerless position. Dowell and Hudson (1997) comment that patients have a powerful drive to reduce the use of WM and continue

to test and modify their medication, and that HCPs should encourage them to disclose their self-regulation behaviour in a non-judgmental manner. Svensson *et al*. (2000) agree that HCPs should work with the patients to control and decide on the treatment that is best for their lifestyle. Self-regulation behaviour is only dangerous if not communicated to HCPs. Furthermore, HCPs must recognize that patients are already in control of their treatment decision, and the fact is virtually self-evident but may be unseen by HCPs because of their traditional acute-care paradigm. It is futile for HCPs to try to control what is beyond their control – patients' lifestyle, illness and health experience, and social context. Consequently, in patient-centred care, HCPs should act as collaborators who empower patients with information, expertise and support to make the best possible treatment decision that is compatible with the lives of patients (Anderson & Funnel, 2005; Anderson & Funnel, 2010).

Intentional Non-adherer

The participants first related their non-adherence to medication due to forgetfulness, but it was later determined that they were intentionally forgoing medication because of the absence of symptoms, such as headache. Meyer, Leventhal, and Gutmann (1985) suggest that the majority of patients who first enter treatment for hypertension perceive their illness as time-limited and curable. The researchers explain that individuals evaluate illness and that its treatment largely depends on their experience of past illness.

Similarly, patients who have socialized to a paradigm of acute illness will see hypertension as symptomatic and short in duration. Therefore, they will not feel the need to cure an asymptomatic or 'non-existent' illness and intentionally not adhere to medication. An overweight 38 year-old Malay housewife said:

> I put the medication in front of the cupboard and right in front of the room door. Each time I open the door I will see it. I do not know why, I just forget to take......... people said that when you have high blood pressure you will have a headache, but … I do not have any headache, so, do I need to take medication? I do not think I am that serious!

Consequently, when first encountering the patient, HCPS are required to assess the patients' information needs concerning stages of illness representation, coping and the appraisal process in response to hypertension. By instilling health information concerning the characteristics of chronic illness, such as hypertension, strategies to monitor and evaluate disease progress could bolster positive adherence behaviour.

This study is limited to the care of hypertensive patients; the findings presented in this paper are not applicable to the understanding of a variety of chronic illnesses. Thus, the findings should only be used to hypothesize hypertension adherence

behaviour and not be generalized or used as a predictive model due to its small sample size. The results indicate a contextual relationship between the perception of medication and adherence behaviour. In addition, the rationales behind a chosen type of adherence behaviour demonstrate that individual illness experience is subjective and that knowledge acquired to cope with chronic illness like hypertension is phenomenological. The practical implication gained from insights of the study suggests that adherence is a complicated phenomenon arising not only from patient-related factors but also health system related-factors. Patients who need a long-term self-administrated care endure their treatment with stoicism. What they need is to be supported, and not to be blamed. HCPs are required to empower patients to take self-care and adherence-promoting intervention should be tailored to the patients' needs.

Moreover, this study did not look into other aspects of adherence to non-pharmacological treatment, such as reducing dietary salt intake and weight, as well as increasing physical activity, which are also important contributors in reducing blood pressure. Therefore, further exploratory research can look into patients' perspectives in adhering with non-pharmacotherapy aspects of hypertensive care in a larger sample.

CONCLUSION

This study has provided an understanding of the perceptions concerning medication and the types of adherence behaviour in hypertensive patients. Patients perceive WM as having side effects, and this creates a barrier to accepting its effectiveness. In addition, CAM acts as an alternative treatment to reduce the harm caused by WM. The types of adherence behaviour exhibited by the participants are faithful follower, self-regulator and intentional non-adherer. The reasons for engaging in a particular type of adherence behaviour are largely dependent on the context of the participants. It is important to elicit a patient's reasons for non-adherence to medication, and thus, patient care centre can be designed to optimise patients' outcome.

REFERENCES

Anderson, R. M., & Funnell, M. M. (2005). Patient empowerment: reflection on the challenge of fostering the adoption of a new paradigm. *Patient Education and Counseling*, *57*, 153-157.

Anderson, R. M., & Funnell, M. M. (2010). Patient empowerment: myths and misconceptions, *Patient Education and Counseling, 79*, 277-282.

Bane, C., Hughes, C. M., Cupples, M. E., & McElnay, J. C. (2007). The journey to concordance for patients with hypertension: a qualitative study in primary care. *Pharmacy World and Science.*

Baumann, L., & Leventhal, H. (1985). I can tell when my blood pressure is up, can't I? *Health Psychology*, *4*(3), 203-218.

Becker, M. H., & Maiman, L. A. (1975). Sociobehavioral Determinants of compliance with Health and Medical Care Recommendations. *Medical care*, *13,* 10-23.

Blaikie, N. (2007). *Approaches to Social enquiry*.(2nd edn.). Cambridge: Polity.

Blaikie, N. (2010). *Designing social research: The logic of anticipation* (2nd edn.). Cambridge: Polity.

Brislin, R. W. (1970). Backward translation for cross-cultural research. *Journal of Cross Cultural Psychology*, *1*, 185-216.

Britten, N. (1994). Patients' ideas about medicines: a qualitative study in a general practice population. *British Journal of General Practice, 44*, 465-468.

Brissette, I., Scheier, M. F., & Carver, C. S. (2002). The role of optimism in social network development, coping and psychological adjustment during a life transition. *Journal of Personality and Social Psychology*, *82*, 102-111.

Butler, T. (2001). *Principle of health education and health promotion* (3rd edn.). Canada: Thomson Wadsworth.

Cameron, L., & Leventhal, H. (2003). *The Self-Regulation of Health and Illness Behavior*. London: Routledge.

Conrad, P. (1985). The meaning of medications: another look at compliance. *Social Science and Medicine*, *20*(1), 29-37.

Dick, J., & Lombard, C. (1997). Shared vision-a health education project design to enhance adherence to anti-tuberculosis treatment. Internatonal, *Journal of Tubeculosis & Lung Disease, 1*, 181-186.

Dowell, J. & Hudson, H. A. (1997). A qualitative study of medication-taking behaviour in primary care. *Family Practice*, *14*, 269-275.

Donovan, J. L., & Blake, D. R. (1992). Patient non-compliance: Deviance or reasoned decision-making? *Social Science and Medicine, 34*, 507-13.

Haynes, R. B. (1979). *Determinants of compliance: The disease and the mechanics of treatment*. Baltimore MD: John Hopkins University Press.

Horne, R., & Weinman, J. (1999). Patients' beliefs about prescribed medicines and their role in adherence to treatment in chronic physical illness. *Journal of Psychosomatic Research, 47,* 555-67.

Hingson, R., Scotch, N. A., Sorensen, J., & Swazey, J. P. (1981). *In sickness and In Health: Social Dimensions of medical care*. St Louis: Mosby.

Humpel, N. (2006). Gaining insight into the what, why and where of complementary and alternative medicine use by cancer patients and survivors. *European Journal of Cancer Care*, 15, 362-368.

Gabe, J., Bury, M., & Elston, M. A. (2004). *Key Concepts in Medical Sociology*. London: Sage.

Gascon, J. J., Sanchez-Ortuno, M., Llor, B., Skidmore, D., & Saturno, P. J. (2004). Why hypertensive patients do not comply with the treatment. *Family Practice, 21*, 125-30.

Giddens, A. (1976). *New rules of sociological method: A positive critique of interpretative sociologist.* London: Hutchinson.

Griffth, S. (1990). A review of the factors associated with compliance and the taking of prescribed medicine. *British Journal of General Practice*, *40*,114-116.

Giveon, S. M., Liberman, N., Klang, S., & Kahan, E. (2004). Are people who use 'natural drugs ' aware of their potentially harmful side effects and reporting to family physician. *Patient education and counselling*, *53*, 5-11.

Kaplan, R. M., & Simon, H. J. (1990). Compliance in medical care: Reconsideration of self predictions. *Annals of behavioural Medicine*, *12*, 66-71

Kuhl, J. (2000). A functional-design approach to motivation and self-regulation: the dynamics of personality systems and interactions. In M. Boekaerts, P.R. Pintrich, and M. Zeidner (eds), *Handbook of Self-Regulation*, San Diego, CA: Academic Press.

Johnson, M. J., William, & Marshall, E. S. (1999) Adherent and nonadherentmedicine-taking in

elderly hypertensive patients. *Clinical Nursing Research*, *8*(4), 318-335.

Kyngas, H A., & Lahdenpera, T. (2000). Level of compliance shown by hypertensive patients and their attitude towards their illness.*Journal of Advanced Nursing, 34*(2), 189-195.

Lehane, E., & McCarthy, G. (2007). An examination of the intentional and unintentional aspects of medication non-adherence in patients diagnosed with hypertension. *Journal of Clinical Nursing, 16*, 698-706.

Lee, K., Chin, Y. S., Loong, Y. Y., & Hejar A. R. (2008). From compliance to adherence and concordance, what quantitative and qualitative studies have synthesized? *Journal of Health Management*, *4*(1), 36-61.

Meyer, D., Leventhal, H., & Gutmann, M. (1985). Common-sense models of illness: The Example of Hypertension. *Health Psychology*, *4*(2), 115-135.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. London: Sage.

Mason, J. (2002). *Qualitative Researching*. (2nd edn.). London: Sage.

Merriam, S. B. (1998). *Qualitative research and case study application in education*: *revised and expanded from case study research*. San Francisco: Jossey-Bass Publishers.

Meyer, D., Leventhal, H., & Guttman, M. (1985). Common–sense models of illness: The example of hypertension. *Health Psychology*, *4*, 115-135.

Morgan, M. (1996). Perception and use of anti-hypertensive drugs among cultural groups. In S. J. William, & M. Calnan (Eds.), *Modern medicine. Lay perspectives and experience*. London: CL Press.

Morris L. S., & Schulz, R. M. (1992). Patient compliance-an overview. *Journal of Clinical Pharmacy and Therapeutics*, *17,* 283-295.

Pescosolido, B. A. (1992). Beyond rationale choice; the social dynamic of how people seek help. *American Journal of Sociology*, *97*, 1096-1178.

Pollock, K., & Grime, J. (2000). Strategies for reducing of proton pump inhibitors (PPIs): Patient self-regulation of treatment may be an under-exploited resource. *Social Science of Medicine*, *51*, 1827-1839.

Pound, P., Britten, N., Morgan, M., Yardley, L., Pope, C., Daker-White, G., & Campbell, R. (2005). Resisting medicines: a synthesis of qualitative studies of medicine taking. *Social Science and Medicine, 61*, 133-55.

Robertson, M. H. B. (1992). The meaning of compliance: patient perspective. *Qualitative Health Research, 2*(1), 7-26.

Roger, A. Day, J. C., William, B., Randall, F., Wood, P., Healy, D., & Bentall, R. P. (1998). The meaning and management of neuroleptic medicine: a study of patient with a diagnosis of schizophrenia. *Social Science and Medicine*, *47*(9), 1313-1323.

Russell, S., Daly, J., Hughes, E., & Hoog, C. (2003). Nurses and 'difficult" patients: negotiating non-compliance. *Journal of Advanced Nursin, 43*(3), 281-287.

Schutz, A. (1972). *The phenomenology of the social world*. London: Heinemann.

Strauss, A. & Corbin, J. (1998). *Basics of qualitative research: technique and procedures for developing grounded theory* (2nd edn.). Thousand Oaks: Sage publications.

Svensson, S., Kjellgren, K. I., Ahlner, J., & Saljo, R. (2000). Reasons for adherence with antihypertensive medication.*International Journal of Cardiology, 76,* 157-63.

The Third National Health and Morbidity Survey 2006. (NHMS III): Ministry of Health Malaysia, 1-28.

Thoits, P. A. (1986). Social support and coping assistance.*Consulting and Clinical Psychology*, *154*, 416-424.

Vermeire, E., Hearnshaw, H., Royen, V. P., & Denekens, J. (2001). Patient adherence to treatment: three decades of research. A comprehensive review. *Journal of Clinical Pharmacy and Therapeutics*, *26*, 331-42.

Wissen, K. V., Litchfield, M. L., & Maling, T. (1998). Living with hypertension. *Journal of advanced nursing, 27*, 567-574.

World Health Organisation. (2003). Adherence to long term therapies: evidence for action. WHO Publication, Geneva.

SOCIAL SCIENCES & HUMANITIES

Towards Identifying Quality Assurance Standards in Virtual Learning Environments for Science Education

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ABSTRACT

Many studies indicated the beneficial impacts of Virtual Learning Environments (VLE) on teaching and learning experience (Barbour & Reeves, 2009). Therefore, quality and standardisation of e-learning have become a crucial success factor to ensure the quality of learning and to maximize benefits gained from such learning experience. This research sought to identify and propose a set of standards for VLEs in science education so as to ensure the quality of these environments and maximize the learning benefits for students. A wide range of studies have been analyzed in order to identify the main dimensions of VLE from which quality standards should be derived. Hence, an evaluation form with six main standards was developed based on previous studies. It was then distributed to purposively selected panel of experts who ranked on a 3-point scale and determined the importance of each standard. The ranking of these standards was done by the panel of experts from Saudi, European, and Malaysian universities with different backgrounds. These standards, arranged in their order of importance, are: design, support, authority and safety, improvement and review, VLE cost effectiveness, and quality VLE software. Moreover, the findings indicated that the devised form is suitable to be used as an evaluation tool to assess the quality of VLE for science education.

Keywords: Virtual learning environments, VLE, total quality, standards, science education, virtual environments

INTRODUCTION

A learning environment is defined as a group of circumstances and factors that learners interact with and are influenced by them. They characterize the educational situation and give it its uniqueness. Research has shown that the learning environment affects the learner according to the degree of its

authenticity (Khamees, 2003). However, when it is difficult to provide this kind of environment, simulated environments are the most suitable alternatives (Ibid).

Using simulations and virtual reality, which have become well established during the last ten years, have made it possible to design simulated learning environments using computers that may sometimes surpass the real, natural environments (Hamit, 1993; Helsel, 1992). Virtual reality is interactive as it responds to users' actions and behaviour. In fact, it provides a degree of interaction that is not possible in traditional multimedia since it allows users to go anywhere and discover any place in the virtual reality environment (Berge & Clark, 2005). Virtual reality has become a new method of learning using computers that adds a wide range of scientific imagination and learning possibilities to individuals (Chow, Andrews, & Trueman, 2007). It also offers an individualized learning experience that fulfills the educational needs of students with different learning styles, in addition to VLE's flexibility in terms of time and place (Barbour & Reeves, 2009). Moreover, one of its most important advantages is the ease of continuous renewal of the information provided, which helps make learning more enjoyable and individualised (Al-Shanak & Doumi, 2009).

Although virtual reality emerged as an area of distinction for computer applications during the eighties, this technology is still considered in its early stages of development. So far, there has been little research on this technology, particularly with regard to its educational applications. Its novelty has

led researchers and educators to exert huge efforts to build a theoretical and conceptual basis for this emerging technology and its potential (Clark & Berge, 2005; Mclellan, 1996).

With the increasing need for virtual learning technology, both locally and internationally, the development of virtual learning environments has become a science with its own foundations and origin. The development of educational materials and learning environments is no longer left to personal efforts. In fact, it now has its internationally known principles and standards, especially after the development of quality concepts. Thus, quality assurance has become a very important issue because virtual learning universities and institutions cannot be accredited without subjecting them to quality standards. If we look at the reality of science education today, especially in the Arab region, we find that the learner's knowledge acquisition depends mainly on theory rather than practice and experimentation of newly acquired knowledge in real life. This is due to many reasons, which include the lack of suitable equipment and lab instruments, the risks and dangers of some laboratory experiments, and the high cost of materials and shortage of time (Al-Radi, 2008).

A virtual environment that is well-designed provides learners with authentic learning experiences that enable them to transfer what is happening within the virtual learning environment, in terms of skills, experiences and experiential learning acquired to real life situations.

SIGNIFICANCE OF THE STUDY

The First and Second International Conferences of e-Learning and Distance Learning, which were held in Riyadh in March 2009 and February 2011 subsequently, recommended activating the roles of professional institutions and specialized groups in emphasizing quality control procedures in e-learning and distance learning contexts. They also suggested establishing a clear policy for encouraging and supporting interested staff and students. Furthermore, standard tools should also be developed and adopted to determine the extent of readiness to plan and apply e-learning at universities and other academic institutions (First International Conference of e-Learning and Distance Learning, 2009; Second International Conference of E-Learning and Distance Learning, 2011).

The benefits or the advantages of virtual learning in general and in science education in particular, and the widespread nature of its applications around the world, have led to increasing attention to improvement of its quality. The issue of quality assurance in virtual learning has become a new challenge to e-learning in higher education. Ignoring this challenge means that e-courses and programmes created will neither be recognized nor certified and lacking in quality. This challenge is faced by most traditional universities, and all virtual universities based on e-learning (Al-Mulla, 2008).

It is well known that even the world's leading universities have started to provide virtual academic programmes. These include Harvard University, Berkeley University, University of Massachusetts, Stanford University, The British Open University, University of London, and University of Oxford. The Quality Assurance Agency (QAA) for Higher Education in Britain pays a special attention to assuring the quality of electronic and virtual learning programmes (QAA, 2010). Indeed, there are some virtual universities that offer their educational services using purely virtual methods, including admission and registration, evaluation and granting of degrees. Among these universities are Jones International University in the United States of America and the International Management Centre's Association in Britain (Middlehurst, 2002).

Therefore, the assurance of quality in virtual and e-learning is a very important issue for any academic courses, programmes, and educational environment. If quality is a prerequisite for the success of the educational process in general, it is essential for virtual and e-learning in particular. Since the concept of quality in virtual and e-learning is associated in the literature and recent studies with the outcome of the educational process, most definitions of quality in e-learning have described it in terms of measuring or testing the effectiveness and quality of e-learning programs in accordance with standards and benchmarks (Barker, 2007).

Based on the foregoing, the issue of ensuring the quality of virtual and e-learning programmes is subject to the adherence and conformity of these programmes to the quality standards issued by professional non-profit organizations. Therefore, it is

crucial to develop appropriate criteria and measures to insure the quality of these programmes (Al-Mulla, 2008).

In light of these issues, the aim of this study was to set mechanisms and standards so as to ensure quality and validity of virtual science learning environment. Therefore, this study sought to construct a concept proposal and frame of reference for the future to ensure the quality of virtual learning environments, especially in view of the lack of such studies in the Arab World in general and in the Kingdom of Saudi Arabia in particular.

RESEARCH QUESTIONS

The objective of this study was to identify standards for the quality assurance model of the science virtual learning environments, and rank the standards in their order of importance.

The study aimed to answer the following key questions:

1. What is the proposed view of virtual environments of science education in the light of total quality standards?

   1.1 What are the important standards that can be included in the quality assurance model of VLE for science education and virtual laboratories?

   1.2 To what extent are these standards important in order of ranking to ensure the quality in VLE of science education?

RESEARCH HYPOTHESIS

Recent research has proven the importance of quality assurance in VLEs (Al-Shanak & Doumi, 2009). In this paper, we sought to identify these standards based on research in the area of quality assurance in VLE for science education. However, we believe that these standards vary in importance, and that prioritizing them will better ensure the quality of VLE. Hence, the aim of this paper was to identify and prioritize these standards based on previous research in the field, as well as input from experts in the field of VLE and E-learning.

LITERATURE REVIEW

The Importance of VLE in Education

In order to define and develop quality standards for VLEs, it is important to review and point out the factors that facilitate its effectiveness and usefulness. For this purpose, the researchers set the study of Barbour and Reeves (2009) as the starting point. This study focused on revising previous research, which dealt with the current status of virtual schools between 2004 and 2008. This study also differentiated between the various types of virtual schools on the basis of learning type, namely, synchronized, asynchronized or an independent virtual school. The researchers in this study have pointed out some of the educational benefits of virtual learning. The most significant ones can be summed up as follows:

- The ability to offer an individual sophisticated learning programme that is customized to meet the particular requirements of a certain student to fit his or her own learning style,

- The flexibility in terms of time and place,

- The enhanced opportunities for disabled students whose disability otherwise prevented them from pursuing a conventional education,

- Providing higher levels of motivation,

- Widening the coverage of educational services,

- Offering high-quality educational opportunities,

- Improving the skills and results of students, and

- Offering the opportunity for multiple educational options (Ibid).

Barbour and Reeves (2009) also pointed out the challenges that virtual education faces, such as the nature of the students and the need for them to have positive attitudes towards self-study, the technical skills needed, enthusiasm for the educational method in use and time management skills. The study concludes by emphasizing the importance of assessing the functionality of the virtual science learning environments, in addition to assessing the extent to which these environments provide the expected benefits both for the teacher and the students.

The integration of VLEs in education has been proven as useful and beneficial for students' attainment in many studies.

The study of Abofakhr (2008) used the pre- and post-test method to measure students' attainment as a result of using VLEs in a sociology course at the Syrian virtual university. Among the most important conclusions of the study is that the attainment level of the experimental group students, who were taught via the virtual university, increased as compared to their counterparts who had studied the same module within the framework of conventional education at the University of Damascus. In addition, there were differences in the results of the pre-test and post-test to which the students of the experimental group were subjected. The results are in favour for the post-test which provides strong support for the effectiveness of learning via a virtual university.

The study of Meisner, Hoffman and Turner (2008) used pre- and post-test in a science course. The researchers conducted a pre-test on the students who were to be involved in the experimental sample before allowing them to use a high-quality VLE, which consisted of a virtual physics lab. Then, after one semester, the researchers conducted a post-test which further demonstrated the effectiveness of VLE, as students' attainment improved. In addition, the test revealed their perceptions and positive attitudes towards this type of learning. According to the researchers, the study lends strong support to the view that the attainment level of students being taught via VLE is far better than those taught in a conventional learning environment.

Finally, the study of Al-Husari (2002) sought to identify the perceived benefits of

using VLEs from the students' viewpoint. Students pointed out that the programme helped them to understand scientific processes and the concepts that they usually found difficult to grasp through conventional methods. In addition, these programs also gave them the chance to understand the changes that occur as a result of conducting a physical or chemical experiment. Moreover, the VLE helped to increase students' concentration and attention, as well as increasing the students' contribution and interaction. It also developed the students' sense of responsibility for their own learning.

Quality Assurance in VLE

Ensuring the quality of VLE becomes essential in order to achieve the educational benefits presented above. In this regard, it is useful to point out that quality assurance in virtual learning is a concept that is in the interests of all stakeholders, as academic accreditation agencies call for this quality, and users of these environments expect it. Moreover, teaching staff need it in order to support their educational role (McLoughlin & Visser, 2003; Wang, 2006). Therefore, governmental quality agencies and educational institutions throughout the world exert their best efforts to address the challenges which arise from the use of VLEs around the world. One particular example of this interest in quality assurance is the survey carried out by the UK's OFSTED (Office for Standards in Education, Children's Services and Skills) (Ofsted, 2009) which reported that a lot of participants expressed their concern about quality assurance of VLEs

being used in British schools. They have also emphasized the importance of having official procedures to assure the quality of VLEs in education in general as well as in specific content areas.

In general, the quality standards for VLEs should take the needs of all the stakeholders and beneficiaries into consideration, namely, the students, the teacher and the educational institution (Middlehurst, 2003). In this regard, the British agency for the quality of higher education (the QAA) is concerned with setting uniformed standards to assure their application within the framework of higher education in general and all forms of electronic education in particular. The main point on which the concept of quality of electronic education is established and of which virtual learning falls under can be summed up under the following headings: ease of access, arrangement of educational content, delivery system, student support, communication and interaction, and evaluation (QAA, 2010). Frydenberg (2002) proposed and discussed a set of general standards to be used to assess the quality of electronic education, and also defined the criteria that should be covered by each standard. These standards are as follows: institutional commitment, technology, students services, curriculum design and development, education and teacher, delivery system, financing, legal issues, and evaluation. The study of Chibueze (2008) agrees with the former studies in terms of general quality standards which include institutional support, curriculum development, the process of teaching and

learning, structure of educational content, students' support, teaching staff's support, examining and evaluation, and ease of access.

In this regard, Fyodorova (2005) studied the implications of the theory of multiple intelligences on the quality of virtual education. This study is very useful for the present study because of its comprehensiveness and specificity concerning all of the components of VLE and because of the framework proposed by the author for assessing and designing VLE. The evaluation standards include gaining students' attention, identifying the learning objectives, stimulating recall of prior knowledge, presenting the content, extracting and providing feedback, estimation, improving retention and transfer, assessment, improving the process of saving and transferring information, providing a variety of educational content, creating interaction that attracts attention, providing instant feedback, encouraging interaction with other students and teachers. This framework distinguishes between educational standards and technical standards, which include interface, navigation, supervision, learners' interaction, efficiency, presentation, practice activities, feedback, and course introduction.

On the regional level, Al-Mulla (2008) designed a proposed tool for quality assurance of academic programmes delivered electronically. The tool consists of 65 indicators which are divided into 9 main standards, namely, administrative, program design, curriculum design, content display, curriculum evaluation, student support, teaching staff support, other resources, and revision. Al-Mulla proposes using his tool as an indicator to evaluate the quality of e-learning programs; however, the tool does not lend itself to be used in evaluating VLE, especially ones that were designed for science education.

The study of Al-Saleh (2005) concerned with measuring the quality of e-learning by setting basic standards in order to evaluate the quality of education delivered. These standards were then categorized; each standard contains indicators that indicate the quality of the e-curriculum being evaluated. In addition, the researcher suggested a method to evaluate and measure how much a given e-curriculum meets the standards of educational design quality. These standards include institutional support, technical support, student support, teaching staff support, technology, design and development of the curriculum, visual design, the economics of e-learning system, and evaluation. As for the standard of educational design quality, the researcher allocated specific main and subsidiary standards that tackle and discuss the details of the e-learning experience. These standards include the quality of the design process, the objectives and requirements of the curriculum, the electronic content, motivation, educational strategies and learning activities, interaction and feedback, interface design, e-learning technology, evaluation of learner's performance, and evaluation of curriculum effectiveness.

The authors feel that it necessary to point out that the aforementioned quality standards lack the legally binding nature that obliges educational institutions to apply them, although these quality standards are issued by official governmental bodies and research institutions, and in some countries, these standards come from educational institutions. The standards serve as indicators and applications that can be described as complying with quality, yet these standards are not obligatory.

From the studies presented above, it is evident that there are common quality standards shared among these studies despite the different terms used to identify them. Therefore, the researchers attempted to point out and categorize these standards in order to understand the multiple dimensions of quality in VLE. It can be concluded that these standards fall mainly under three headings institutional, educational, and technical standards. These standards were further examined in more detail to improve their accuracy and representativeness, and this resulted in other standards such as the evaluation of the learning experience, which was labelled in Chibueze (2008) as the standard of "examining and evaluation", and in QAA (2010) as "evaluation". Moreover, different studies discussed standards related to support, whether it was "students services" (Frydenberg, 2002) or "staff support" (Al-Mulla, 2008) or even "technical support" (Al-Saleh, 2005), in which they were all grouped in this current study under management and support standards.

Dimensions of Quality

In this paper, a wide range of studies were analyzed to identify the main dimensions of VLE quality standards. This was achieved through reviewing the studies which are related to total quality standards within programmes and educational institutions that apply virtual and e-learning. The most important dimensions were identified, and these should serve as the basis for the quality standard within the virtual environment. The dimensions are as follows:

1. The institutional dimension: This concerns with the administrative and management issues such as organization, certification, finance, investment returns, information technology services, educational development, marketing services and academic affairs such as teaching staff support, educational affairs, work load, class size, salaries, and intellectual property rights. Finally, student services include pre-registration services, programme information, counselling and guidance, financial support, registration, fees, library support, and social support networks.

2. The educational or pedagogical dimension: This refers to teaching and learning. This dimension is concerned with issues related to objectives, content, design and presentation methods, and teaching strategies. There are varied educational methods used in the science education VLE for instance: physical simulation, procedural simulation,

situation simulation, and process simulation.

3. The technological dimension: This examines the issues regarding technological infrastructure of the learning environment. This dimension includes the design and planning of the infrastructure, hardware, and software.

4. Interface design dimension: This refers to the overall appearance of VLE programmes including the design of the website, content design, browsing, and user-friendliness.

5. Evaluation dimension: This includes evaluating students learning and the learning environment.

6. Virtual learning management dimension: This refers to the maintenance of the VLE as well as information distribution.

7. Resource support dimension: This examines the guidance support, technical support, vocational guidance support, and the resources required to support the VLE.

8. Ethical dimension: This refers to the social cultural and geographical variation, as well as variation among students, courses of action and legal actions such as: regulatory policy, copyright and plagiarism.

METHODS AND ANALYSIS

This study followed the descriptive analytical method as it is the most suitable method for this type of research because it operates on the basis of hypothesis and it involves the collection of data in order to test the hypothesis and to answer questions concerning the research subject and explain these answers qualitatively and quantitatively (Cohen, Manion, & Manion, 2000). Knowing that there is a limited number of experts in the area of VLE for science education, the study used purposive sampling technique and the participants were chosen based on who was thought to be appropriate for the study. The sample consisted of 30 educational experts from Saudi Arabian, European, and Malaysian universities, specialized in science education, pedagogy, psychology, educational technology, e-learning, virtual learning, information systems, and computer programming, in addition to specialists at National and International Academic Standardization Organizations.

In order to answer the first research question, a large number of studies that tackled the quality of virtual environments and e-learning have been analysed. One area of difficulty was that of defining distinctive standards for VLE in particular since most of the work concerned with quality was designed for e-learning and there is a lack of research in the field of VLE quality standards. To remedy this lack, an evaluation form containing six main standards of quality in VLE on a 3 point scale was designed to identify the importance of each standard making (3) the most important.

Based on the research discussed above, the six main standards that have been identified are as follows:

1. The design standard. This was divided into three subsidiary standards: (i) standards for quality design of virtual science education environment dimensions and components, (ii) standards for quality instructional design, and (iii) standards for quality technical design.

2. Standards for quality VLE software.

3. Support standards. It was divided into four subsidiary standards, namely, institutional support, student support, faculty support, and technical support.

4. Authority and safety standards.

5. Improvement and review standards.

6. VLE cost effectiveness standard.

As previously mentioned, the form contained the six main standards as main headings. Under each standard, there are sub-standards and statements that describe the highest level of standard performance

of VLE. To answer the second research question, the participants were asked to specify the importance of each standard and its indicators.

The processes of designing, building and applying the proposed evaluation form for the standards of VLE of science education passed through many phases, as summarized in the following:

The first phase: Identifying VLE for science education quality standards. This was achieved by viewing earlier studies which are related to total quality standards of educational programmes and institutions which apply e-learning and virtual education. We also researched the foundations of virtual and e-learning within the field of science education. Then, Fig.1 was devised to indicate the dimension of the science virtual learning environment.

The second phase: After designing the visual representation of VLE dimensions, the six main standards and their indicators
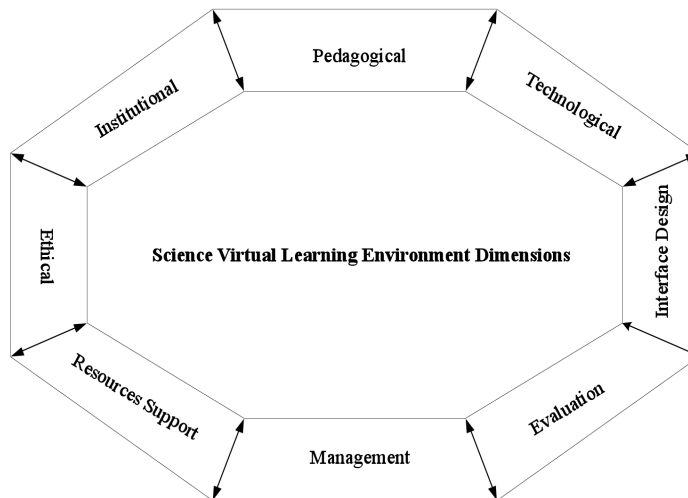
Fig.1: Science virtual learning environment dimensions.

were derived from the VLE dimensions. Since these dimensions cover a wide range of topics, some of the derived standards overlapped; therefore, we took the decision to avoid overlapping and create the six standards which in some cases combine two dimensions together. For example, the "design" standard was derived from the "pedagogical", "technological", and "interface design" dimensions.

The third phase: This phase was concerned with ensuring the validity and usability of the evaluation form. A face validity check was applied as the form was presented to 15 experts who specialize in science education, educational technology, psychology, and educational design to verify

that the indicators of the form serve their objective. After making some amendments and changes to the vocabulary of the form suggested by the experts, they agreed that the form is valid for application.

The fourth phase: The phase aimed to measure the internal consistency of the evaluation form using Cronbach's Alpha coefficient, which indicates the average correlation of all the items in any scale (Pallant, 2001). In the pilot study, when the Cronbach Alpha coefficient was calculated, an overall coefficient of (0.90) was obtained. Given the nature of the form, the Alpha value was considered to signify adequate reliability.
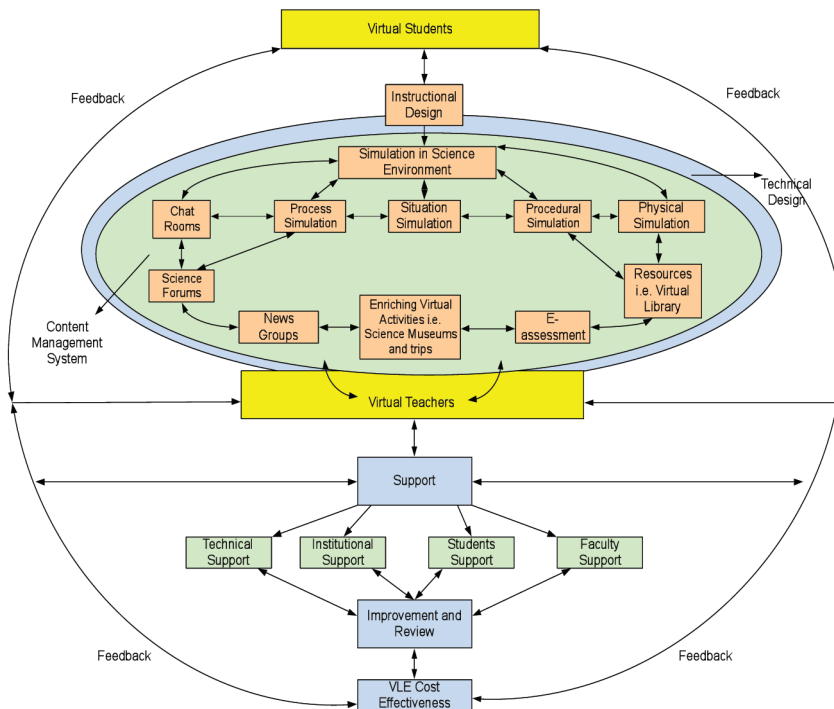
Fig.2: Proposed visual model for the virtual science learning environment in relation to total quality standards.

The fifth phase: In this phase, the evaluation form was distributed to 30 experts who specialized in science education, educational technology, computer teaching methods, and e-learning in Saudi, European, and Malaysian universities.

Having satisfactorily addressed the two subsidiary questions, the researchers turned their attention to the main question: What is the proposed view of virtual environments of science education in relation to total quality assurance standards? A wide range of studies and websites which tackled issues related to virtual and e-learning quality design were consulted. In the end, the researchers came out with a proposed model, as shown in Fig.2.

Fig.2 demonstrates how the proposed virtual science learning environment model was designed in relation to total quality standards proposed above. The model was designed to serve the needs of both the virtual teacher and virtual students to provide and ensure a quality learning experience. The function of the components of the VLE aligns with the standards presented above. As shown, the support standard is represented in this model in terms of technical support, institutional support, student support, and faculty support. The improvement and review standards as well as the VLE cost effectiveness standard are also clearly presented. The arrows represent the interaction and feedback between all the VLE components, including the inputs and outputs. These connections create a comprehensive system that is bounded to its component through continuous cause-and-effect relations.

The VLE is situated within the content management system that applies all technical design standards. The VLE contains virtual classes which are distributed in the virtual environment, providing various access points for national and international networks, e-mail, mail groups, telnet, video on demand (VOD), interactive televisions, instant and international educational materials (Al-Mubarak, 2004). In these classes, students learn through simulations which were designed according to instructional design standards, quality design standards of VLEs, and standards for quality VLE software. Students can conduct scientific experiments within virtual laboratories by dealing with the variables which they cannot deal with in real life. Within the frame of VLEs, students are left on their own to try, explore, inquire, analyze and build their own knowledge all by themselves (Gerval & Le Ru, 2008). In any learning experience, moreover, students are assessed to evaluate their progress and to identify the weaknesses and strengths; it is important to note that the VLE e-assessment is also subjected to quality technical design standards.

In this VLE model, students can visit scientific clubs, science museum, virtual libraries, and practice a wide variety of enriching activities which enable them to gain authentic experience; all of which were designed according to quality VLE design standards (Hin & Subramaniam, 2005). The continuous communication between teachers, students, and administration plays an important role in this model. The VLE communication tools were designed in accordance with technical design standards.

They enable synchronous and asynchronous online communication via email, chat rooms, science forums, news groups, and video conferencing so as to allow interaction with others who are parts of their educational experience (Ellis & Calvo, 2007).

FINDINGS: SEMANTIC ANALYSIS AND INTERPRETATION OF THE RESULTS

Data acquired from the experts were processed and analyzed. The analysis included frequencies and percentages, in addition to Chi-square test. The appendix shows the form in full length and the percentages for each indicator. The form in the appendix shows that there are statistical differences in arranging the degree of importance of the main and subsidiary standards of virtual sciences learning environment, which reflect its importance from the participants' point of view. This is applicable at levels 0.05 and 0.01 in all of the main and subsidiary standards, which means that the hypothesis is acceptable on the basis of these indicators. The Chi-square test was used to identify the extent of the significance of differences in arranging the degree of importance of each standard. The values of $\chi2$ were proven to be significant at all of the indicators, except for 10 indicators; namely, 27-28-29-31-45-67-68-105-164-165. This means that no differences were detected in the experts' opinions about these ten indicators. Significant value of $\chi2$ means that there is a variance in the respondents' opinions, which is a result of the unequal frequencies in any indicator.

Through the study and the analysis of the form, we may infer that there is a meaningful statistical difference in arranging the degree of importance of VLE design standards in light of total quality standards which reflects the variance of their importance in the experts' point of view, and this offers strong support to the study's hypothesis.

The Relative Importance of the VLE Main Standards Indicated By the Experts

Table 1 and Fig.3 show that the percentage of the arithmetic average of the VLE standards exceeding 90%. This means that these standards are perceived as highly important, and this places heavy emphasis on using these standards as a tool for the purpose of

TABLE 1
The frequencies and percentages of the relative importance of VLE main standards arranged according to the order of importance

Rank	Main Standard	Frequencies	Mean Value	The mean average percentage
1	Design	345	316.3667	91.70
2	Support	177	162.0000	91.53
3	Authority and Safety	48	43.7000	91.04
4	Improvement and Review	42	38.1667	90.87
5	VLE Cost Effectiveness	33	29.9000	90.61
6	Quality VLE Software	60	54.3000	90.50
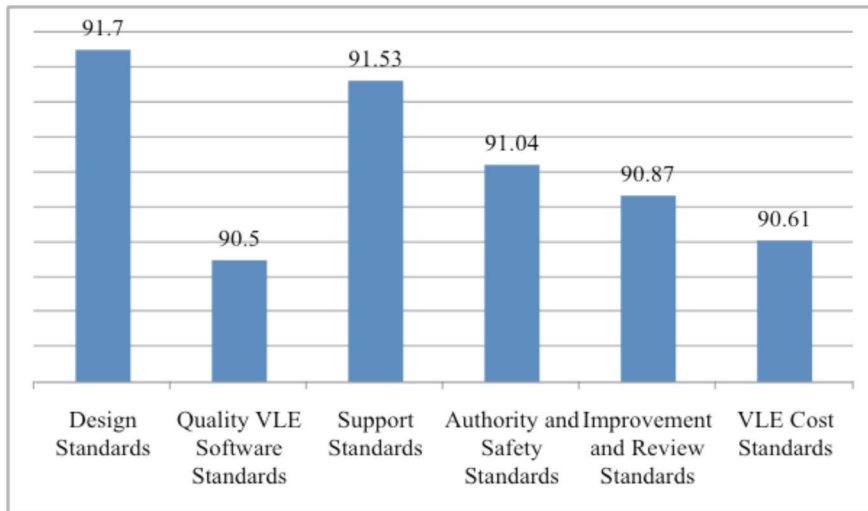
Fig.3: The percentage of the relative importance of VLE main standards

evaluating virtual learning environments in general, and science education learning environments in particular. We may also notice that the "design standard" has been ranked as the standard with the highest percentage of 91.7%.

We think that the reason behind this high percentage is that the virtual science learning environment, including its components of hardware and software's ultimate accuracy, is in its design and development, as design is the basic pillar on which the virtual environment is based, and the foundation which supports all of the other standards. The "support standard" came next in importance according to the experts' view, with an average that reached 91.53%. We regard this standard as an important one and it is deservedly ahead of the other standards since earlier studies ascertained that the quality of VLEs cannot be guaranteed without supporting systems.

This goes along with the study of Moore (2002), which focused on the importance of support standard, and the satisfaction of teaching staff, as well as students who use the VLE. In the third place, the "authority and safety standard" came third, and the "improvement and review standard" came fourth. The "VLE cost effectiveness" was ranked fifth, and finally, the "quality VLE software" came in last. We consider the fact that the quality VLE software standard came in the last position as not indicating insignificance of the standard. On the contrary, its arithmetic average was 90.5%. This reflects the close similarity of the respondents' views regarding the importance of the main standards of VLEs. Among the studies which emphasized on the quality of VLE and discussed similar standards are the studies of Al-Husari (2002), Al-Mulla (2008), and Al-Shanak and Doumi (2009).

The Relative Importance of the VLE Subsidiary Standards Indicated by the Experts

Table 2 and Fig.4 show that the subsidiary standard of "quality design dimensions and components" was ranked as first as its arithmetic average reached 97.42%. The reason for its high ranking was the main standard that it is related to was also ranked as first. Moreover, many studies have asserted the importance of setting accurate and clear indicators of the quality design of VLE dimensions and components, and the experts who participated in this study seem

TABLE 1
The frequencies and percentages of the relative importance of VLE subsidiary standards arranged according to the order of importance.

Rank	Subsidiary standard	Frequencies	Mean value	The mean average percentage
1	Quality design dimensions and components	66	64 .3000	97.42
2	Institutional support	42	39.1000	93.1
3	Technical support	24	22.2333	92.64
4	Quality instructional design	129	117.6667	91.21
5	Authority and safety	48	43.7000	91.04
6	Faculty support	45	40.9000	90.89
7	Improvement and review	42	38.1667	90.87
8	VLE cost effectiveness	33	29.9000	90.61
9	Student support	66	59.7667	90.56
10	Quality VLE software	60	54.3000	90.5
11	Quality technical design	150	134.4000	89.6
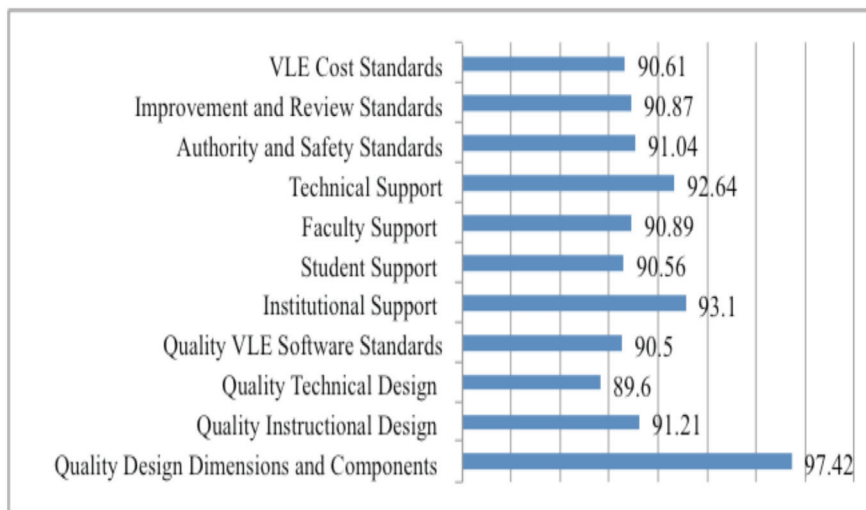
Fig.4: The percentages of the relative importance of the VLE subsidiary standards

to agree with these studies (e.g., Abofakhr, 2008; Al-Mulla, 2008; Al-Shaer, 2008). The "Institutional support" came second with 93.01%, followed by the "Technical support" that came third with 92.64%. The fourth was "Quality instructional design" with 91.21%, while "Authority and Safety" was fifth with 91.04%. The sixth was "Faculty support" with 90.89%, followed by "Improvement and review" with 90.87%. The eighth was "VLE cost effectiveness" with 90.61%. The ninth was "Quality VLE software" with 90.5%. The eleventh and last was "Quality technical design" with 89.6%. We believe that the last ranking of this particular standard does not mean that the survey participants have underestimated its importance, since it has a high percentage of 89.6%, and this value is regarded as high. The reason behind this ranking can be attributed to the fact that the technical quality design of VLEs refers to the comprehensive appearance of the environment including website design, pages design, content design, browsing, and usability. These minor details could be of little importance after fixing the cornerstone of the components and dimensions of the VLE design quality.

CONCLUSION AND IMPLICATIONS

Many studies which have been reviewed highlight the benefits of using VLE in education. However, these benefits are not possible to be achieved without ensuring the quality of VLE. Therefore, this study aimed to identify the quality standards of VLE and present them in a form that should be used to evaluate quality level in VLE for science education. In addition, it endeavoured to rank the quality standards in the order of their importance. This study is very thorough and detailed because of the importance and multi-faceted nature of the topic. It managed to identify six main standards for quality in VLE ranked in order of their importance. These standards are Design, Support, Authority and Safety, Improvement and Review, VLE Cost Effectiveness, and Quality VLE Software.

Ensuring the quality of VLEs requires a pluralistic approach that covers all details of the learning and teaching experience. Therefore, the designed form which contains six standards and eleven sub-standards covers every possible aspect of the VLE for science education and pays equal attention to all factors contributing to the beneficial use of VLE. In order to benefit from all the fruitful results promised by VLE, we therefore recommend using the proposed form as an evaluative tool to assess any current VLE or new ones to be implemented. However, given the rapid change and development in the field of VLE, it is suggested to continue researching and creating adaptable new standards as tools to measure and ensure the quality of VLEs.

REFERENCES

Abofakhr, Z. (2008, 28-30 April). *The Efficiency of Virtual Learning on Knowledge Acquirement of Educational Qualification Diploma Students of Teaching Methodologies of Sociology, Experimental Study on the Syrian Virtual University*. Paper presented at The Second International Conference & Exhibition for Zain

e-Learning Centre. Retrieved June 10, 2011, from Zain E-Learning Centre.

Al-Husari, A. (2002). Patterns and characteristics of virtual reality, the views of students and teachers in some of its programs available through the Internet. *Journal of Education Technology, 12,* 3-38.

Al-Mubarak, A. (2004). *The impact of teaching through virtual classrooms using the Internet on the attainment of faculty of education students studying education and communication techniques at King Saud University.* Master thesis, King Saud University.

Al-Mulla, F. (2008, 28-30 April). *Model of the proposed standards to ensure the quality of academic programs in e-learnin*g. Paper presented at The Second International Conference & Exhibition for Zain e-Learning Centre. Retrieved June 1, 2011, from Zain E-Learning Centre.

Al-Radi, A. (2008). *Virtual Labs as a Model of E-learning.* Paper presented at the E-Learning Forum: Ministry of Education, Riyadh, Saudi Arabia.

Al-Saleh, B. (2005, 5-7 July). *E-Learning and Instructional Design: Partnership for Quality.* Paper presented at the Tenth Scientific Conference for the Egyptian Association for Educational Technology on E-Learning Technology and Total Quality Requirements, Cairo, Egypt.

Al-Shaer, H. (2008). The impact of an introductory training program on "universal design" of e-courses on the knowledge of its principles and use in the design and production of e-courses among instructional designers at e-learning centers. *Studies in Pedagogy and Curriculum, 131.*

Al-Shanak, K., & Doumi, H. (2009). *Foundations of E-Learning in Science Education.* Amman, Jordan: Dar Wael for Publishing and Distribution.

Barbour, M. K., & Reeves, T. C. (2009). The reality of virtual schools: A review of the literature. *Computers & Education, 52,* 403-416.

Barker, K. C. (2007). E-Learning Quality Standards for Consumer protection & Consumer confidence: A Canadian Case Study in E-learning Quality Assurance. *Educational Technology & Society, 10,* 109-119.

Berge, Z. L., & Clark, T. (2005). *Virtual Schools: Planning for Success.* New York: NY: Teachers College Press.

Chibueze, I. L. (2008, 28-30 April). *Factors Necessary for Effective Quality Assurance in a Web-Based Learning Environment.* Paper presented at The Second International Conference & Exhibition for Zain e-Learning Centre. Retrieved May 25, 2011, from Zain E-Learning Centre.

Chow, A., Andrews, S., & Trueman, R. (2007). A 'Second Life': can this online, virtual reality world be used to increase the overall quality of learning and instruction in graduate distance learning programs? In M. Simonson *et al*. (Eds.), Proceedings of *Association for Educational Communications and Technology 2007, Volume 2* (pp. 86-94). Anaheim, CA: AECT.

Clark, T., & Berge, Z. L. (2005). Perspectives on Virtual Schools. In T.Clark & Z. L. Berge (Eds.), *Virtual Schools: Planning for success* (pp. 9-19). New York: Teachers College Press.

Cohen, L., Manion, L., & Morrison, K. (2000). *Research Methods in Education* (5th ed.). New York: Routledge.

Ellis, R. A., & Calvo, R. A. (2007). Minimum indicators to quality assure blended learning supported by learning management systems. *Journal of Educational Technology and Society, 10,* 60-70.

First International Conference of e-Learning and Distance Learning. (2009). First International

Conference of e-Learning and Distance Learning. Retrieved November 15, 2010 from http://www.eli.elc.edu.sa/2009/

Frydenberg, J. (2002). Quality Standards in e-Learning: A matrix of analysis. *International Review of Research in Open and Distance Learning, 3,* 1-15.

Fyodorova, A. (2005). *Multiple Intelligence Theory in Improving the Quality of Virtual Education.* (Master thesis, University of Joensuu). Retrieved from ftp://cs.joensuu.fi/pub/Theses/2005_MSc_Fyodorova_Anna.pdf

Gerval, J. P., & Le Ru, Y. (2008). *Virtual Lab: Discovering through Simulation.* Paper presented at The 3rd International Conference on Virtual Learning. Retrieved November 2, 2010 from http://www.cniv.ro/2008/disc/icvl/documente/pdf/invited/ICVL_invitedPapers_paper01.pdf

Hamit, F. (1993). *Virtual Reality: An Exploration of Cyberspace.* Carmel, Indiana: Prentice-Hall Publishers.

Helsel, S. K. (1992). Virtual reality as a learning medium. *Instructional Delivery Systems, 6,* 4-5.

Hin, L. T. W., & Subramaniam, R. (2005). *E-Learning and Virtual Science Centers.* Hershey: Information Science Publishing.

Khamees, M. A. (2003). *The Development of Educational Technology.* Cairo: Dar Quba for Publishing and Distribution.

Mclellan, H. (1996). Virtual Realities. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology* (pp. 457-487). New York: Simon& Schuster Macmillan.

McLoughlin, C., & Visser, T. (2003). Global Perspectives on Quality in Online Higher Education. In D. Lassner, & C. McNaught (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2003* (pp. 253-256).

Chesapeake, VA: AACE. Retrieved from http://www.editlib.org/p/13756.

Meisner, G. W., Hoffman, H., & Turner, M. (2008). Learning Physics in a Virtual Environment: Is There Any? *Lat.Am.J.Phys.Edu, 2,* 87-102.

Middlehurst, R. (2002) Quality assurance and accreditation for virtual education: A discussion of models and needs. In B. Wächter (Ed.), *The Virtual Challenge to International Cooperation in Higher Education, a Project of the Academic Cooperation Association* (pp. 99-109). ACA Papers on International Co-operation in Education, Bonn, Lemmens.

Moore, J. C. (2002). *Elements of Quality: The Sloan-C Framework.* Needham, MA: Sloan Center for Online Education.

Ofsted. (2009). *Virtual learning environments: an evaluation of their development in a sample of educational settings* London, The Office for Standards in Education, Children's Services and Skills (Ofsted).

Pallant, J. (2001). *SPSS survival manual: a step by step guide to data analysis using SPSS for Windows (Version 10 and 11).* Buckingham: Open University Press.

QAA. (2010). *Code of practice for the assurance of academic quality and standards in higher education Section 2: Collaborative provision and flexible and distributed learning (including e-learning).* Gloucester, UK: Quality Assurance Agency for Higher Education.

Second International Conference of e-Learning and Distance Learning. (2011). Second International Conference of e-Learning and Distance Learning. Retrieved June 10, 2011 from http://eli.elc.edu.sa/2011/

Wang, Q. (2006). Quality assurance best practices for assessing online programs. *International Journal on E-Learning, 5*(2), 265-274.

APPENDIX

The Percentages of the Main and Subsidiary Standards of the VLE Standard Form related to Total Quality Standards.

Main Standard	Indicator	Degree of Importance %		
		3	2	1
	1.1 Standards for Quality Design of Virtual Science Education Environment Dimensions and Components			
	1. Availability of high quality physical, social, cultural, and psychological dimensions in VLE.	67.7	23.3	--
	2. Design and build VLE according to "Universal Design" protocols because it satisfies learners' needs with varied learning styles and multiple intelligence including special needs and gifted learners.	83.3	10.0	6.7
	3. VLE and laboratories for science education are designed and developed by a specialised team of programmers, engineers, instructional and curriculum design experts in science education, and psychologists.	80.0	20.0	-
	4. Availability of science education virtual tools and materials designed according to virtual reality technology.	80.0	16.7	3.3
	5. VLE design should be safe, secure, and convenient.	73.3	23.3	3.3
	6. A clear vision on the design of VLE correctly based on the standards of accredited national and international institutions.	73.3	23.3	3.3
1. Design Standards	7. High quality specifications and standards for VLE design.	73.3	26.7	-
	8. Clear rules and regulations to be practiced in VLE.	70.0	30.0	-
	9. Clearly stated and formatted general aims of VLE.	73.3	26.7	-
	10. The general aims of VLE are based on philosophical principles of constructivism, brain-based learning, and active learning methods.	53.3	33.3	13.3
	11. Availability of high tech equipment to embody sophisticated scientific phenomena.	83.3	10.0	6.7
	12. Availability of two types of learning in VLE: synchronous virtual learning and asynchronous virtual learning via the internet such as email, chatting, e-forums, bulletin boards, video and audio conferencing, and news groups.	70.0	30.0	-
	13. Availability of virtual library that contains specialized electronic resources in natural sciences.	73.3	26.7	-
	14. The virtual library is organized in a way that assists in searching, displaying, and using of information. And allow electronic treatment of information by matching learners' needs with electronic resources memory for instructional activity.	70.0	30.3	-

1. Design Standards				
15.	There are clear input, process, output of VLE related to different aspects of learning i.e. cognitive, skills, and emotions.	67.7	20.0	3.3
16.	There are clear instructions of procedures to be followed in using VLE technologies.	80.0	16.7	3.3
17.	VLE supports collaborative learning through its virtual software.	60.0	26.7	13.3
18.	Availability of virtual lab software designed and programmed in cooperation with high quality academic, research, and manufacturing institutions.	73.3	20.0	6.7
19.	Availability of electronic infrastructure, networks, and physical facilities for E-Delivery system.	90.0	6.7	3.3
20.	The choice of E-Delivery system should be based on the requirements of the principles of science of instruction and learning.	76.7	20.0	3.3
21.	Availability for simulation software suitable for the field under study in VLE.	56.7	40.0	3.3
22.	Usage of delivery systems and teaching paradigms suitable for the curriculum and virtual lab.	63.3	33.3	3.3
23.	Considering of electronic waste during planning phase of VLE as well as during conclusion of contracts with companies and institutions and agree of recycling of harmful electronic waste in safe methods.	60.0	33.3	6.7
1.2 Standards for Quality Instructional Design				
1.	There is a systematic process in designing, developing, and producing the curriculum to meet learner's cognitive, skills, and emotional needs and convert them to criteria in virtual module development.	60.0	23.3	16.7
2.	Design virtual and electronic modules to ensure cohesion and structure of content activities.	90.0	6.7	3.3
3.	Virtual module is developed on the bases of defining prerequisites and experiences in e-learning.	83.3	13.3	3.3
4.	Virtual module is developed on the bases of analysing the importance and advantages of the module from learner's prospective (Orienting Context), physical specifications of VLE (Instructional Context), and the chances for practicing newly acquired skills (Transfer Context).	60.0	40.0	-
5.	Course contains orientation activities and defined prerequisites to clarify learners' misconceptions.	66.7	33.3	-
6.	Content structure of concepts, principles, theories, and laws are defined using analysis suitable for the nature of knowledge and skills required to fulfill the module aims.	56.7	43.3	-
7.	Instructional criteria of virtual module is developed using suitable tools such as storyboarding and scenarios.	76.7	23.3	-
8.	Apply formative assessment by using Alpha and Beta testing during the production of the module to improve it according to assessment results.	66.7	33.3	-
9.	During design phase data collection procedures for module evaluation and learners' training and support are all defined.	73.3	26.7	-
10.	During design phase overall assessment procedures are defined and periodical reviews of virtual module to ensure its efficiency and competency.	70.0	26.7	3.3

	Statement			
1. Design Standards	11.	Comprehensive syllabus of the module that clearly describe its aims and requirements on the web before commencing teaching the module in VLE.	73.3	26.7	-
	12.	Virtual module syllabus describes skills and methods of performance evaluation.	83.3	13.3	3.3
	13.	Module aims are formulated in procedural behavioural and measurable approach.	76.7	20.0	3.3
	14.	Module aims should be achievable in light of learners' characteristics.	83.3	10.0	6.7
	15.	Virtual module aims should be related to pedagogical strategies, content, learning activities and performance evaluation as an integrated system.	83.3	10.0	6.7
	16.	Virtual module aims support higher order thinking skills such as critical thinking, Meta cognition, creative thinking, and decision making.	90.0	10.0	-
	17.	Aims are based on life skills and continuous realistic applications in VLE.	83.3	13.3	3.3
	18.	Content should be of high quality and carefully designed in terms of novelty and originality and flawless.	76.7	23.3	-
	19.	Content should be flexible to cover varied VLE applications	83.3	16.7	-
	20.	Content is designed and presented in purposeful organized chunks that facilitate learning.	83.3	13.3	3.3
	21.	Content include trusted external links chosen of high quality and standard to benefit supporting virtual learning module activities and aims.	73.3	20.0	6.7
	22.	Instructional content is logically connected and based on learner's previous experiences	66.7	33.3	-
	23.	Unified user interface through out the VLE for control icons, browsing, and links.	68.7	10.0	3.3
	24.	Virtual module boost learner's self esteem and capability to achieve virtual learning aims through skills and tools of self learning and evaluating included in the module.	83.3	16.7	-
	25.	Course employs the use of visual thinking tools such as concept maps, logical organization of concepts, and visual maps.	70.0	26.7	3.3
	26.	Course employs learning strategies suitable for its aims and requirements, and learners' characteristics and individual differences between them using synchronous and asynchronous tools.	76.7	20.0	3.3
	27.	Availability of learning and teaching strategies and tools to assist learners with special needs.	83.3	16.7	-
	28.	Course uses enriching and active learning activities in accordance with teaching standards.	73.3	26.7	-
	29.	Learning activities offer links to enriching information suitable for learner's performance and progress.	72.3	26.7	-
	30.	Instructional content in VLE is progressive in difficulty and sophistication as the learner progress in studies.	66.7	30.0	3.3
	31.	Information is provided to learners on protocols of active learner-content, learner-teacher, and learner-learner interaction.	76.7	23.3	-
	32.	Course utilises suitable techniques and methods to provide sufficient feedback.	70.0	30.0	-

1. Design Standards					
	33.	Course encourages learners to provide feedback on course delivery and activities in secrecy.	76.7	20.0	3.3
	34.	VLE has an electronic forum for learners in which they express their educational needs, suggestions, problems, and challenges they face.	60.0	36.7	3.3
	35.	Multimedia design utilises the same basic principles of interface design (as well be noted in Technical Design Standards).	70.0	26.7	3.3
	36.	Course uses authentic and real assessment methods such as e-portfolio and self assessment.	80.0	13.3	6.7
	37.	Course goes through periodic review, continuous evaluation, and cost and performance measurement to ensure quality and compatibility with virtual learning programs of the institution.	80.0	20.0	-
	38.	Suitable decisions are made to improve virtual course effectiveness and efficiency according to evaluation outcome.	83.3	16.7	-
	39.	Availability of secure electronic system for submitting learners' tests and research papers.	73.3	26.7	-
	40.	E-receipt system to inform learners and teachers of correct and approved submission of tests and research papers.	80.0	16.7	3.3
	41.	Test E-Bank.	76.7	23.3	-
	42.	Encourage electronic collaborative projects and virtual teams.	76.7	20.0	3.3
	43.	E-publishing for learners and teachers work.	66.7	30.0	3.3
	1.3	**Standards for Quality Technical Design**			
	1.	Put technical and presentational interface design issues into consideration such as surfing, lists, icons, font size and type, control tools, and log in –log off VLE tools.	66.7	33.3	-
	2.	VLE is linked to institution's databases such as student database system and academic records database system.	66.7	33.3	-
	3.	VLE is linked to central library database.	86.7	13.3	-
	4.	Web technology is used to design VLE to allow access to it from any place.	70.0	26.7	3.3
	5.	VLE programming is compatible with varied operating systems such as Windows and Linux.	76.7	23.3	-
	6.	Server capacity is suitable with number of learners in VLE.	90.0	10.0	-
	7.	Each learner is allocated a space to store personal files and documents.	76.7	20.0	3.3
	8.	VLE contain repository to store instructional materials, activities, and learning resources.	73.3	23.3	3.3
	9.	All file types with different extensions can be uploaded and downloaded.	76.7	23.3	-
	10.	There are programs that facilitate team work such as e-calendar, bulletin boards, and forums.	80.0	16.7	3.3
	11.	Instructional content can be developed easily using user friendly software without the need for prior programming skills.	76.7	20.0	3.3
	12.	Availability of programs to design assessment and evaluation tools such as Visual Cert Exam.	83.3	16.7	-

1. Design Standards	13.	VLE contains RSS feeds and content can be accessed offline.	83.3	16.7	-
	14.	Simple user interface for VLE.	66.7	26.7	6.7
	15.	Two different user interface one for learners and the other for teachers since they perform different activities in VLE.	76.7	20.0	3.3
	16.	Unified interface throughout VLE.	83.3	13.3	3.3
	17.	Accessible page design in terms of font size and colure, control of audio materials volume, control of picture resolution, and availability of zooming for pictures.	73.3	13.3	13.3
	18.	Accessible design in terms of possibility to upload multimedia.	76.7	16.7	6.7
	19.	Home page for each learner that display information such as date of last visit, number of unread replies in a thread s/he started, or number of emails inbox.	70.0	26.7	3.3
	20.	Possibility to personalize pages for each learner using font size and colour and background	27.3	23.3	3.3
	21.	Special needs learners are put into consideration when designing VLE learners such as dyslexic, colour blind, and short sighted.	60.0	26.7	13.3
	22.	Suitable size icons with clear labels.	80.0	20.0	-
	23.	Clear drop down lists with logically related items.	70.0	26.7	3.3
	24.	Synchronous and asynchronous communication such as chat programs, forums, bulletin boards, email, and video and audio conferences.	80.7	16.7	3.3
	25.	Availability of sensory transformers such as virtual reality glasses, helmets, and gloves	83.3	13.3	3.3
	26.	Connect and use devices to interact with virtual reality in VLE such as data gloves and head mounted device and sense and motion transformers.	63.3	26.7	10.0
	27.	Each learner has unique username and password for signing in VLE.	66.7	20.0	13.3
	28.	Restricted learners' access to instructional content according to learner's or teaching progress (learners are only allowed access to lessons that have been taught).	80.0	16.7	3.3
	29.	Possibility to track learners' activities in VLE to evaluate their interaction with instructional content.	66.7	23.3	10.0
	30.	Create backup of VLE to save its content from lost in case of server failure.	73.3	26.7	-
	31.	Server should be chosen according to content volume, band width, hosted files i.e. text, audio, video, and picture, and programs executed by server such as Perl Script, Java Server Pages, Active Server Program.	83.3	16.7	-
	32.	Browser is used to access VLE.	70.7	26.7	3.3
	33.	Availability of media player for audio, picture, and text files.	80.0	20.0	-
	34.	VLE should contain a place to answer questions related to usage of VLE and virtual laboratories.	76.7	23.3	-
	35.	Browsing icons support back and forward move and scrolling up and down and using help button.	76.7	23.3	-

1. Design Standards	36.	Copies of some programs learners might need to brows VLE content such as Flash and Acrobat Reader.	80.0	20.0	-
	37.	VLE should contain all programs learners need to operate some learning resources such as MS Word and PowerPoint.	70.0	26.7	3.3
	38.	Another colour is used to distinguish electronic links in VLE.	76.7	23.3	-
	39.	Concepts used in the course are defined by creating hyperlink on the word which will open a small pop on window that includes the definition.	53.3	26.7	20.0
	40.	Navigation tools are designed in simple and easy to use way to move between content items.	53.3	43.3	3.3
	41.	Use of simple ideational maps to present course content.	70.0	76.7	3.3
	42.	All pages contain (Home) icon.	60.0	33.3	6.7
	43.	Use pictorial navigation tools such as pictorial icons.	83.3	13.3	3.3
	44.	Reduce text links in one paragraph to ensure non dispersion	63.3	30.0	6.7
	45.	Use hyperlinks in table of contents and pick lists.	56.7	36.7	6.7
	46.	Course is designed to correct all operating and use mistakes that users might fall in.	60.0	33.3	6.7
	47.	Security system against electronic attacks including encryption of data exchanged between learners and educational institutions via the Internet.	73.3	23.3	3.3
	48.	Availability of video and audio classes captured via webcams to activate cooperative learning environments in VLE.	66.7	26.7	6.7
	49.	Maintenance and technical support are continuously available for VLE.	73.3	23.3	3.3
	50.	Use wireless LAN networks for VLE.	63.3	26.7	10.0

Main Standard	Indicator	Degree of Importance %		
		3	2	1
2. Standards for Quality VLE Software	1. Programs are designed according to Internet protocols and standards.	70.0	26.7	3.3
	2. Availability of learning systems and educational content management system.	73.3	23.3	3.3
	3. Availability of automated packaging systems and standards tools.	80.0	16.7	3.3
	4. Preparation of qualified technical team to design and develop VLE with cooperation with an experienced consultant.	73.3	20.0	6.7
	5. Attention is paid to choose uncomplicated systems that do not require radical restructuring in present system and then develop system functions gradually.	73.3	23.3	3.3
	6. Establish portal systems that can provide and integrate suitable services for VLE.	76.7	20.0	3.3
	7. Availability of learning resources database programs i.e. handbook program, download programs, Microsoft Adope Reader, Acrobat, Internet Explorer and Netscape.	83.3	16.7	-
	8. Availability of Electronic portfolio program.	70.0	23.3	6.7
	9. General guidelines governing procurement and replacement of hardware and software. These guidelines always ensure development of hardware and software.	66.7	26.7	6.7
	10. Efficient infrastructure to undertake maintenance and repair operations for hardware and software.	76.7	16.7	6.7
	11. Security system to protect learners and teachers personal information, assessment and grades, and to protect VLE from viruses.	86.7	13.3	-
	12. Adapt virtual learning programs with the orientation and aims of educational institutions.	83.3	16.7	-
	13. Special programs to manage VLE and register learners in virtual learning course, and specify access rights for each user.	76.7	23.3	-
	14. Special programs that record the time a learner needed to achieve learning goals, perform activity, or conduct an experiment in virtual lab.	73.3	23.3	3.3
	15. Special programs to manage resources in VLE.	73.3	23.3	3.3
	16. Virtual lab programs contain tools that support the experiment such as graphs, animation, and statistical analysis software.	66.7	26.7	6.7
	17. Special program in VLE to develop social, behavioural, and active human communication skills to face the shortcomings of virtual learning.	63.3	33.3	3.3
	18. Special program that explain ethical, social, and cultural issues related to ICT use that is consistent with educational institution aims and orientation.	60.0	36.7	3.3
	19. Virtual laboratories software feature different environments to undertake experiments such as vacuum, water, air and dark environments.	83.3	16.7	-
	20. Virtual laboratories software features the possibility of self-assessment during solo performance of laboratory tests.	83.3	16.7	-

Main Standard	Indicator	Degree of Importance %		
		3	2	1
3. Support Standards	**3.1 Institutional Support**			
	1. Educational institution support for providing high quality LVE.	80.0	20.0	-
	2. Availability of strong support system for all input, process, and out put of VLE.	83.3	16.7	-
	3. Form policies and special system to support the development of virtual learning programs in VLE.	80.0	20.0	-
	4. Suitable technical criteria and financial commitment to VLE software.	86.7	13.3	-
	5. Educational institution management encourages and support virtual learning by accrediting this method of learning.	83.3	16.7	-
	6. Educational institution undertakes internal and external audits to reduce risk rate and to ensure quality control.	83.3	16.7	-
	7. Educational institution adopts system, policies, and regulations that support new VLE.	76.7	23.3	-
	8. Educational institution adopts systems, policies, and regulations that support virtual educational innovations.	76.7	20.0	3.3
	9. Provide sufficient finance to support VLE system and operation.	80.0	20.0	-
	10. Educational institution uses administrative accountability system to ensure quality control and productive usage of VLE resources.	76.7	23.3	-
	11. Encourage cooperation and partnership in resources such as e-library, distinct virtual applications, and faculty between Arab virtual universities through specific types of regulation and links to those resources (information clearing house, electronic indexes).	83.3	16.7	-
	12. Support, commitment, and continuous cooperation within educational institution to work with shared values and visions to ensure success and continuous development of quality in VLE.	83.3	13.3	3.3
	13. Extent to which salaries of supporting services workers attract job competencies to the field of virtual learning.	73.3	23.3	3.3
	14. Availability of long term plans to develop VLE's and their infrastructure.	76.7	20.0	3.3
	3.2 Student Support			
	1. Management system to provide registration and acceptance services in VLE.	83.3	13.3	3.3
	2. Provide learners with copies of the Student Guide to introduce them to testing system and how to answer questions besides using it as study skills guide.	83.3	16.7	-
	3. Establish a centre to assess learners' skills (proficiency assessment) to assess and develop learners' varied skills.	70.0	26.7	3.3
	4. Educational technology specialists to support students and to provide guidance and solution with regard to electronic resources technology.	73.3	23.3	3.3
	5. Availability of personalised lessons and multimedia via VLE.	60.0	33.3	6.7

3. Support Standards				
6. Lay a realistic strategy to develop and support self learning and enable learners of controlling their educational progress.	76.7	61.7	6.7
7. Availability of full and clear information for learners regarding the nature and requirements of virtual learning. Including information on the relation between achievement, attainment, assessment, academic progress, and number of hours approved.	83.3	16.7	-
8. Provide training on VLE and how to interact with it by publishing Student Guide on VLE.	66.7	30.0	3.3
9. Easy access to productivity tools, internet services, interactive media, and digital resources to enrich learning aims and activities.	76.7	20.0	3.3
10. Sufficient technical support to provide maintenance, technical assistance, operation, and upgrading technical infrastructure.	70.0	23.3	6.7
11. Start encouragement and incentives system such as giving Virtual Digital Creativity Award.	73.3	26.7	-
12. Availability of feature that enables answering learners' questions on issues related to virtual course.	76.7	23.3	-
13. Availability of help and guidance in all VLE pages.	66.7	33.3	-
14. Availability of assisting tools in virtual course such as multi-language dictionary, databases, calendar, statistical software, and translator.	63.3	36.7	-
15. Give learners a space to publish ideas and suggestions to their teachers and other learners without the use of email.	70.0	30.0	-
16. Availability of collective communication tools among learners in VLE.	73.3	23.3	3.3
17. Availability of contacting technical support for help when accessing the course.	73.3	23.3	3.3
18. Direction and guidance programs for new learners to ensure full understanding of VLE.	70.0	30.0	-
19. Continuously track services provided to learners in VLE through learners satisfaction survey.	80.0	20.0	-
20. Security software to protect learners' files, records, and results.	80.0	16.7	3.3
21. Receive feedback from learners on their virtual learning experience at the end of the course.	83.3	13.3	3.3
22. Availability of educational support for learners provided by teachers in VLE.	76.7	20.0	3.3
23. Provide training course for learners on how to use VLE and its advantages and characteristics before commencing teaching activities.	80.0	20.0	
3.3 Faculty Support 1. Continuous professional development training courses and provides professional development resources for faculty members working with VLE. That is to ensure efficient use of VLE and virtual learning programs.	80.0	20.0	-
2. Availability of specifications of ICT and pedagogical skills required for functioning within VLE and train faculty members on them.	76.7	23.3	-
3. Start encouragement and incentive system to encourage faculty in contributing and participating in developing VLE.	80.0	20.0	-

3. Support Standards				
4. Measure VLE performance and use benchmarking to compare it with other VLE's.	73.3	26.7	-
5. Start a scheme that focus on improving faculty members' talents, widen their horizons, and improve their efficiency in the field of virtual learning.	73.3	26.7	-
6. Develop training courses for faculty on using VLE materials and resources.	76.7	23.3	-
7. Develop criteria and indicators of faculty technical performance in VLE.	73.3	26.7	-
8. Develop professional development programs that focus on urgent problems of VLE and are directly related to faculty needs.	80.0	20.0	-
9. Adopt effective assessing methods and provide informative feedback to improve faculty performance.	73.3	26.7	-
10. Develop faculty performance through workshops to improve all components of VLE.	73.3	26.7	-
11. Provide resources, references, directions and guidance on effective use of the web in teaching virtual courses.	63.3	33.3	3.3
12. Use incentives to assist the process of increasing quality performance.	70.0	20.0	10.0
13. Support faculty members with tutors to assist them in VLE activities.	63.3	30.0	6.7
14. Faculty are offered a chance to express their opinions on purchasing and replacing ICT plans.	73.3	26.7	-
15. Annual budget for training faculty and other VLE member.	80.0	20.0	-
3.4 Technical Support			
1. Provide sufficient technical and maintenance support to keep VLE in state of readiness to perform operations and achieve aims.		16.7	-
2. Availability of special security measures i.e. learner PIN number and backup in case of system failure.	76.7	23.3	-
3. Provision of human, administrative, and technical resources to provide supporting services. Acceptable ratio is one faculty to 25 learners.	76.7	23.3	-
4. Train and develop administrative and technical human resources to ensure and improve quality of performance in VLE.	76.7	20.0	3.3
5. Provisions of virtual libraries equipped according to quality in virtual learning standards.	76.7	23.3	-
6. Provision of virtual labs and software according to quality in virtual learning standards.	80.0	20.0	-
7. Provision of suitable financial support to operate VLE and maintain quality.	76.7	23.3	-
8. Availability of administrative and technical team responsible for maintenance and technical support of hardware and networks in VLE.	76.7	23.3	-

Main Standard	Indicator	Degree of Importance %		
		3	2	1
4. Authority and Safety Standards	1. Create security system that protects secrecy of information.	80.0	20.0	-
	2. Hyperlinks link to safe sites that do not create problems for operating system and browser.	83.3	16.7	-
	3. Secure system that identifies each user to protect confidential information from manipulation and electronic espionage.	80.0	20.0	-
	4. Ask for information that distinguishes each learner from the other.	83.3	16.7	-
	5. Modifying information in virtual courses is not permitted without entering learner's unique PIN number.	83.3	16.7	-
	6. Virtual course is free of viruses and spyware.	83.3	16.7	-
	7. Provision of regulations and security protection for materials on synchronous networks.	73.3	23.3	3.3
	8. Availability of information of senior management with job title for academics.	66.7	26.7	6.7
	9. Provision of information on copyrighted materials in VLE.	73.3	26.7	-
	10. Provision of instructional content designers' emails to facilitate interaction with them.	73.3	23.3	3.3
	11. Identify the name of the body or educational institution that provides VLE.	63.3	30.0	6.7
	12. List the names of action team including programmers, technicians, engineers, and experts and state their qualifications and previous experiences.	66.7	23.3	10.0
	13. Preference resources, references, models, and designs that have been used in designing VLE.	70.0	26.7	3.3
	14. Assess and accredit VLE by other agencies responsible for quality and educational accreditation.	73.3	26.7	-
	15. Consider copyright, design, and intellectual property laws.	76.7	20.0	3.3
	16. Form suitable laws and policies to protect copyrights and intellectual property of instructional content produced by faculty.	80.0	20.0	-

Main Standard	Indicator	Degree of Importance %		
		3	2	1
5. Improvement and Review Standards	1. There are regulations and suitable activities to assess and review VLE design.	83.3	13.3	3.3
	2. There is assessment process and internal audit for VLE.	80.0	20.0	-
	3. There is external audit for e-learning programs.	70.0	30.0	-
	4. Learners are asked for their opinions during VLE review process.	66.7	30.0	3.3
	5. There are indicators of development and improvement in VLE in light of assessment and review results.	66.7	30.0	3.3
	6. There are indicators of periodical assessment and review for VLE programs, the results are used for improving VLE.	73.3	20.0	6.7
	7. Academic and administrative department in the educational institution (including senior management) participate in improvements and quality control in VLE.	80.0	20.0	-
	8. Assessment reports offer a holistic view on VLE performance including all components, programs, and output. They define strengths and weaknesses and improvement strategies.	80.0	20.0	-
	9. VLE assessment depends on input, process, and output with special focus on output quality.	73.3	23.3	3.3
	10. Administration design processes that ensure achieving acceptable standards as well as ensure continuing improvement in performance.	70.0	30.0	-
	11. Presence of a program that studies and analyses VLE and inform senior management staff about the quality of important aspects in VLE.	70.0	26.7	3.3
	12. Availability of important tools such as questionnaires to undertake a survey on quality of VLE parts and components, in a specific time frame for reviews, assessment, and results.	80.0	16.7	3.3
	13. Presence of periodic assessment procedures for VLE (internal and external) for academic accreditation purposes.	70.0	30.0	-
	14. Form Quality Improvement Team with members from different departments to review and improve VLE to ensure quality.	73.3	23.3	3.3

Main Standard	Indicator	Degree of Importance %		
		3	2	1
6. VLE Cost-Effectiveness Standards	1. Find low prices for Internet connection by making use of competition between Internet providing companies.	73.3	23.3	3.3
	2. Increase efficiency and competency of VLE and reduce drop out rate.	73.3	23.3	3.3
	3. The return value of designing and publishing a course is commensurate with the cost.	70.0	26.7	3.3
	4. There is no fee for using virtual courses.	70.0	20.0	10.0
	5. Access to websites and resources related to the course is free.	70.0	20.0	10.0
	6. Possibility to upload free resources and assisting programs that virtual course files needs to operate.	73.3	23.3	3.3
	7. Specialised department take on the responsibility of administrating and supervising the budget and accounts for VLE.	70.0	30.0	-
	8. Form a committee to review laws, regulations, academic, administrative and financial procedures in VLE.	76.7	23.3	-
	9. Availability of accounting and financial system to ensure quality in VLE.	86.7	13.3	-
	10. Extent to which costs and expenses of VLE are equal to those of other Arab and International virtual universities.	80.0	16.7	3.3
	11. Extent to which all components of VLE invest its financial, material, and human resources.	83.3	16.7	-

The Impact of Negative Affectivity, Job Satisfaction and Interpersonal Justice on Workplace Deviance in the Private Organizations

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ABSTRACT

Workplace deviance has become pervasive in most organizations today. Researchers conceptualized workplace deviance based on whether the offence is directed towards organizational or interpersonal deviances. This study examined the contributions of individual and situational factors towards workplace deviance in the private organizations. Workplace deviance was conceptualized as interpersonal deviance and organizational deviance. Self-administered survey was conducted on 160 employees who worked full-time. The findings of the study indicated that negative affectivity and interpersonal justice were positively and significantly correlated with both types of workplace deviance, and the correlations were low. However, job satisfaction was not correlated with organizational deviance and interpersonal deviance. Implications and suggestions for future research are also discussed.

Keywords: Interpersonal justice, job satisfaction, negative affectivity, workplace deviance

INTRODUCTION

In the recent years, the issue of workplace deviance (WD) has become pervasive in most

organizations and generated high concerns among organizational behaviour and human resource researchers (Appelbaum, Iaconi & Matousek, 2007; Bennett, Aquino, Reed & Thau, 2005; Krau, 2008; Spector & Fox, 2005). WD researchers have labelled the term differently, such as counterproductive behaviour (Sackett & Devore, 2002), antisocial behaviour (Giacolone & Greenberg, 1997) and misbehaviour (Vardi

& Weitz, 2004). Some previous researchers have focused on specific types of negative behaviour, such as misbehaviour (Vardi & Weitz, 2004), whistle blowing (Miceli & Near, 1992), and betrayal of trust (Elangovan & Shapiro, 1998). However, this focus has changed, whereby research on WD is narrowed into developing a unified construct and validated measures of WD behaviours (Bennett & Robinson, 2000). Bennett and Robinson (2000) defined WD behaviour as an occupational crime which may vary along a continuum of severity, ranging from minor acts (such as embarrassing colleagues, taking longer breaks, and leaving early) to serious acts such as sabotage and theft. Further examples of deviant behaviour include misuse of time at work, absenteeism, causing damages on employer's property, employees who are always late for work, use of drugs and alcohol, stealing from their employers, poor-quality of work and performing unsafe behaviours (Vardi & Weitz, 2004). Robinson and Bennett (2000) conceptualized WD as having two dimensions, depending on whether the offence is directed towards organizational or interpersonal. Some examples of interpersonal deviance are making fun of co-workers, acting rudely toward others, blaming co-workers for mistakes made on the job, and disobeying supervisor's instructions. Meanwhile, dragging out work to get overtime, stealing from the organizations, and taking office supplies without permission are some examples of organizational deviance. Using these two dimensions of WD (i.e. interpersonal

deviance and organizational deviance), Robinson and Bennett (2000) further identified four categories of WD, namely; production deviance, property deviance, political deviance and personal aggression.

In the Malaysian context, the issues of WD have been given a great deal of discussion in the public media concerning cases such as bribery, tardiness, dishonesty, poor work attitude, fraudulence, underperformance and fake medical claims (Abdul Rahman & Aizat, 2008; Abdul Rahman, 2008; Awanis, 2006). A study conducted by Global Corruption Barometer among employees in the Malaysian organizations found that corruption is prevalence and pervasive. Substance abuse (one of the forms of WD), dishonesty absenteeism, accident and employee turnover, poor work attitude and industrial accidents are also serious problems among employees in the Malaysian private organizations (Abdul Rahman, 2008). Awanis (2006) revealed in her research that taking longer breaks than acceptable, spending longer time fantasizing, saying something hurtful, and making fun of someone at work stand out to be the common forms of deviant behaviour in the Malaysian organizations. Despite the huge media coverage, empirical research conducted on WD is still lacking, especially among employees in private organizations. Abdul Rahman (2008) pointed out that there is no up-to-date statistics or empirical data regarding these deviant behaviours though various destructive behaviours have occurred and been reported by the Malaysian Labour Department.

The purpose of this study was to examine the factors contributing to WD behaviour among employees in the private organizations. The selected factors are job satisfaction, negative affectivity and interpersonal justice. The WD literature have noted that these factors have greatly contributed to deviant behaviours in organizations (Appelbaum & Shapiro, 2006; Bruck, Allen, & Spector, 2002; McCardle, 2007). In the Tenth Malaysia Plan, the nation is striving to accomplish Vision 2020 and to advance Malaysia towards high-income and developed nation status by 2020 (Malaysia, 2010). To achieve the mission and vision, it is vital to have a workforce which is characterized by creativity, innovations, ethics and high integrity. Good values and ethics are prerequisite to quality service in organizations. In line with this, the Malaysian government has launched several programmes that are aimed to inculcate desirable values such as honesty, discipline, integrity, dedication, accountability, trustworthiness and efficiency among Malaysian employees (Malaysia, 2010).

Therefore, this study is significant to individuals and organizations, as employees who do not commit to any form of WD will increase organizational stability and functionality. The findings of this study are expected to assist human resource personnel in playing more effective roles in managing, reducing, and preventing WD. By understanding the determinants of WD, the human resource personnel will also be in a better position to plan and implement effective policies, as well as practices,

towards reducing the prevalence of WD. In addition, the study contributes to the literature on WD in an international and cross-cultural context through investigation of WD in a non-western context.

This study took an interactionist perspective in supporting its research framework. Using this perspective, individual behaviours were conceptualized as a continuous and multi-directional interaction between individuals who possessed distinct traits and situations in which they encountered (Endler & Magnusson, 1976). The interactionist perspective takes a dual person context approach, suggesting that factors related to both individual (e.g. personality traits) and context are combined to influence behaviours (Magnusson, 1990). Mischel (1977) argued that the expression of individual dispositions (e.g. personality traits) is inhibited in situations that exert a strong influence on behaviour. Behaviours are more likely to reflect relevant traits when the situation is weak. For example, certain situation does not provide clear incentive, support or normative expectations of behaviour. According to Aquino, Galperin and Bennett (2004), most WD researchers are in line with the interactionist perspective, whereby they take into account the contributions of both person and environment variables in predicting WD behaviours. Following the interactionist perspective, this study offered a direct examination on the influence of individual characteristic (negative affectivity) and situational factors (procedural justice and job satisfaction) in

predicting WD. It should also be noted that most studies on WD have been centred in the North America and Europe (Abdul Rahman, 2008; Faridahwati, 2006; Smithikrai, 2008). Thus, most of the literature and studies cited in this paper are based mainly from the studies conducted in these regions.

The paper is organized as follows; it begins with a description of the phenomenon of WD in the Malaysian scenario, and followed by a review on the individual and situational variables and their relationships with WD, as well as several postulated hypotheses. The subsequent sections describe the research methodology, results and discussion are also discussed. The paper ends with a conclusion, as well as the implications and recommendations for future research.

LITERATURE REVIEW

WD Behaviour in Malaysia

Studies on WD among the local researchers have associated individual characteristics and organizational factors as predictors of WD (Faridahwati, 2003; Abdul Rahman, 2008). Abdul Rahman's (2008) study on the predictors of deviant behaviour among production employees in Penang showed that perceived leadership integrity was significantly correlated to organizational deviance compared to interpersonal deviance. In addition, there was no relationship between job satisfaction, job stress and WD. The study also noted that organizational commitment, organizational justice, and perceptions of organizational support were significantly correlated with

WD. In another study, Faridahwati (2003) revealed that saying hurtful things and making fun of someone at work stood out to be the common forms of WD among hotel employees. A subsequent study by Abdul Rahman (2008) concluded that personality traits (i.e., locus of control) moderated the relationship between employees' trust in organization and WD behaviour among production employees in a manufacturing organization. His study also found that trust in organization was correlated with employees' WD behaviour. In addition, he found three dominant forms of WD behaviour among employees, namely, production deviance, property deviance and interpersonal deviance. The results of his study concluded that organizational variables and work-related variables played important roles in influencing employees' attitude and deviant behaviour at the workplace. Collectively, all these studies demonstrated the prevalence of WD in the Malaysian organizations.

Another local survey conducted by Kommen Prufen Meckern Gehen (2004), an international audit, tax and advisory professional firm, indicated that 83% of the Malaysian public and private limited companies experienced fraud which is considered as a serious form of WD. What is more shocking is that this percentage has continuously increased as compared to the previous years. The survey also revealed that 23% out of 100 Malaysian large companies surveyed have been subjected to fraud, in which 70% of the cases reported were committed by employees (Zauwiyah & Mariati, 2008).

Aznira's (2006) study among 73 lecturers at one of the government colleges in Malaysia found that there was a negative and significant relationship between emotional intelligence and WD. Using a sample of 58 managers, executives and assistant executives in a private organization, Norhayati (2006) revealed that occupational stress was significantly correlated to WD, and the correlation is moderate. However, the study also found that demographic factors do not contribute to employees' WD. Mazni, Tong and Hishammuddin's (2008) interviews with human resource managers from various manufacturing industries showed that various forms of organizational and interpersonal deviance exist in the workplace. Some examples of deviant behaviours are harassment, spreading negative rumours, bullying, and physical attacks to co-workers. A more recent study by Zauwiyah and Hasmida (2009) found that age, gender, conscientiousness and organizational justice significantly predicted cyber loafing (a form of organizational deviance) among Malaysian employees.

Negative Affectivity and WD

Previous WD studies suggested that individual personality plays an important role in the manifestation of deviant behaviour in organizations (Neuman & Baron, 1998). In this study, negative affectivity was selected to represent the individual variable. Negative affectivity indicates the extent to which persons perceive level of distressing emotions, such as anger, hostility, fear and anxiety. Meanwhile,

past researchers (e.g., Aquino, Lewis & Bradfield, 1999; Appelbaum & Shapiro, 2006) also believe that individuals with high negative affectivity are predisposed to react more strongly to negative events when they occur. Studies revealed that high-negative affectivity individuals were more likely to engage in both types of WD behaviour compared to low-negative affectivity individuals (Goh, 2006). Goh (2006) further explained that individuals with high-negative affectivity were more likely to feel anxiety when they interacted with other people and perceived situations as annoying, frustrating and provocative. In short, negative affectivity was found to be related to interpersonal and organizational deviances, such as work avoidance, work sabotage, abusive behaviour, threats and overt attitudes. Based on the above, it was postulated that:

H_01: There is no significant contribution of negative affectivity towards interpersonal deviance.

H_02: There is no significant contribution of negative affectivity towards organizational deviance.

Job Satisfaction and WD

Job satisfaction is one of the situational variables involved in this study. It is defined as positive feelings about one's job, based on one's evaluation of job characteristics (Robbins & Judge, 2007). Job satisfaction also reveals the degree to which an employee is content with his or her job as a whole, which encompasses multiple aspects of one's job, such as the work itself,

the quality of interpersonal relationships, compensation and career advancement opportunities (Bruck *et al.*, 2002).

Zhang, Chen and Chen (2008) found that job dissatisfactions, which resulted from dissatisfying work situation, tend to be associated with higher level of WD. Individuals tend to retaliate against their organization by doing something that can harm the organization and/or their colleagues. A study conducted by Mulki, Jaramillo and Locander (2006) on 208 healthcare and social employees concluded that dissatisfied employees resorted to both types of deviant behaviours as a way to cope with frustration. Another study by Crede, Chernyshenko, Stark, Dalal and Bashshur (2007) found that job satisfaction was strongly and negatively correlated with both types of WD behaviour and job withdrawal among 950 university's staff. Therefore, the following hypotheses were put forward:

$H_0$3: There is no significant contribution of job satisfaction towards interpersonal deviance.

$H_0$4: There is no significant contribution of job satisfaction towards organizational deviance

Interpersonal Justice and WD

Interpersonal justice is another situational variable involved in this study which focused on individuals' perceptions on the quality of interpersonal treatment received during the execution of organizational decisions. Interactional justice is an important predictor of employees' responses or judgments about their supervisors (McCardle, 2007). Bies

and Moag (1986) found that insensitive or impersonal treatments were more likely to provoke intense emotional and behavioural response compared to other types of injustice such as distributive and procedural justice.

Aquino *et al*. (2004) indicated that the level of interpersonal injustice was positively related to individuals' tendency to conduct WD behaviours. Meanwhile, the level of individual's interpersonal justice could trigger deviant behaviours such as anger, resentment and moral outrage. A meta-analysis study by Colquitt, Conlon, Wesson, Porter and Ng (2001b) also supported the relationship between interpersonal justice and interpersonal deviance, as well as organizational deviance. They revealed that interpersonal justice was the strongest predictor of WD when other types of justice were controlled. Henle (2005) also found that deviant behaviours tend to occur among employees who perceived low interpersonal justice. Similarly, Ambrose, Seabright, and Schminke's (2002) research revealed that interactional justice was linked to the severity of sabotage (one form of organizational deviance). Based on the above, the following hypotheses were presented:

$H_0$5: There is no significant contribution of interpersonal justice towards interpersonal deviance.

$H_0$6: There is no significant contribution of interpersonal justice towards organizational deviance.

METHODOLOGY

Sample

This study was conducted on full-time workers from a variety of private organizations in the state of Malacca, Malaysia. Following Israel (1992), the sample size in this study was determined by the type of quantitative research data analysis. Using the analysis of G*Power (Erdfelder, Faul, & Bruchner, 1996), specifically for F-test in Multiple Regression, the total suggested sample size is 119 (effect size = 0.15, power = 0.95; numbers of predictors/independent variables = 3). The values of Alpha and power are acceptable for social science research, while the number of independent variables is determined from the research framework. G*Power is a reliable method for determining sample size because the calculation is based on the type of statistical analysis used for each investigation (Erdfelder *et al*., 1996). Likewise, Cohen (1988) suggested that the sample size determination should take into account the significant criterion (alpha), the desired degree of statistical power and effect size.

Since the number of samples required is at least 119 (based on G*Power analysis), we decided to send a total of 200 sets of questionnaire to the four types of industries (i.e., manufacturing, construction, services and trading). These industries were selected based on their major contributions to Malacca's economic growth (Data Asas Melaka, 2010). Based on a proportional stratified random sampling technique, a total of 50 sets of questionnaire were distributed to each industry involved.

Out of the 200 sent out questionnaires, 160 respondents responded to the surveys. The high response rate, i.e. 80%, was due to researchers' effort in building good rapport with the involved organizations through frequent follow-up calls and repeated visits. The respondents were support staff working at the selected organizations. The human resource managers of each organization were contacted prior to data collection for permission to enter the organizations. They were briefed about the study purposes and the research instrument. The questionnaires were distributed to the respondents who worked in various departments by the human resource managers. Using a cover letter, all respondents were assured that their returned questionnaires would be kept anonymous and confidential. The completed questionnaires were sent back to the human resource managers to be collected by the researchers.

Instrument

The research questionnaire was divided into two parts. The first part captures the respondent's socio demographic details, such as age, marital status, qualification, tenure and type of industry. The second part focuses on items relating to WD, i.e., negative affectivity, job satisfaction and procedural justice. WD instrument was adopted and adapted from Bennett and Robinson (2000), consisting of 11 items which responded on a five-point Likert scale ranging from 1 (never) to 5 (everyday).

The instrument measures interpersonal deviance (four items) and organizational deviance (seven items). Sample item for interpersonal deviance: "Said something hurtful to someone at work". Sample item for organizational deviance: "Taken a longer break at your workplace". In this study, the internal reliability coefficient was .89.

Negative affectivity was measured using Positive and Negative Affect Schedule (PANAS) which was developed by Watson, Clark and Tellegen (1988). It comprises of seven items which were rated on a five-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely). Items in PANAS describe negative emotions (e.g., irritable, upset, and afraid) and the respondents were asked to indicate the extent to which they generally perceived each emotion. High scores indicate high levels of negative affectivity, and vice-versa. The overall internal reliability for the present sample was .74.

Job satisfaction was assessed using the nine items of job satisfaction scale developed by Brayfield and Rothe (1951). The items were rated on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items are: "I am satisfied with my current job; I feel real enjoyment in my job". In this study, the reported internal consistency was .90.

Interpersonal justice was measured using the six items of interpersonal justice scale developed by Colquitt (2001a). The items are related to how they perceived that their supervisor/s have treated them at work, and this ranged from 1 (strongly disagree) to

5 (strongly agree). Sample items are: "My supervisor treats me in a polite manner; My supervisor treats me with dignity". In this study, the internal reliability coefficient was .87.

Data Analysis

Data were analyzed using descriptive analysis, Pearson Product-Moment Correlation Coefficient, and Multiple Stepwise Regression analysis. The construct validity of WD instrument (11 items) was established using factor analysis, with the principal component analysis method and varimax rotation. The results of the factor analysis produced two factors, with the total variance explained of 33.75% ($KMO = 0.857$). The factor loadings of 0.50 and above were considered as practically significant (Hair, Tatham, Anderson, & Black, 2006). The first factor, i.e. organizational deviance ($\alpha = 0.8$), consists of seven items. The second factor, i.e. interpersonal deviance ($\alpha = 0.7$), consists of four items. Subsequently, the Multiple Stepwise Regression was used to determine the contribution of the selected independent variables towards the criterion variable (interpersonal deviance and organizational deviance).

RESULTS

Table 1 shows the socio-demographic profile of the respondents. This study involved 55.6% male and 44.4% female employees. The age of respondents ranged from 21 to 50 years old. Majority of the respondents' age ranged from 21-30 years old. Most of them (60%) were married, followed by

single (33.1%) and divorced (6.9%). The respondents' levels of education ranged from secondary level (Sijil Pelajaran Malaysia) to degree level, with most of the respondents obtained their degree (44.4%). Half of the respondents (51.3%) reported to having work tenure of less than three years, while only 1.1% of the respondents stated that they have worked for more than ten years. Most of the respondents worked in the construction industry (37.5%), followed by 23.1% employed in the manufacturing sector, 23.8% laboured in the service sector, and 15.6% were from the trading industry.

TABLE 1
Descriptive statistics for demographic profile

Profile	N	(%)
Age (years)		
21-30	83	51.9
31-40	56	35.0
41-50	21	13.1
Education level		
SPM (Secondary level)	13	8.1
STPM (High school level)	33	20.6
Diploma	43	26.9
Degree	71	44.4
Type of Industry		
Manufacturing	37	23.1
Construction	60	37.5
Service	38	23.8
Trading	25	15.6
Gender		
Male	89	55.6
Female	71	44.4
Marital status		
Single	53	33.1
Married	96	60.0
Divorced	11	6.9

Table 1 (*continued*)

Tenure in organization		
Less than 3	82	51.3
4-6	58	36.3
7-9	18	11.3
More than 10	2	1.1

Table 2 shows the means, standard deviations (SD) and Pearson's inter-correlations of the individual variables used in this study. Job satisfaction was found to be not correlated with both interpersonal and organizational deviances. The table also reveals that there is a positive and low correlation between negative affectivity and organizational deviance ($r = .187$, $p < .01$), and a negligible and positive relationship between negative affectivity and interpersonal deviance ($r = .345$, $p < .01$). Interestingly, the correlation analysis indicated that interpersonal justice was negatively correlated with both organizational and interpersonal deviances, but the magnitude is negligible (organizational deviance: $r = -.172$, $p < .05$), (interpersonal deviance: $r = -.147$, $p < .05$). The inter-correlation values conclude that there is no potential multicollinearity problem (Cohen, 1988). To determine the contribution of the selected variables in this study (job satisfaction, negative affectivity and interpersonal justice) towards employees' WD behaviour, this study then embarked on the multiple stepwise regression analysis.

Two separate multiple stepwise regression analyses were carried out to test for the stated hypotheses. The hypotheses that posit the contribution of the independent

variables towards interpersonal deviance are $H_0 1$: There is no significant contribution of negative affectivity towards interpersonal deviance; $H_0 3$: There is no significant contribution of job satisfaction towards interpersonal deviance; and $H_0 5$: There is no significant contribution of interpersonal justice towards interpersonal deviance.

To test for these specific hypotheses ($H_0 1$, $H_0 3$, and $H_0 5$), the first regression analysis was conducted with "interpersonal deviance" as the dependent variable, whereas job satisfaction, negative affectivity and interpersonal justice as the independent variables. The regression model indicates that negative affectivity and interpersonal justice are two major predictors of employees' interpersonal deviance (see Table 3). The variable that was excluded from the model is job satisfaction. Table 3 shows that negative affectivity is a good predictor of interpersonal deviance, whereby negative affectivity contributed to the highest variation in interpersonal deviance ($\beta = 0.369$, $t = 4.995$; $p = 0.001$). Negative affectivity has a high β-coefficient ($\beta = 0.369$) which denotes that the variable has a moderate predictive value for employees' interpersonal deviance. This is followed by interpersonal justice which has significantly contributed to the variation in interpersonal deviance ($\beta = -0.194$, $t = -2.625$; $p = 0.001$). The result also implicates that the higher the employees' negative affectivity and the lesser the employees' interpersonal justice, the most likely that employees engage in interpersonal deviance at their workplace. Table 3 also indicates that the regression model explains 15.6% of the variance in employees' interpersonal deviance ($F = 6.889$, $p = 0.010$). This regression model also shows that negative affectivity and interpersonal justice explain 7.4% of the variance in organizational deviance ($F = 6.268$, $p < 0.01$). On the basis of these findings, we found no support for $H_0 1$ and $H_0 5$ for interpersonal deviance; however, we found support for $H_0 3$ for interpersonal deviance.

Subsequently, the second stepwise regression analysis was performed to test for the following hypotheses; $H_0 2$: There

TABLE 2
Correlations, Means and Standard Deviations of Study Variables

Variables	M	SD	Y_1	Y_2	X_1	X_2
Y_1	2.82	0.66				
Y_2	2.57	0.73	.598**			
X_1	3.28	0.68	.076	.007		
X_2	2.15	0.56	.187**	.345**	-.151*	
X_3	2.7	0.77	-.172*	-.147*	.069	.127

Notes:
Y_1 = Organizational deviance, Y_2 = Interpersonal deviance, X_1 = Job satisfaction,
X_2 = Negative affectivity, X_3 = Interpersonal justice.
** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

TABLE 3
Multiple stepwise linear regression on interpersonal deviance

	Unstandardized coefficients		Standardized coefficients	t	Sig
	B	Std error	Beta		
(Constant)	2.048	.269		7.599	.0001
Negative Affectivity	.480	.096	.369	4.995	.0001
Interpersonal justice	-.183	.070	-.194	-2.625	.0001

Note: R=0.395; R²=0.156; Adj. R²=0.145; F=6.889; p=0.010

is no significant contribution of negative affectivity towards organizational deviance; $H_0 4$: There is no significant contribution of job satisfaction towards organizational deviance; and $H_0 6$: There is no significant contribution of interpersonal justice towards organizational deviance.

In this study, organizational deviance was included as the dependent variable, whereas job satisfaction, negative affectivity and interpersonal justice as the independent variables. Table 4 indicates that two predictors were found to be significantly contributed to employees' organizational deviance. These predictors are negative affectivity (t = 2.738, p < 0.007, β = 0.212) and interpersonal justice (t = -2.575, p < 0.011, β = -0.199). It should be noted that the beta coefficients found in this analysis are very small, and therefore, they should be interpreted with caution (Field, 2009). Based on the largest beta coefficient obtained and the largest t value, it was therefore concluded that negative affectivity contributed to the highest variance in organizational deviance as compared to interpersonal justice. The variable that was excluded from the model is job satisfaction. The regression model denotes that the higher the employees' negative affectivity

and the lesser the employees' interpersonal justice, the most likely that employees will engage in organizational deviance at the workplace. This regression model also shows that negative affectivity and interpersonal justice explain 7.4% of the variance in organizational deviance (F = 6.268, p < 0.01). The negative affectivity alone explains 3.5% of the variance, while interpersonal justice only explains 3.9% of the variance in employees' organizational deviance. Given these patterns of the findings, we found no support for $H_0 2$ and $H_0 6$ for organizational deviance; however, we found support for $H_0 4$ for organizational deviance.

CONCLUSION, DISCUSSION AND IMPLICATIONS

This paper sought to investigate the factors related to person and environment in predicting WD among employees working in the private sector. In this study, negative affectivity was included as the person factor and job satisfaction as well as interpersonal justice as the environment factors. Six research hypotheses were posed in relation to the relationships between the study variables.

TABLE 4
Multiple stepwise linear regressions on organizational deviance

| | Unstandardized coefficients | | Standardized coefficients | t | Sig |
	B	Std error	Beta		
(Constant)	2.759	.255		10.802	.0001
Negative Affectivity	.249	.091	.212	2.738	.007
Interpersonal justice	-.170	.066	-.199	-2.575	.011

Note: R=0.272; R^2=0.074; Adj. R^2=0.062; F=6.630; p=0.011

The findings concluded that employees' WD was predicted by both person (negative affectivity) and environment factors (interpersonal justice). However, job satisfaction was not found to have contributed to employees' WD. Nevertheless, this study has shown that the person factor remains as the most explanatory power in explaining the phenomenon of employees' WD.

Meanwhile, the causes of WD behaviour have been studied at many different levels, such as the individual and the organizational levels. This study showed that at the individual level, WD behaviour could not be attributed by personality traits alone. Thus, this study highlighted the contribution of the interactionist perspective, i.e. a combination of personality traits and workplace situation (Peterson, 2002), by integrating these variables in its research framework. The findings of this study are consistent with the past WD findings that individual disposition exerts a strong influence on employees' workplace behaviour (e.g., Appelbaum & Shapiro, 2006; Aquino et al., 1999; Goh, 2006). Individuals with high negative affectivity are most likely to demonstrate deviant behaviour, and this is probably

because they are in jobs that are more prone towards deviant behaviour. Individuals working in different types of industries are exposed to different working contexts and organizational procedures. Appelbaum and Shapiro (2006) highlighted that employees with negative affectivity personality tend to have negative attitudes and feelings against their customers, organization, job, and even themselves across all situations. Moreover, they are most likely to feel anxiety when interacting with people (Appelbaum & Shapiro, 2006).

This study also supports the findings of the studies by Aquino et al. (1999), Colquitt et al. (2001b), and Ambrose et al. (2002), whereby interpersonal justice was found to contribute to both interpersonal and organizational deviances. This is probably due to the role of interpersonal justice that occurs in situations that are interpersonal in nature (such as interactions with colleagues or superiors). When the level of interpersonal justice, as perceived by the individuals, was lower such as when individuals perceived unfair interpersonal treatment from their supervisors or superiors, the tendency of the individuals to conduct WD would be higher

(Aquino *et al.*, 2004).

However, the result for job satisfaction in the current study is inconsistent with the findings of some previous WD studies (e.g., Hollinger & Clark, 1982; Zhang *et al.*, 2006; Mulki *et al.*, 2006; Crede *et al.*, 2007) which found that job satisfaction was significantly correlated with organizational and interpersonal deviances. The explanation for the insignificant result for job satisfaction in this study is probably due to the fact that most of the respondents were satisfied with their working conditions; therefore, enhanced their job satisfaction in the organization. Satisfied employees would contribute their efforts and assist the organization to reach its desired goals and objectives (Mulki *et al.*, 2006).

This study contributed to WD literature by examining both situational and individual factors on WD using data based on a non-western context. Organizations should play a vital role in their attempt to curb WD. Therefore, organizations should have a clear understanding of the disciplinary rules governing the workplace, such as the organizational policy on WD. The rules and regulations will send strong messages to employees who act defiantly, i.e. they will be punished accordingly. In addition, WD policy should also be made clear and transparent to all levels of employees. Training programmes and updated policy manual related to WD would be avenues in which WD policy can be made transparent.

As mentioned above, individuals having high negative affectivity will frequently experiencing negative emotion, and without effective control mechanisms, they will be more likely to commit deviant. In addition, the management should balance their emphasis by demonstrating high concern for people and productivity. High concern for people will alleviate high levels of interpersonal justice in the organization, which then help to reduce the occurrence of WD among employees.

Despite all the efforts and mechanisms provided to prevent WD, organizations should be able to integrate all the efforts from all parties involved, such as employees, employers and policy makers. It is the responsibility of each entity in the organizations to play his/her role in developing, promoting and obeying strategies and the rules of the organizations. In addition, Neuman and Baron (1998) suggested that personal screening, pre-employment testing, and carefully structured job interviews can assist in preventing WD by identifying potential offenders even before they enter the organizations. Organizational effort should also be given to the development of a human centred workplace culture based on respect, tolerance, team work, equal opportunity and support. Besides that, organizations should provide assistance and support to all employees and also ensure that employees are aware of these support systems. The supports cover their personal as well as professional matters.

LIMITATIONS OF THE STUDY

In this study, the authors were aware of

several factors that might have limited or affected the overall results. It is important to highlight that the study was based on a sample taken from only one occupational sector of private organizations. Therefore, caution needs to be taken when generalizing the findings to other sectors or to other types of occupation, such as the public organizations. Other than that, the accuracy of the data is largely dependent on the respondents' honesty in revealing their true experiences of WD. The respondents may have felt constrained to honestly express their perceptions of deviance because of their feelings of uncertainties with regard to confidentiality.

FUTURE STUDIES

Further studies are needed to clarify other personality variables (e.g., the Big Five) and other situational variables (e.g., other dimensions in organizational justice, such as procedural justice and distributive justice) that may have significant impacts on WD. Other groups of variables that may have potential in predicting WD are job-related variables (e.g., work stressors and job characteristics) and socio demographic variables (e.g., race and work shift). A different approach of study, such as a qualitative study, may also generate more fruitful findings because such studies may uncover other factors that contribute to WD as well as other dimensions of WD, apart from the organizational and interpersonal factors. Finally, future studies should also consider examining the interaction effect between personality and situational

variables and their impact on WD.

REFERENCES

Abdul Rahman A. R., & Aizat M. N. (2008). Trust in organizational and WD behavior, the moderating effect of locus of control. *International Journal of Business*, *10*, 211-235.

Abdul Rahman, A. R. (2008). Predictors of WD behavior in Malaysia. Unpublished Doctoral Thesis. Universiti Sains Malaysia, Malaysia.

Ambrose, M. L., Seabright, M. A., & Schminke, M. (2002). Sabotage in the workplace: The role of organizational injustice. *Organizational Behavior and Human Decision Processes*, *59*, 947-965.

Appelbaum, S. H., & Shapiro, B. T. (2006). Diagnosis and remedies for deviant workplace behaviors: Causes, impacts, and solutions. *Journal of American Academy of Business*, *9*(2), 14 -20.

Appelbaum, S., Iaconi, G. D., & Matousek, A. (2007). Positive and negative deviant behaviors: causes, impacts and solutions. *Corporate Governance, 7*, 586-598.

Aquino, K., Galperin, B., & Bennett, R. J. (2004). Social status and aggressiveness as moderators of the relationship between interactional justice and workplace deviance. *Journal of Applied Social Psychology*, *34*, 1001–1029.

Aquino, K., Lewis, M. U., & Bradfield, M. (1999). Justice constructs, negative affectivity, and employee deviance: a proposed model and empirical test. *Journal of Organizational Behavior, 20*, 1073-1091.

Awanis, K. I. (2006). *The relationship between deviant behavior among Mara employees in northern Malaysia and its predictors*. Unpublished Master Thesis. Universiti Sains Malaysia, Malaysia.

Aznira, A. Z. (2006). *Emotional intelligence and WD behavior*. (Unpublished Master Thesis dissertation) Universiti Sains Malaysia,

Malaysia.

Bennett, R. J., Aquino, K., Reed II, A., & Thau, S. (2005). The normative nature of employee deviance and the impact of moral identity. In S. Fox and P.E. Spector. (Eds.), *Counterproductive Work Behavior: Investigations of Actors and Targets* (pp. 107-125). Washington, DC: American Psychological Association.

Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of WD. *Journal of Applied Psychology*, *85*, 349-360.

Bies, R., & Moag, J. (1986). Interactional justice: Communication criteria of fairness. In R. Lewicki, M. Bazerman, & B. Sheppard (Eds.), *Research on negotiation in organizations* (pp. 43–55). Greenwich, CT: JAI Press.

Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, *35*, 307-311.

Bruck, C. S., Allen, T. D., & Spector, P. E. (2002). The relation between work-family conflict and job satisfaction: A finer-grained analysis. *Journal of Vocational Behavior*, *60*, 336-353.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.

Colquitt, J. A. (2001a). On the dimensionality of organizational justice: a construct validation of a measure. *Journal of Applied Psychology*, *86*, 386-400.

Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C., & Ng, K. Y. (2001b). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology, 86,* 425-445.

Crede, M., Chernyshenko, O. S., Stark, S., Dalal, R. S., & Bashshur, M. (2007). Job satisfaction as mediator: An assessment of job satisfaction's position within the nomological network. *Journal of Occupational and Organizational Psychology, 80*, 515-538.

Data Asas Melaka. (2010). Portal Rasmi Kerajaan Negeri Melaka. Retrieved on 24 March 2011, from http://www.melaka.gov.my/bm/muat-turun/21-data-asas-melaka-2010.html.

Elangovan, A. R., & Shapiro, D. L. (1998). Betrayal of trust in organizations. *Academy of Management Review*, *23*, 547-566.

Endler, N. S., & Magnusson, D. (1976). Toward an interactional psychology personality. *Psychological Bulletin, 83*, 956-974.

Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments, and Computers*, *28*, 1-11

Faridahwati, M. S. (2006). Organisational Misbehavior. *Akademika, 69*, 57-82

Faridahwati, M. S. (2003). WD among hotel employees: An exploratory survey. *Malaysian Management Journal, 7*, 17-33.

Field, A. (2009). *Discovering Statistics Using SPSS - and Sex, Drugs and Rock 'n' Roll (3rd edition)*. London: SAGE Publications Ltd.

Giacalone R. A., & Greenberg J. (1997). *Antisocial Behaviour in Organisations*. London: SAGE Publications Ltd.

Goh, A. (2006). *An attributional analysis of counterproductive work behavior (cwb) in response to occupational stress*. Unpublished Doctoral Dissertation, University of South Florida, United States.

Hair, J. F., Tatham, R., Anderson, R., & Black, W. (2006). *Multivariate Data Analysis*. Upper Saddle River, NJ: Prentice Hall.

Henle, C. A. (2005), Predicting WD from the interaction between organizational justice and personality. *Journal of Managerial Issues*, *17*, 247-63.

Hollinger, R., & Clark, J. (1982). Employee deviance: A response to the perceived quality of the work experience. *Work and Occupations*, *9*, 97-114.

Israel, G. D. (1992). *Determining sample size*. Gainesville, FL: Florida State University, Cooperative Extension Service.

Kommen Prufen Meckern Gehen Forensic. (2004). *Fraud Survey 2004*. KPMG International, Amsterdam.

Krau, E. (2008). Work, creativity, inventions and society. *Man and Work*, *16*, 45-54.

Magnusson, D. (1990). Personality development from an interactionist perspective. In L.A. Pervin (Ed.), *Handbook of Personality: Theory and Research* (pp. 193–224). New York: Guilford Press.

Malaysia. (2010). *Tenth Malaysia Plan 2011-2015*. Putrajaya: The Economic Planning Unit, Prime Minister's Department.

Mazni, A., Tong, Y. K., & Hishamuddin, I. (2008). *Human Resource Manager's Perspective on workplace violence, and its prevention mechanisms*. Symposium conducted at the National Management Conference. Universiti Darul Iman, Trengganu.

McCardle, G. J. (2007). *Organizational justice and WD: The role of organizational structure, powerlessness, and information salience*. Unpublished Doctoral Dissertation, University of Central Florida, Orlando.

Miceli, M. P., & Near, J. P. (1992). *Blowing the whistle: The organizational and legal implications for companies and employees*. New York: Lexington.

Mischel, W. (1977). The interaction of person and situation. In D. Magnusson, & N. S. Endler (Eds.). *Personality at the crossroads: Current issues in interactional psychology* (pp. 333-352). Hillsdale, NJ: Erlbaum.

Mulki, J. P., Jaramillo, F., & Locander, W. B. (2006). Emotional exhaustion and organizational deviance: Can the right job and a leader's style make a difference? *Journal of Business Research*, *59*, 1222–1230.

Norhayati, Z. (2006). *Occupational stress and WD behavior*. (Unpublished Master Thesis dissertation). Universiti Utara Malaysia, Malaysia.

Neuman, J. H., & Baron, R. A. (1998). Workplace violence and workplace aggression: Evidence concerning specific forms, potential causes, and preferred targets. *Journal of Management, 24*, 391-419.

Peterson, D. K. (2002). Deviant workplace behavior and the organization's ethical climate. *Journal of Business and Psychology*, *17*, 47-61.

Robbins, S. P., & Judge, T. A. (2007). *Organizational behavior (12th Ed.)*. Upper Saddle River, Pearson: Prentice Hall.

Robinson, S., & Bennett, R. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, *85*, 349-60.

Sackett, P. R., & DeVore, C. J. (2002). *Counterproductive behaviors at work*. In N. Anderson, D. S. Ones, H. K. Sinangil, & C. Viswesvaran (Eds.), *Handbook of industrial, work and organizational psychology: Personnel psychology* (pp. 145–164). London: Sage.

Smithikrai, C. (2008). Moderating effect of situational strength on the relationship between personality traits and counterproductive work behavior. *Asian Journal of Social Psychology*, *11*, 253-263

Spector, P. E., & Fox, S. (2005). The stressor-emotion model of counterproductive work behavior. In S. Fox, & P. E.Spector (Eds.), *Counterproductive work behavior: Investigations of actors and targets* (pp. 151–174). Washington, DC: American Psychological Association.

Vardi, Y., & Weitz, E. (2004). *Misbehavior in Organizations: Theory, Research, and Management*. London, NJ: Lawrence Erlbaum Associates.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.

Zauwiyah, A., & Mariati, N. (2008). The control environment, employee fraud and counterproductive workplace behaviour: An empirical analysis. *Communications of the IBIMA, 3*, 145–153.

Zauwiyah, A., & Hasmida, J. (2009). *Employees' attitudes towards cyberloafing in Malaysia*. Proceedings of 12th International Business Information Management Association (p. 409-418). Kuala Lumpur, Malaysia.

Zhang, S., Chen, X.P., & Chen, G. Q. (2008). *Interpersonal and collective group identities: Differential contribution to business security.* Research Paper sponsored by CIBER. Retrieved on March 8, 2010, from http://www7.gsb.columbia.edu/ciber/sites/default/files/09Zhang(1).pdf.

Exploring the Relationship between Attitude towards Laptop Usage and Laptop Utilisation: A Preliminary Study among Malaysian Science and Mathematics Teachers

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ABSTRACT

Realising the importance of ICT in the education system, the Malaysian Ministry of Education introduced the laptop initiative to integrate ICT into the students' learning environment. The laptop provides a unique feature which allows the integration of ICT into the education at anytime and anywhere. Based on the review of literature, teachers' attitude is seen as one of the significant indicators in influencing teacher's laptop utilisation. The objectives of this study were to explore the teachers' levels of laptop utilisation in terms of teaching and learning processes (TLP), lesson preparation and planning (LPP); teachers' level of attitude towards laptop usage; and also to examine the relationship between teachers' attitude towards laptop usage and laptop utilisation. Survey questionnaires were administered to 38 secondary school Mathematics and Science teachers. The results reported that the teachers' laptop utilisation was at the moderate level (TLP: M = 3.13, S.D. = 5.56 and LPP: M = 3.09, S.D. = 4.68) and these teachers showed positive attitude towards the laptop (M = 3.84, S.D. = 13.04). Furthermore, the findings also revealed that there was a significant positive correlation between teachers' attitude towards laptop usage and laptop utilisation (TLP: r = .69 and LPP: r = .44).

Keywords: Attitude, in-service teachers, laptop utilisation

INTRODUCTION

The Information and Communication Technology (ICT) is regarded as a major revolution and it has had a profound impact on education (Yee, Luan, Ayub & Mahmud, 2009). In order to compete with the rapid

growth of ICT, the Malaysian Ministry of Education (MoE) initiated a gateway to integrate ICT into the students' learning environment. Extensive innovations incorporating ICT have been diffused by MoE to enhance the instructional process. In line with this, the diffusion of innovations by Rogers (1962) was employed as the theoretical foundation of this particular study. The four fundamental elements in the diffusion of innovative ideas are innovation, communication channels, social system and time (Rogers, 1962; Rogers & Shoemaker, 1971; Rogers, 1986). Hence, the innovation is communicated via certain channels from an individual to another individual between the members in a social system over time (Rogers, 1962). The first element of the diffusion process refers to an idea, practice or object that is perceived as novel to the individual. Communication is a process of transmitting ideas from a source to a receiver via mass media or interpersonal channels. The third element of diffusion describes the social system as a population of individuals who are interrelated in joint problem solving to achieve a common goal. The fourth element in the analysis of the diffusion of innovations is time. The time element is involved in innovation-decision process, innovativeness, and rate of adoption (Rogers, 1986). Since the innovation-decision process is closely related to this research, it will be further discussed in the purpose of the study.

In this Information Age, accommodating an ICT based classroom environment requires the teachers to progressively familiarize themselves from being a knowledgeable presenter to a knowledgeable facilitator (Wong & Hanafi, 2007). In other words, the teachers' role ceases from being the main player to being the facilitator in the classrooms (Wong, Jalil, Ayub & Tang, 2003; Luan, Bakar, Mee & Ayub, 2010). Hence, teachers are expected to utilise the ICT gadgets, such as desktop computers, laptops, interactive whiteboards, smart boards, digital camera, data projector, printer and scanner to enhance students' learning. This present study particularly focused on the use of laptops among the teachers due to its own special features as compared to other ICT devices.

A unique characteristic that a laptop provides is it allows the integration of ICT into the education at anytime and anywhere. It was reported that teachers were able to try various teaching strategies that are different from their conventional methods with the help of the laptops as the instructional device (Walker & Rockman, 1997). Therefore, laptops can provide greater mobility and ease of changeover for the teachers in this advanced learning era for teaching and learning processes as well as for lesson preparation and planning purposes.

Laptops are known as "powerful instructional tools" (Falba, Grove, Anderson & Putney, 2001) which enable the teachers to integrate ICT into the classrooms. Moses, Khambari and Luan (2008a) conducted a comprehensive literature review to explore how teachers utilised the laptop and found that "educators use the laptop for more than

one purpose" (p. 109). Laptop utilisation was categorised by them into four different categories, namely teaching and learning processes, lesson preparation and planning, administration and management tasks, and lastly for communication purposes. A learning technology evaluation research was conducted by the Maine Education Policy Research Institute to examine how laptops were being used by the teachers (Silvernail & Harris, 2003). It was reported that the laptops were used by the teachers for different purposes, in which mostly were used for conducting research for lessons, developing instructional materials and to communicate with colleagues. Moreover, teachers could access up-to-date information easily and in a fast mode via the utilisation of laptop. Simultaneously, these teachers found that their lessons were up-to-date, extensive and provided ways for them to search for knowledge in depth. It was summarized in the evaluation report that a majority of the teachers utilised the laptops for lesson development and classroom instruction (Silvernail & Harris, 2003). This finding was corroborated by Khambari, Luan and Ayub (2010) who reported that the majority of teachers believed the usage of laptops were beneficial to their classroom instruction.

Mouza (2006) examined the ways in which elementary school teachers integrate laptops in their classrooms for instructional tasks. Through interviews and observations, Mouza (2006) found that the teachers integrated laptops for an extensive range of instructional practices consistently after gradually overcoming the difficulties in using the laptops. In the study, Mouza (2006) also summarised that the teachers utilised the laptops for teaching practices and lesson development. In other words, laptop utilisation in this study was categorised into two dimensions, namely the teaching and learning processes (TLP), and lesson preparation and planning (LPP) as these usage were generally reported by other researchers (Moses *et al.*, 2008a; Mouza, 2006; Silvernail & Harris, 2003).

Meanwhile, Idris, Loh, Mohd. Nor, Abdul Razak, and Md. Saad (2007) stated that at the end of the day, the teachers would be the ones that make a difference despite how well the curriculum, infrastructure or teaching aids were prepared. This was further affirmed when Liaw (2002) noted that "no matter how sophisticated and how capable the technology, its effective implementation depended upon the user having positive attitude towards it" (p. 18). The study revealed that when the users possessed more positive attitudes toward computers, they also possessed more positive attitudes toward Web atmospheres subsequently (Liaw, 2002). Attitude was defined by Ajzen and Fisherbein (2000) as an individual's degree to respond in a favourable or unfavourable approach with respect to a psychological object. Brown, Manogue and Rohlin (2002) expressed attitude as a combination of beliefs, thoughts and feelings that influence an individual to react in a positive or negative way. Thus, teachers need to possess a positive attitude towards laptop to successfully implement laptops in the TLP and LPP.

In addition, the attitude towards technology use acts as one of the key antecedents that influences the teachers to integrate technologies (Baylor & Ritchie, 2002; Kersaint, Horton, Stohl, & Garofalo, 2003; Teo, Lee, & Chai, 2008, Teo, Lee, Chai & Wong, 2009; Luan & Teo, 2009) into the classrooms. According to Hebert and Benbasat (1994), about 77% of the variance of intention to use the technology was explained by the users' attitude. A survey was conducted by Al-Khaldi and Al-Jabri (1998) to study the relationship between computer utilisation and attitudes. Based on the results, attitudes were found to affect the usage of computer and the strongest factor determined was computer liking, followed by confidence. Albirini (2006) conducted a study among the teachers in Syria and found that they have positive attitude towards the integration of ICT in the education system. This truly supports the findings by Abdullah, Zainol Abidin, Wong, Majid, and Hanafi (2006) who reported that most teachers have positive attitude towards computer use in their instructional delivery. Apart from that, Shapka and Ferrari (2003) carried out a study to investigate the computer-related attitudes of pre-service teachers. In their study, they examined the relationship between self-reported beliefs and the results of a challenging computer task. The findings revealed that attitudes were correlated with computer task and the relationship between the variables was strong.

A study on the usage of laptops was conducted by Khambari (2009) among Mathematics and Science teachers to investigate the relationship between laptop use and professional development. This quantitative study revealed that there was a moderate correlation between laptop use and professional development. In general, past studies pertaining to ICT application in education are used to support this present study as it shares some series of knowledge and features of laptop utilisation in the teaching environments. It shapes similar ideas since computers and laptops could be categorised as a subset or a component of ICT. Therefore, as pervious studies (Al-Khaldi & Al-Jabri, 1998; Shapka & Ferrari, 2003) have found that there is a relationship between computer use and attitudes, teachers' laptop utilisation may also have a relationship with their attitude towards laptop use.

PURPOSE OF THE STUDY

Primarily, Mathematics and Science teachers in Malaysia were given laptops by the government beginning from 2003 to be utilised as a device to assist their daily teaching task. This was to emphasize the use of technology in the learning interaction among the teachers and the students in both the subjects. As a consequence of the transformation to integrate technology using the laptop in the Mathematics and Science curricula, the teachers were expected to be proficient in handling the teaching tool. With the current impetus of technology in the teaching and learning environment, it is imperative to explore the teachers' attitude towards technology use as it has been identified as one of the significant

indicators in influencing teacher's utilisation of technology. According to Rogers (1986), the innovation-decision process comprising five steps is termed as "the mental process through which an individual or other decision-making unit passes from first knowledge of innovation, to forming an attitude toward the innovation, to a decision to adopt or reject, to implementation of the new idea, and to confirmation of this decision" (p. 118). The second decision-making step which involves the formation of an attitude refers to persuasion. Rogers and Shoemaker (1971) asserted that persuasion occurs within an individual when he or she forms a favourable or unfavourable attitude toward a new idea. Besides, they also stated that one of the major divisions of the innovation-decision process model is the antecedents which comprise the individual's personal characteristics, social characteristics and the strength of the perceived need of the idea. The uttered paradigm of personal characteristic is the attitude of an individual toward alteration.

There have been several studies reported on the teachers' attitude towards laptop use as the antecedent of laptop utilisation (Inan & Lowther, 2010; Moses *et al*., 2008a; Moses *et al*., 2008b). Thus far, there has been no study conducted to investigate the relationship between these two variables in the Malaysian context. For this reason, there is a need to comprehend whether a relationship exists between the teachers' attitude towards laptop use and the laptop utilisation among the Malaysian in-service Mathematics and Science teachers. The

objectives of the current study were: (a) to explore the Mathematics and Science teachers' levels of laptop utilisation in terms of TLP and LPP, (b) to explore the Mathematics and Science teachers' level of attitude towards laptop usage, and (c) to examine the relationship between teachers' attitude towards laptop usage and laptop utilisation (TLP and LPP).

METHODOLOGY

The method employed in this study was a quantitative descriptive research design. The data were gathered using questionnaires. The survey instruments were administered to 38 in-service Mathematics and Science teachers. This sample size was deemed adequate for this preliminary study as it surpassed the minimum sample size (N= 30) required for a correlational study (Gay, Mills, & Airasian, 2009). Ary, Jacobs, Razavieh, and Sorensen (2006) also asserted that correlational studies do not require a very large sample size. The selection of the teachers was done via simple random sampling. Four secondary schools located in the state of Selangor were randomly selected to participate in this study. The first author went to the respective schools personally to collect the data. Before distributing the questionnaires, the researcher elucidated the purpose of the study to each of the teachers. This was followed by giving explanation, while the questionnaires were administered and time was allocated according to the teachers' conveniences. Subsequently, the instruments were collected after the teachers had responded to the items. However, due

to time constraint, several teachers in two of the schools were not able to complete the questionnaires on that particular day. Hence, the researcher had to go to the respective schools on another day to collect the data. The majority of the teachers involved in this survey research were females (32 teachers) and the rest were males (6 teachers). Almost all of them (34 teachers, 89.5%) were provided with laptops by the school. However, the remaining four of them (10.5%) personally owned a laptop which enabled them to use it for instructional purposes.

The instrument had two separate sections with 5-point Likert scale items requiring the teachers to respond. The first section required the teachers to answer on the utilisation of laptop in TLP and LPP, whereas the second section needed the teachers to respond on their attitude towards laptop usage. The validity of the instrument was carefully evaluated and established via a validation process by four experts in the field of ICT.

The TLP and LPP scales were developed by the researchers based on the review of relevant literature. These scales were quantified on five different laptop utilisations ranging from "Never", "Rarely", "Sometimes", "Often", and "Always". All the 11 items (6 items for TLP and 5 items for LPP) were scored such as "Never" – 1 point, "Rarely" – 2 points, "Sometimes" – 3 points, "Often" – 4 points, and "Always" – 5 points. Higher scores indicate a higher level of laptop utilisation among the secondary school teachers and

vice versa. The maximum score for the TLP scale was 30 and the minimum score was 6. As for the LPP scale, the maximum score was 25 and the minimum possible score was 5. The indication of the levels for the TLP and LPP were generated by the researchers themselves (see Tables 1 and 2). According to Pallant (2006), the general alpha level of a scale should be above .70. In this study, the reliability coefficient value obtained was .90 for the TLP scale and .79 for the LPP scale. As such, these scales have an acceptable level of reliability as the values are higher than .70.

TABLE 1
Indication of Levels by Categorization of Summated Scores for TLP

Category of Scores	Level
Below 14.00	Low
Between 14.00 and 22.00	Moderate
Above 22.00	High

TABLE 2
Indication of Levels by Categorization of Summated Scores for LPP

Category of Scores	Level
Below 11.67	Low
Between 11.67 and 18.33	Moderate
Above 18.33	High

The attitude scale used in the survey instrument was entailed to measure teachers' attitude towards the laptop and it was developed by Albirini (2006). Permission to use, modify and translate the instrument was obtained from Albirini by the researchers. Double-barrelled items were amended to make them clearer and understandable whereas one of the items was omitted from

the scale due to its irrelevancy. Apart from modifications, six additional items were constructed by the researchers to meet the purpose of the study. In total, therefore, the attitude scale consisted of 26 items. The scale was quantified on five different rating of attitude towards the laptop ranging from "Strongly Disagree", "Disagree", "Neutral", "Agree", and "Strongly Agree". Each of the items in the scale was scored as "Strongly Disagree" - 1 point, "Disagree" - 2 points, "Neutral" - 3 points, "Agree" - 4 points, and "Strongly Agree" - 5 points. Reliability testing by Albirini (2006) yielded a Cronbach's alpha value of .90 for the attitude scale. However, the reliability coefficient value obtained for this study was slightly higher, i.e. .93. The total summated scores for teachers' attitude towards laptop usage ranged from 26 to 130. The researchers also generated the indication of levels by categorising the summated scores for teachers' attitude towards laptop usage (see Table 3). The scores approaching the minimum score denote a negative attitude of the teachers whereas the scores approaching the maximum score indicate a positive attitude of the teachers towards laptop usage. All the negative items in this scale were reverse scored before the computation of the data analysis.

TABLE 3
Indication of Levels by Categorisation of Summated Scores for Teachers' Attitude towards Laptop Usage

Category of Scores	Level
Below 60.67	Negative
Between 60.67 and 95.33	Neutral
Above 95.33	Positive

Data collected in this study were analysed through two different approaches, namely, descriptive statistics and inferential statistics using SPSS Version 17.0. Descriptive statistics such as mean scores and standard deviations were calculated for the dependent variables (laptop utilisation in TLP and LPP) and independent variable (attitude towards laptop usage). A correlational analysis was performed to determine the relationship between teachers' attitude towards laptop usage and laptop utilisation (TLP and LPP).

RESULTS

Laptop Utilisation among In-service Mathematics and Science Teachers

Laptop utilisation among the secondary school Mathematics and Science teachers was measured via two dimensions, namely the usage of laptop in the TLP and LPP. The TLP dimension measures the use of laptop in the teaching and learning processes among the Mathematics and Science teachers (Table 4).

Less than one third of the teachers (26.3%, M = 3.66, S.D. = 1.17) used the laptop sometimes for the teaching and learning processes. Meanwhile, nearly half of the teachers (47.4%, M = 3.11, S.D. = 1.01) reported that they sometimes utilised the laptop to facilitate the various pedagogical approaches in the teaching and learning process, such as collaborative learning and problem-based learning. About one third of the teachers (34.2%, M = 3.61, S.D. = 1.10) used the laptop often to provide detailed explanation to the students during the teaching and learning processes. Most

TABLE 4
Descriptive Statistics for TLP Scale

Item	Never	Rarely	Sometimes	Often	Always	M	S. D.
	f	f	f	f	f		
	(%)	(%)	(%)	(%)	(%)		
I use the laptop in the teaching-learning process.	1 (2.6)	6 (15.8)	10 (26.3)	9 (23.7)	12 (13.6)	3.66	1.17
I use the laptop to facilitate various pedagogical approaches (e.g., collaborative learning, problem-based learning, etc.).	3 (7.9)	5 (13.2)	18 (47.4)	12 (23.7)	3 (7.9)	3.11	1.01
I use the laptop to provide detailed explanations (e.g., visual aids, etc.) during the teaching-learning process.	1 (2.6)	6 (15.8)	9 (23.7)	13 (34.2)	9 (23.7)	3.61	1.10
I use the laptop to show examples (e.g., pictures, animation, audio, video, etc.) to enhance students' learning.	2 (5.3)	3 (7.9)	16 (42.1)	7 (18.4)	10 (26.3)	3.53	1.13
I use the laptop to facilitate the use of relevant Internet resources during the teaching-learning process.	10 (26.3)	10 (26.3)	9 (23.7)	5 (13.2)	4 (10.5)	2.55	1.31
I create a conducive learning environment (e.g., educational flash, jokes, music, etc.) using the laptop to motivate the students to learn.	11 (28.9)	8 (21.1)	16 (42.1)	1 (2.6)	2 (5.3)	2.34	1.10

of the teachers (42.1%, M = 3.53, S.D. = 1.13) utilised the laptop sometimes to show examples such as pictures, animation, audio and video to enhance the students' learning. Equal percentages of the teachers (26.3%, M = 2.55, S.D. = 1.31) reported that they never and rarely used the laptop to facilitate the use of relevant Internet resources during the teaching and learning practices. Majority of the teachers (42.1%, M = 2.34, S.D. = 1.10) reported that they created a conducive learning environment using the laptop sometimes to motivate their students to learn.

Based on the results for laptop

utilisation in TLP, the item "I use the laptop in the teaching-learning process" scored the highest mean (3.66, S.D. = 1.17). On the contrary, the item with the lowest mean score was "I create a conducive learning environment (e.g., educational flash, jokes, music, etc.) using the laptop to motivate the students to learn" with the value of 2.34 (S.D. = 1.10). Thus, the mean score for item 1 showed that the teachers mainly used the laptop in the teaching and learning processes as a whole compared to the other items in TLP.

The second dimension measured the

TABLE 5
Descriptive Statistics for LPP Scale

Item	Never	Rarely	Sometimes	Often	Always	M	S. D.
	f	f	f	f	f		
	(%)	(%)	(%)	(%)	(%)		
I use the laptop to prepare my lesson plan.	13 (34.2)	7 (18.4)	6 (15.8)	7 (18.4)	5 (13.2)	2.58	1.46
I use the laptop to design instructional materials that can attract my students' interest.	2 (5.3)	11 (28.9)	14 (36.8)	6 (15.8)	5 (13.2)	3.03	1.10
I develop teaching materials (e.g., presentation slides, videos, etc.) to be used in the class using the laptop.	4 (10.5)	12 (31.6)	11 (28.9)	7 (18.4)	4 (10.5)	2.87	1.17
I use the laptop to prepare handouts (e.g., quiz, notes, homework, etc.) for the students.	2 (5.3)	4 (10.5)	13 (34.2)	8 (21.1)	11 (28.9)	3.58	1.18
I use the laptop to search for teaching resources from the Internet.	4 (10.5)	9 (23.7)	4 (10.5)	11 (28.9)	10 (26.3)	3.37	1.38

utilisation of laptops in the LPP among the teachers (see Table 5).

The percentage of the teachers (34.2%) who reported that they never used the laptop to prepare lesson plan (M = 2.58, S.D. = 1.46) is equivalent to the teachers who used the laptop sometimes to prepare handouts such as quizzes, notes and homework for the students (M = 3.58, S.D. = 1.18). More than one third of them (36.8%, M = 3.03, S.D. = 1.10) use the laptop sometimes to design instructional materials that can attract the students' interest. About one third of the teachers (31.6%, M = 2.87, S.D. = 1.17) stated that they rarely use the laptop to develop teaching materials such as presentation slides and videos to be used in the class. Meanwhile, less than one third of the teachers (28.9%, M = 3.37, S.D. = 1.38)

often use the laptop to search for teaching resources from the Internet.

The statement with the highest mean score for this dimension was "I use the laptop to prepare handouts (e.g., quiz, notes, homework etc.) for the students" (M = 3.58, S.D. = 1.18) and the item "I use the laptop to prepare my lesson plan" scored the lowest mean score among the other items (M = 2.58, S. D. = 1.46). As a result, these teachers utilise the laptop more frequently to prepare handouts for the students compared to the other tasks described under the LPP dimension.

Descriptive statistics were carried out to explore the in-service secondary school Mathematics and Science teachers' levels of laptop utilisation in terms of TLP and LPP as shown in Table 6. The laptop utilisation

TABLE 6
Descriptive Statistics for Laptop Utilisation

		Mean	Standard Deviation	Summated Score	Level
Laptop Utilisation	TLP	3.13	5.56	18.79	Moderate
	LPP	3.09	4.68	15.42	Moderate

mean scores obtained for TLP (M = 3.13, S.D. = 5.56) is higher than the mean scores for LPP (M = 3.09, S.D. = 4.68).

There were three out of the six items in TLP that scored above the mean of means for TLP. As for the second dimension, there were two items that scored above the mean of means for LPP. Hence, the Mathematics and Science teachers generally utilise the laptops more regularly for the teaching and learning practices compared to lesson preparation. However, according to the summated scores calculated, the teachers' use of laptop for both the dimensions (TLP = 18.79, TPP = 15.42) was found to be at the moderate level.

In-service Mathematics and Science Teachers' Attitude towards Laptop Usage

The findings concerning the teachers' attitude towards laptop usage are given in Table 7. Generally, most of the teachers disagreed or agreed with the items in the attitude scale.

The teachers agree that they are glad there are more teachers using the laptops these days (reported as the highest percentage - 78.9%; M = 3.84, S.D. = 0.59), followed by other items such as "I like to use the laptop because it is portable" (76.3%, M = 4.08, S.D. = 0.49), "Using the laptop in lessons can motivate the students

to learn" (71.1%, M = 4.03, S.D. = 0.55), "I would like to use the laptop for teaching-learning process more frequently" (71.1%, M = 3.97, S.D. = 0.68), "Using the laptop does not scare me at all" (68.4%, M = 4.18, S.D. = 0.61), "The laptop is an efficient tool to access information from anywhere" (68.4%, M = 4.18, S.D. = 0.61) and "Using the laptop is enjoyable" (60.5%, M = 4.03, S.D. = 0.64). About one third of the teachers (39.5%) agree that they are anxious about laptop security (M = 2.39, S.D. = 0.97). However, a fraction of them (36.8%) support the need of laptops in every subject (M = 3.29, S.D. = 0.93).

On the contrary, several items that scored the highest percentages of disagreement among the teachers include "I do not like talking to others about laptop" (68.4%, M = 3.71, S.D. = 0.69), "I do not like to use the laptop because of virus attack" (60.5%, M = 3.53, S.D. = 0.95) and "I have no intention to use the laptop in the future" (60.5%, M = 4.11, S.D. = 0.69). Less than half of them disagreed with the statements, such as "I dislike using the laptop in teaching" (44.7%, M = 3.74, S.D. = 1.06), "I do not think I would need the laptop in my classroom" (44.7%, M = 3.68, S.D. = 1.02) and "I would do things manually rather than using the laptop" (42.1%, M = 3.82, S.D. = 0.90).

Based on the results, the highest mean

TABLE 7
Descriptive Statistics for Teachers' Attitude towards Laptop Usage Scale

Item	Strongly Disagree f (%)	Disagree f (%)	Neutral f (%)	Agree f (%)	Strongly Agree f (%)	M	S. D.
Using the laptop does not scare me at all.	0 (0.0)	1 (2.6)	1 (2.6)	26 (68.4)	10 (26.3)	4.18	0.61
Using the laptop makes me feel uncomfortable.*	8 (21.1)	19 (50.0)	6 (15.8)	5 (13.2)	0 (0.0)	3.79	0.94
I am glad there are more teachers using the laptops these days.	0 (0.0)	2 (5.3)	4 (10.5)	30 (78.9)	2 (5.3)	3.84	0.59
I do not like talking to others about laptop.*	2 (5.3)	26 (68.4)	7 (18.4)	3 (7.9)	0 (0.0)	3.71	0.69
I do not like to use the laptop because of virus attack.*	3 (7.9)	23 (60.5)	3 (7.9)	9 (23.7)	0 (0.0)	3.53	0.95
I like to use the laptop because it is portable.	0 (0.0)	0 (0.0)	3 (7.9)	29 (76.3)	6 (15.8)	4.08	0.49
Using the laptop is enjoyable.	0 (0.0)	0 (0.0)	7 (18.4)	23 (60.5)	8 (21.1)	4.03	0.64
I am anxious about laptop security.*	0 (0.0)	6 (15.8)	10 (26.3)	15 (39.5)	7 (18.4)	2.39	0.97
I dislike using the laptop in teaching.*	9 (23.7)	17 (44.7)	6 (15.8)	5 (13.2)	1 (2.6)	3.74	1.06
Using the laptop saves time.	0 (0.0)	6 (15.8)	4 (10.5)	19 (50.0)	9 (23.7)	3.82	0.98
Using the laptop saves my effort.	0 (0.0)	7 (18.4)	4 (10.5)	19 (50.0)	8 (21.1)	3.74	1.01
Schools would be a better place without the usage of laptops.*	9 (23.7)	19 (50.0)	5 (13.2)	4 (10.5)	1 (2.6)	3.82	1.01
Teachers need to use the laptops in all subjects.	0 (0.0)	9 (23.7)	12 (31.6)	14 (36.8)	3 (7.9)	3.29	0.93
Learning how to use the laptop is a waste of time.*	11 (28.9)	22 (57.9)	3 (7.9)	2 (5.3)	0 (0.0)	4.11	0.76
Using the laptop in lessons can motivate the students to learn.	0 (0.0)	0 (0.0)	5 (13.2)	27 (71.1)	6 (15.8)	4.03	0.55
The laptop is an efficient tool to access information from anywhere.	0 (0.0)	1 (2.6)	1 (2.6)	26 (68.4)	10 (26.3)	4.18	.61
I do not think I would need the laptop in my classroom.*	8 (21.1)	17 (44.7)	6 (15.8)	7 (18.4)	0 (0.0)	3.68	1.02

Table 7 (*continued*)

The laptop enhances the students' learning.	0 (0.0)	1 (2.6)	8 (21.1)	22 (57.9)	7 (18.4)	3.92	0.71
The laptop brings more disadvantages than advantages in my teaching.*	9 (23.7)	19 (50.0)	6 (15.8)	3 (7.9)	1 (2.6)	3.84	0.97
I would do things manually rather than using the laptop.*	9 (23.7)	16 (42.1)	10 (26.3)	3 (7.9)	0 (0.0)	3.82	0.90
I would avoid using the laptop as much as possible.*	9 (23.7)	20 (52.6)	7 (18.4)	2 (5.3)	0 (0.0)	3.95	0.80
I would like to learn more on how to use the laptop.	0 (0.0)	2 (5.3)	0 (0.0)	22 (57.9)	14 (36.8)	4.26	0.72
I have no intention to use the laptop in the future.*	10 (26.3)	23 (60.5)	4 (10.5)	1 (2.6)	0 (0.0)	4.11	0.69
I would like to use the laptop for teaching-learning process more frequently.	0 (0.0)	2 (5.3)	3 (7.9)	27 (71.1)	6 (15.8)	3.97	0.68
I do not like to explore the laptop by myself.*	7 (18.4)	19 (50.0)	7 (18.4)	5 (13.2)	0 (0.0)	3.74	0.92
I am willing to attend more training to learn about the usage of the laptop.	0 (0.0)	1 (2.6)	4 (10.5)	21 (55.3)	12 (31.6)	4.16	0.72

* *Negative items*

TABLE 8
Descriptive Statistics for Teachers' Attitude towards Laptop Usage

	Mean	Standard Deviation	Summated Score	Level
Attitude towards Laptop Usage	3.84	13.04	99.71	Positive

score is 4.26 (S.D. = 0.72), which is for the item "I would like to learn more on how to use the laptop". Teachers reported that they have very favourable thoughts of learning to use the laptop compared to other attitude statements. On the other hand, the item with the lowest mean score was "I am anxious about laptop security" (M = 2.39, S. D. = 0.97).

As illustrated in Table 8, the descriptive analysis was performed to explore the in-service secondary school Mathematics and Science teachers' attitude towards laptop usage. The mean computed from the data for the teachers' attitude towards laptop usage was 3.84 (S.D. = 13.04).

In total, 12 items scored above the mean of means and two items scored equally same, with the mean of means for this scale. It can be concluded that the teachers have a positive attitude towards the laptop as the summated score reported is relatively high (99.71).

The Relationship between Teachers' Attitude towards Laptop Usage and Laptop Utilisation (TLP and LPP)

Assumptions testing for normality, linearity, and homoscedasticity were performed on the collected data. Normality testing was individually done on each of the variables and it was found that the variables were normally distributed. The relationships between the variables were assumed to be linear and the variability in scores for the variables was found to be similar. Hence, the preliminary analyses conducted revealed that there were no violations of assumptions. Scatterplots were used to check for the assumptions and distribution of the variables involved.

This scatterplot (Fig.1) indicates a positive relationship between the variables, suggesting that the high scores on the teachers' attitude towards laptop usage are associated with the secondary school Mathematics and Science teachers' high scores on the laptop utilisation in the teaching and learning processes.

The relationship between the teachers' attitude towards laptop usage and dimensions of laptop utilisation was determined using the Pearson product-moment correlation coefficient. The findings are presented in Table 9. Based on the results, there was a large (Cohen, 1988), positive correlation between teachers' attitude towards laptop usage and laptop utilisation in TLP ($r = .69$, $n = 38$, $p < .0005$). A correlation coefficient of 0.69 indicates that there is a large linear relationship between both the variables. It means, as the scores for attitude towards laptop usage increases, so will the scores for the utilisation of laptop for TLP.

TABLE 9
The Pearson Product-Moment Correlation between the Teachers' Attitude towards Laptop Usage and TLP

	Laptop Utilisation
	TLP
Attitude towards Laptop Usage	.69*

* Correlation is significant at .01 level (2-tailed)
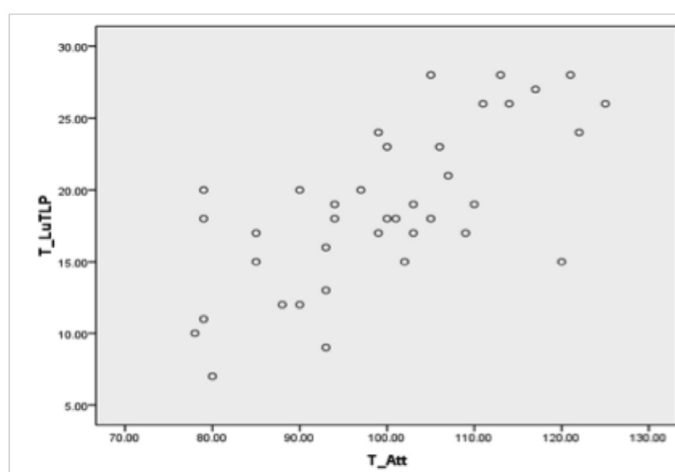
Fig.1: Distribution of the Teachers' Attitude towards Laptop Usage and Laptop Utilisation in TLP

The scatterplot depicted in Figure 2 denotes a positive relationship between both the variables. This explains that the high scores on the teachers' attitude towards laptop usage are associated with the high scores on the laptop utilisation of the secondary school Mathematics and Science teachers in the lesson preparation and planning.

As for the second dimension (Table 10), it was reported that there was a medium (Cohen, 1988), positive correlation between teachers' attitude towards laptop usage and laptop utilisation in LPP ($r = .44$, n = 38, p < .0005). This shows that on average basis, teachers who have a more positive attitude towards laptop usage use the laptop more for LPP.

TABLE 10
Pearson Product-Moment Correlation between Teachers' Attitude towards Laptop Usage and LPP

| | Laptop Utilisation |
	LPP
Attitude towards Laptop Usage	.44*

* Correlation is significant at .01 level (2-tailed)

DISCUSSION

This study investigated a sample of 38 in-service secondary school Mathematics and Science teachers. The teachers' level of laptop utilisation was measured in two dimensions, namely TLP and LPP. Based on the computed data, it was reported that the teachers' laptop utilisation in both TLP and LPP was at the moderate level. Laptop utilisation in terms of TLP and LPP was categorised under the same level because the teachers basically use the laptop for the teaching and learning processes if they utilise it to prepare for their lessons and materials. Therefore, the teachers who utilise the laptop for LPP would also utilise the laptop for TLP and vice versa. However, the level of use was reported as moderate as some of the teachers might have the thinking that conventional method of teaching is more appropriate for certain topics in teaching Mathematics and Science. This finding is supported by Khambari (2009), who said that teachers noted that other approaches rather than laptop were also preferable in carrying out certain tasks.

On the other hand, the teachers' attitude towards laptop usage was found to be at a high level, since the majority of the teachers have positive attitude towards the laptop. This is also suggested by Liaw (2002) who stated that a successful implementation of technology is dependent upon the users' positive attitude. In more specific, teachers with positive attitude have a sense of contentment, enjoyment and feel at ease to use the laptop for instructional purposes and lesson preparation of Mathematics and Science subjects. These teachers have positive mind-set towards the utilisation of laptop. Conversely, teachers with a negative attitude towards it will avoid, dislike and have no intention to incorporate the laptop into their teaching practices.

The final analysis using the Pearson product-moment correlation coefficient between the teachers' attitude and the dimensions of laptop utilisation produced expected results as supported by previous
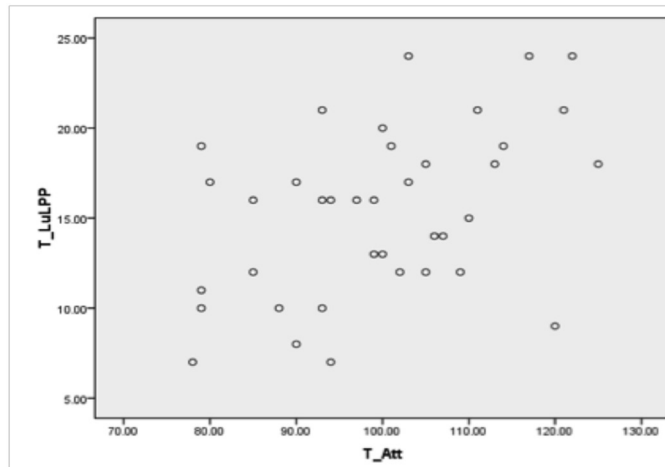
Fig.2: Distribution of the Teachers' Attitude towards Laptop Usage and Laptop Utilisation in LPP

studies. The present findings are consistent with those of the previous studies by Al-Khaldi and Al-Jabri (1998) as well as Shapka and Ferrari (2003) who support the notion that there is a relationship between attitude and computer utilisation. The result showed that the relationship between the teachers' attitude towards laptop usage and the laptop utilisation in TLP had a large and significant positive correlation. Meanwhile, the relationship between the teachers' attitude towards laptop usage and the laptop utilisation in LPP had a medium and significant positive correlation. A stronger linear relationship was found between teachers' attitude and their use of the laptop for TLP as compared to LPP, as there was a difference between the strength of the relationship in TLP (0.69) and LPP (0.44).

Generally, the relationship between teachers' attitude towards laptop usage and laptop utilisation had a significantly positive linear correlation. Additionally, the results suggested that the teachers' attitude provided a criterion for the concurrent validity of the laptop utilisation in the TLP and LPP. Correspondingly, laptop utilisation implied a criterion for the concurrent validity of the teachers' attitude towards laptop usage. It depicts that the teachers will utilise the laptop in the TLP and LPP when they have a positive attitude towards the laptop. Consequently, it has been verified through this study that the teachers' laptop utilisation is positively related to their attitude towards the use of laptop in TLP and LPP.

Furthermore, laptop initiative was perceived as new when it was initiated by the government amongst the teachers in the schools. The idea or message was transmitted from the authority to the teachers through mass media and interpersonal channels over time. The current study supported the innovation-decision process model by Rogers (1986) which suggests that attitude occurs in the persuasion function as the teachers mentally form a favourable or unfavourable attitude towards laptop usage for instructional delivery.

CONCLUSION

This study offers a set of important results regarding the level of laptop utilisation in terms of TLP and LPP, the level of teachers' attitude towards laptop usage and finally the relationship between teachers' attitude towards laptop usage and laptop utilisation. The findings revealed that the teachers' attitude towards laptop usage was positively correlated with utilisation of laptops. Therefore, the teachers' attitude towards laptop usage and laptop utilisation among the secondary school Mathematics and Science teachers could provide concurrent validity or strength to each other. Teachers with a positive attitude will incorporate laptops in their teaching practices as compared to those with negative attitude and less preference to utilise laptops. For this reason, more research should be carried out in the future to ensure the effectiveness of laptop utilisation by the Mathematics and Science teachers in Malaysia.

LIMITATIONS AND RECOMMENDATIONS

The samples selected for this preliminary study were considered to be small. Therefore, the findings of this study could and should not be generalised beyond the samples who had participated in this survey. Further studies need to be conducted with a larger sample size to study the relationship between attitude and other predicted variables, such as self-belief, time deficiency, technical support, leadership and so forth which may have an effect on the teachers' use of laptops. Besides, this

research was conducted in a quantitative manner. As such, structured interviews can be carried out among the teachers to make the study more robust as richer and more meaningful data can be collected. Based on these recommendations, the limitations of this study may be examined more extensively in future research so as to yield more interesting findings.

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REFERENCES

Abdullah, N. A., Zainol Abidin, M. J., Wong, S. L., Majid, O., & Hanafi, A. (2006). The attitude and motivation of English language teachers towards the use of computers. *Malaysian Online Journal of Instructional Technology, 3* (1), 57-67.

Ajzen, I., & Fishbein M. (2000). Attitude and the attitude-behavior relation: Reasoned and automatic processes. In W. Stoebe & M. Hewstone (Eds.). *European Review of Social Psychology*, *11* (pp. 1-33). Chichester, England: Wiley.

Al-Khaldi, M. A., & Al-Jabri, I. M. (1998). The relationship of attitudes to computer utilization: New evidence from a developing nation. *Computers in Human Behavior*, *14* (1), 23-42.

Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: the case of Syrian EFL teachers. *Computers and Education*, *47*, 373-398.

Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. (2006). *Introduction to research in education. (7th ed.). Canada: Thomas Wadsworth.*

Baylor, A. L., & Ritchie, D. (2002). What factors facilitate teacher skill, teacher moral, and perceived student learning in technology using classroom. *Computers and Education, 39* (2), 395-414.

Brown, G., Manogue, M., & Rohlin, M. (2002). Assessing attitudes in dental education: Is it worthwhile?. *British Dental Journal, 193* (12), 703-707.

Cohen, J. W. (1988). *Statistical power analysis for the behavioural sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Falba, C., Grove, K., Anderson, D., & Putney, L. (2001). Benefits of laptop computers for elementary teachers. *Journal of Research on Technology in Education*, *33* (5).

Gay, L. R., Mills, G. E., & Airasian, P. (2009). *Educational research: Competencies for analysis and application*. (9th ed.). New Jersey: Pearson Education, Inc.

Hebert, M., & Benbasat, I. (1994). Adopting Information Technology in hospitals: The relationship between attitudes/expectations and behaviour. *Hospital & Health Services Administration, 39*(3), 369-383.

Idris, N., Loh, S. C., Mohd. Nor, N., Abdul Razak, A. Z., & Md. Saad, R. (2007). The professional preparation of Malaysian teachers in the implementation of teaching and learning of Mathematics and Science in English. *Eurasia Journal of Mathematics, Science & Technology Education*, *3*(2), 101-110.

Inan, F. A., & Lowther, D. L. (2010). Laptops in the K-12 classrooms: Exploring factors impacting instructional use. *Computers & Education*, 55, 937-944.

Kersaint, G., Horton, B., Stohl, H., & Garofalo, J. (2003). Technology beliefs and practices of mathematics education faculty. *Journal of Technology and Teacher Education*, *11*(4), 549–577.

Liaw, S. (2002). An internet survey for perceptions of computers and the world wide web: Relationship, prediction, and difference. *Computers in Human Behavior, 18* (1), 17-35.

Luan, W.S., Bakar, A. R., Mee, L. Y. & Ayub, A. F. M. (2010). CLES-ICT: A scale to measure ICT constructivist learning environments in Malaysia. *Procedia—Social and Behavioral Sciences*, *2*(2), 295-299

Luan, W. S., & Teo, T. (2009). Investigating the technology acceptance among student teachers in Malaysia: An application of the technology acceptance model (TAM). *Asia-Pacific Education Researcher*, *18*(2), 261-272

Khambari, M. N. M. (2009). *Relationship between laptop use and professional development of mathematics and science teachers*. (Unpublished master's thesis dissertation), Universiti Putra Malaysia, Malaysia.

Khambari, M. N. M., Luan, W. S., & Ayub, A. F. M. (2010). Technology in Mathematics teaching: The pros and cons. *Procedia—Social and Behavioral Sciences*, *8*, 555-560

Moses, P., Khambari, M. N. M., & Luan, W. S. (2008a). Laptop use and its antecedents among educators: A review of the literature. *European Journal of Social Sciences*. *7*(1), 104-114.

Moses, P., Khambari, M. N. M., Luan, W. S., Abu Bakar, K., Mahmud, R., Mohd Ayub, A. F., & Hasnah Tang, K. Y. (2008b). Exploring the antecedents of laptop use among school teachers. In Rozhan Idrus *et al*. (Eds). *Proceedings of the 2nd International Malaysian Educational Technology Convention: Smart Education, Converging Technology, Education & Content* (pp. 163-170). Kuantan, Pahang: Malaysian Educational Technology Association (META).

Mouza, C. (2006*)*. Learning with laptops: The impact of one-to-one computing on student attitudes and classroom perceptions. *ICLS* (pp. 488-494).

Pallant, J. (2006). *SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS Version 12*. USA: Bell & Bain Ltd.

Rogers, E. M. (1962). *Diffusion of Innovations*. New York: The Free Press.

Rogers, E. M. (1986). *Communication Technology: The new media in society*. New York: The Free Press.

Rogers, E. M., & Shoemaker, F. F. (1971). *Communication of Innovations: A cross-cultural approach*. (2nd ed.) . New York: The Free Press.

Shapka, J. D., & Ferrari, M. (2003). Computer-related attitudes and actions of teacher candidates. *Computers in Human Behavior, 19*(3), 319-334.

Silvernail, D. L., & Harris, W. J. (2003). *The Maine Learning Technology Initiative: Teacher, student, and school perspectives mid-year evaluation report.* Portland, ME: Maine Education Policy Research Institute. Retrieved October 11, 2009 from http://maine.gov/mlti/articles/research/Mid-Year%20Evaluation2003.pdf

Teo, T., Lee, C. B., & Chai, C. S. (2008). Understanding pre-service teachers' computer attitudes: Applying and extending the technology acceptance model. *Journal of Computer Assisted Learning*, *24* (2), 128-143.

Teo, T., Lee, C. B., Chai, C. S., & Wong, S. L. (2009). Assessing the intention to use technology among pre-service teachers in Singapore and Malaysia: A multigroup invariance analysis of the Technology Acceptance Model (TAM). *Computers and Education*, *53*(3), 1000-1009**.**

Walker, L., & Rockman, S. (1997). *Report of a laptop program pilot: A project for anytime anywhere learning by microsoft corporation notebooks for schools by toshiba America information systems.* San Francisco, CA.

Wong, S. L., & Hanafi, A. (2007). Gender differences in attitudes towards Information Technology among Malaysian student teachers: A case study at Universiti Putra Malaysia. *Educational Technology & Society*, *10* (2), 158-169.

Wong, S. L., Jalil, H. A., Ayub, A. F. M., & Tang, S. H. (2003). Teaching a discrete information technology course in a constructivist learning environment: Is it effective for Malaysian pre-service teachers?. *The Internet and Higher Education*, *6*(2), 193-204**.**

Yee, H. T. K., Luan, W. S., Ayub, A. F. M., & Mahmud, R. (2009). A review of the literature: Determinants of online learning among students. *European Journal of Social Sciences*. *8*(2), 246-252.

SOCIAL SCIENCES & HUMANITIES

Learning Culture of Iranian and Chinese-Malaysian Undergraduate Students

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ABSTRACT

With the increasingly multicultural and multi-national demographics of students in the classroom, teachers find themselves having to face the challenges of teaching students from diverse cultural backgrounds. While much research has been done on individual differences in learning attitudes, learning strategies and learning styles, there is a severe lack of work done to investigate whether differences in the attitudes and values towards learning could be attributed to group differences. This paper reports the findings of a study on the differences in learning culture between Iranian and Chinese-Malaysian students. A questionnaire that measures learning culture was developed using Hofstede's (1980) cultural dimensions. The questionnaire consists of 24 items covering four dimensions, namely, collectivism/ individualism, power distance, uncertainty avoidance, and masculinity/femininity. One hundred and fifty Iranian and the same number of Chinese-Malaysian undergraduate students participated in the study. The results showed that there is a significant difference in the collectivism/individualism, uncertainty avoidance, and masculinity/femininity dimensions between these two groups of students. Implications of the results to the teaching and learning of second/foreign language are discussed.

Keywords: Chinese-Malaysian students, Iranian students, learning culture, language learning, national culture

INTRODUCTION

Culture provides the means, customs, and approaches that can influence human thought and behaviour; consequently, it affects how people learn. Past research has shown that learning is influenced by culture (Bruner, 1996; Brislin, Bochner

& Lonner, 1975; Hodkinson, Biesta & James, 2008; Manikutty, Anuradha & Hansen, 2007). Each culture creates its own particular style of thoughts and values and as a result, perceptions of learning vary accordingly amongst people from different cultural backgrounds (Saljo, 1987). Because people's understanding of the world is determined largely by the dominant values and beliefs of the society in which they live, it is expected that students from different cultural groups will have differences in their perception of learning (Purdie, Pillay & Boulton-Lewis, 2000).

Although numerous definitions have been offered by anthropologists and sociologists throughout the years, the concept of culture remains elusive, broad and ambiguous (Ball & Farr, 2003; Lessard-Clouston, 1997). In the study of culture, the trend has been to define the scope of the construct to specific areas. Scollon (1995, cited in Hinkel, 1999, p.1) calls this the "miniaturization of the concept of culture so that the researchers study and write about the culture of the school or even the culture of the classroom". Qualifiers attached to the term 'culture' denote its scope and context; for example "ethnic culture", "local culture", "academic culture" and "disciplinary culture" (Flowerdew & Miller, 1995, cited in Hinkel, 1999, p.1).

Hinkel (1999) posits that culture has to do with "the way a person sees his or her place in society" (p. 1). Further, Rosaldo (1984, in Hinkel, 1999) argues that culture "is far more than a mere catalogue of rituals and beliefs", and that "cultural models

derive from the world in which people live and the reality they construct" (p. 1). She further asserts that these cultural models are understood by people within the same cultural group but not easily so by people outside the group, attesting to the 'collective' nature of culture. Thus, when one speaks of culture, one refers to a collective phenomenon that indicates a group's tendencies as opposed to an individual's personality.

Hofstede (2001) defines culture as "the collective programming of the mind that distinguishes the members of one group or category of people from another" (p. 9). In his seminal work (1980) mapping the differences in national culture of countries in the world using employees of IBM (a US multi-national corporation with offices all over the world), he derived what were called dimensions of culture, which are collectivism/individualism, power distance, uncertainty avoidance, and masculinity/femininity. These dimensions have been applied not only in the study of national cultures, but also of cultures in organizational and educational contexts.

Learning Culture

The present study sought to measure differences in an area of culture focused on learning, which we have named 'learning culture' for ease of reference. Learning culture in this study is defined as students' beliefs and perceptions about how their learning environment should be, and about what they feel is right about teaching and learning practices that include their

expectations about their relationship and interaction with peers and teachers.

Hofstede (1980) identified four[1] dimensions of culture that are collectivism/ individualism, power distance, uncertainty avoidance, and masculinity/femininity. These four dimensions are said to be general aspects of culture that can be used to study differences between groups with regard to any cultural context:

1. Power distance—"which is related to the different solutions to the basic problem of human inequality"

2. Uncertainty avoidance—"which is related to the level of stress in a society in the face of an unknown future"

3. "Individualism versus collectivism, which is related to the integration of individuals into primary groups"

4. "Masculinity versus femininity, which is related to the division of emotional roles between men and women"

(Hofstede, 2001, p. 29)

In 1986, Hofstede expanded his work by applying his cultural dimensions in the educational context, noting that in situations where the teacher and student "were born, raised, and mentally programmed in different cultures prior to their integration in school" (1986, p. 302), cross-cultural difficulties may arise in their interaction with each other. In the next section, cultural differences in learning situations as described by Hofstede

(1986, p. 312) applying his four cultural dimension model are explained.

Collectivism/ Individualism

In a collectivist learning culture, people appreciate values and practices that are "rooted in tradition" more than "whatever is new" (Hofstede, 2001, p. 312). People are expected to learn when they are young, and stop being a student when they reach a certain age (as the expected role of the elderly is to nurture the young). A student is expected to speak only when called upon by the teacher and only in small groups where the group provides him with support. Education is seen as a route to a higher status in society, and thus students focus more on obtaining paper qualifications (accreditation) than acquiring competence. Also, 'face' is important in the collectivist society, therefore making a teacher or student 'lose face' is socially unacceptable. This also implies that maintaining harmony is important and confrontations are avoided. In such a society, status is important, thus giving preferential treatment to a student because of certain affiliations or recommendations is common.

On the other hand, members of an individualistic learning culture embrace innovations and may find traditions stifling. Lifelong learning is encouraged, where older people becoming 'students' is accepted. Students have no qualms speaking up individually and in large groups, nor raising issues and trying to solve conflicts openly. Teachers and students do not 'lose face' easily as they welcome debate

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[1]Although a fifth dimension, long/short term orientation, was added to the list in his later work, the present study used the original four dimensions as these were more relevant to classroom practices

and argument, and education is a route to "economic worth and self-respect based on ability and competence" (p. 312). Thus, in such a society, students expend much effort on acquiring skills and competence rather than taking the easy route to a paper qualification.

Power Distance

In a high power distance learning environment, teachers are respected and should never be challenged or criticized in public (Hofstede, 1986). Students expect teachers to be older (i.e. younger teachers are less credible), to initiate communication, structure lessons clearly, and provide answers and guidance. Teaching is teacher-centred, and success of the student is attributed to the teacher, whose wisdom is respected.

In a low power distance learning environment, students feel free to initiate communication in the classroom, may contradict the teacher, and treat teachers as equals outside the classroom (Hofstede, 1986). Student initiative is expected and students are "to find their own paths". As education is seen as the learning of "impersonal truth", which can be "obtained from any competent person" (p. 312), respect for the teacher is given for his or her ability to educate and not due to social status or power afforded by the position he or she holds.

Uncertainty Avoidance

In learning cultures with high uncertainty avoidance, teachers are expected to be

experts who know the answers, and in turn, expect students to demonstrate accuracy in solving problems (Hofstede, 1986). Teachers are allowed to behave emotionally (and so too are students) especially when aggravated by unexpected events. Students want structure in their learning, and expect teachers to provide clear instructions, guidelines, timelines, and so forth. In contrast, in low uncertainty avoidance cultures, teachers are more tolerant of deviations from preset structure, and may ask open-ended questions without clear answers. Teachers and students are both flexible in their approach to learning and welcome innovation.

Masculinity/Femininity

According to Hofstede (1980), the masculinity/femininity dimension refers to the characteristics commonly associated with the roles of men and women in a society rather than physical characteristics. The values of a masculine culture are assertiveness, competition, and toughness, while values of a feminine culture are more oriented toward home, children, people, and tenderness. In a feminine learning environment, teachers and students value solidarity, social adaptation, and intrinsic interest as opposed to extrinsic rewards. Achievement motivation is comparatively low, hence modesty is praiseworthy. Further, physical punishment is unacceptable and mutual respect is highly valued and nurtured. On the other hand, in a masculine learning culture, teachers openly reward high achievers and set high benchmarks for

performance. Students admire teachers for their knowledge rather than their nurturing qualities, and are motivated by extrinsic rewards such as future careers. In such a competition-oriented culture, corporal punishment is considered a necessary tool.

Some Criticisms of Hofstede's Framework

While Hofstede's cultural framework has been used extensively by researchers examining culture-related phenomena, several criticisms have been leveled against it. These criticisms were aimed at Hofstede's first and seminal work on deriving cultural dimensions using countries (nations) as cultural groups, and hence, the term 'national culture' was used.

First is the question of its validity raised by Blodgett, Bakir, and Rose (2008). Among the weaknesses found through their tests of validity of Hofstede's instrument were that "the majority of the items were lacking in face validity, the reliabilities of the four dimensions were low, and the factor analyses did not result in a coherent structure" (p. 343), in addition to claiming that the instrument lacks validity in measuring culture at the micro (individual) level. However, they conceded that these weaknesses did not detract from the legitimacy of the concept of culture, and that their study did not address the instrument's validity for measuring culture as an aggregate score of group tendencies. These weaknesses attributed to Hofstede's framework has not invalidated the framework itself, as Hofstede (1980) himself on the outset had cautioned against using the measure for individual tendencies.

The instrument measures average group tendencies, notwithstanding individual differences within groups.

Second is criticism from McSweeney (2002), Hofstede's strongest critic, who claimed that the assumptions underlying Hofstede's model are flawed. These assumptions attributed to Hofstede's cultural framework by McSweeney are:

1. National, organizational and occupational cultures are discrete levels of culture.

2. National culture is identifiable at the micro-level of IBM samples.

3. National culture creates the questionnaire responses.

4. National culture is identifiable from Hofstede's questionnaire.

5. Hofstede's dimensions are not situation specific.

(in Williamson, 2002, p. 1376)

In reply to the first argument from McSweeney that national, organizational and occupational cultures cannot be assumed to be independent and therefore cannot be measured separately, Williamson (2002) asserted that the limiting of the sample to IBM employees in Hofstede's study was an attempt to control for organizational and occupational cultures. Thus, the underlying assumption in the framework was that these cultures are not discrete, and not otherwise as claimed by McSweeney. To the second argument, Williamson replied that the issue of representativeness of the IBM sample to the countries' population does

not arise, as the dimensions are constructs and hence their measures are not direct/ absolute measures. The question should be whether the differences in measures represent differences in cultural values. The fact that only IBM employees were used in the sample may underestimate rather than overestimate cultural differences between US and non-US countries (due to the American cultural elements found in IBM); hence, differences found between countries are in fact valid. To McSweeney's third argument that culture cannot be assumed to be deterministic, Williamson explained that the framework measures central tendencies based on the assumption that "people's values may be seen as reflecting a wide variety of factors, including non-cultural factors" (Williamson, p. 1383). The sharing of values is seen as a consequence of cultural and non-cultural factors. While the cause-effect relation may not be linear, they nevertheless wield effects that are quantifiable. The main point in argument four is that it is too simplistic to assume that a complex phenomenon such as culture can be measured through a self-report questionnaire. To this Williamson replied that some of Hofstede's dimensions have correlated with other culture surveys, such as the Chinese Culture Connection (1987) and in Smith, Dugan and Trompenaars (1996) (both cited in Williamson, 2002), attesting to their validity.

In defence of his framework, Hofstede (2002) himself declared that surveys are not the only way to measure culture but it is one of the ways; using nations as units for studying culture may not be the best method, but it is often the only type of unit available for comparison; his sample of IBM employees provided differences between cultures that have been validated by other studies that made use of entire populations; his culture dimensions have been found to be stable and have been externally validated over many subsequent studies past and recent; and finally, the set of dimensions proposed are the baseline dimensions, to which other researchers are free to add, as long as the new dimensions have been proven to be conceptually and statistically independent of the existing ones. His final remark to McSweeney was:

> There is no creative accounting in the way I treated my data, I followed common practice and moreover in the 1980 and 2001 books provided all the data by which others can verify my findings. What we social scientists all do is called statistical inference, but McSweeney is obviously unfamiliar with it.
>
> (Hofstede, 2002, p. 6)

It is clear that Hofstede's framework has withstood criticisms from its detractors judging from its continued widespread use in the social sciences (i.e. management, behavioural sciences, marketing, education, sociology) (Blodgett, Bakir, & Rose, 2008) and has continued to be validated externally as it is used in different contexts, an attestation to its robustness as a framework for measuring cultural differences.

Purpose of the Study

With the increasingly multicultural and multi-national demographics in the classroom, teachers find themselves having to face the challenges of teaching students from diverse cultural backgrounds. Teaching students from cultures that are different from the teacher's is expected be more difficult than teaching a homogenous group who share a similar cultural background with the teacher. As declared by Hofstede, "interactions between teachers and learners from different cultures are fundamentally problematic and cross-cultural misunderstandings often occur because classroom interaction is an archetypal human phenomenon that is deeply rooted in the culture of a society" (1986, p. 303). While much research has been done on individual differences in learning attitudes, learning strategies, and learning styles, there is a severe lack of work done to investigate whether differences in attitudes and values towards learning could be attributed to group differences, as posited by Hofstede.

This study was part of a bigger research involving the investigation of culture-based differences in perceptions and attitudes towards learning in a tertiary educational setting. The objective was to examine the differences in learning culture in terms of Hofstede's (1986) cultural dimensions between two groups of culturally different tertiary students, Iranian and Chinese-Malaysian undergraduate students. The study sought to answer the following questions:

1. What are the patterns of learning culture of the Iranian and Chinese-Malaysian groups of students in terms of the four cultural dimensions of uncertainty avoidance, power distance, masculinity/femininity, and collectivism/individualism?

2. Is there a statistical difference in the measures of each of the four cultural dimensions between the Iranian and Chinese-Malaysian groups of students?

Limitations of the Study

One of the limitations of this research arises from the fact that culture is a very pervasive phenomenon and there is no single way to capture all the aspects and dimensions of culture. The second limitation is that the majority of the Iranian and Chinese-Malaysian subjects of the study were female students and since one of the dimensions of learning culture measures the level of masculinity vs. femininity, the inequality in the number of the male and female subjects may have contributed to some biasness in the results favouring feminism.

Significance of the Study

The current study is the first research attempt to empirically investigate and compare cross-national learning culture of students, drawing on the conception of culture as proposed by Hofstede (1980,1986). Therefore, the results obtained from this study will provide specific insights into the two groups of learners investigated. Furthermore, as the instrument to measure

learning culture was developed specifically for the study, another contribution of the research was the production of a survey instrument that utilizes a semantic differential scale to measure learning culture. Finally, the results obtained and the conclusions reached through this study will add to the body of research done in the area of cross-national learning culture.

MATERIALS AND METHODS

Research Design

The research was a descriptive study employing the survey method and quantitative approach to data analysis. A major part of the study was the development of a paper and pencil questionnaire based on Hofstede's (1986) four cultural dimensions, which we named the Learning Culture Questionnaire (LCQ) to measure the attitudes towards learning and learning practices of two different cultural groups (Iranian and Chinese-Malaysian). The subjects were 150 Chinese-Malaysian undergraduate students in a Malaysian university and 150 Iranian undergraduate students studying in a university in Iran. The physical separation of the two groups of students is a significant strength of the study as it minimizes exposure of the subjects to each other's culture. The cultural patterns of each group of students were then described in terms of the scores obtained from the LCQ, followed by a statistical analysis to determine differences in group means for each of the four cultural dimensions. The following sections describe the subjects and the procedures involved in the questionnaire development, data collection and data analysis.

The Population

The population of the study involved undergraduate Iranian and Chinese-Malaysian undergraduate students. To conduct a study that examines differences in culture, it is expedient to select populations that are more different than similar in the variable of interest, which is the culture of the societies. In the study, the two populations were selected partly due to convenience, as one of the researchers is Iranian and has access to students in Iran. Meanwhile, the Chinese-Malaysian students were selected as the comparison group as they were observed to be different from Iranians in several aspects:

1. Iranian society is predominantly monocultural and monolingual whereas Chinese-Malaysians live in a multi-ethnic and multi-lingual society. Most Chinese- Malaysians are bilingual, if not trilingual.

2. Almost all Iranians are Muslims, whereas Chinese-Malaysians are varied in their religious affiliations.

3. Hofstede's (1980, 2001) mapping of national cultures of over 40 countries placed Iran and Malaysia at different points on the scale, indicating there are significant differences between the cultures of the two countries.

Further, Chinese-Malaysians, an ethnic group within a society of multi-ethnic groups that make up the population of

Malaysia, were used instead of a mix of different ethnic groups in Malaysian society, as all ethnic groups have their own distinct culture despite their common denomination as 'Malaysians'. Thus, comparing these two groups of learners perceived to be vastly different in culture may reveal interesting results regarding any differences in learning culture that may exist.

Sampling

The Learning Culture Questionnaire (LCQ) was distributed to 150 Iranian undergraduate students in Iran and 150 Chinese-Malaysian undergraduate students in Malaysia. The Iranian students studying in Azad University in Iran and Chinese students in Universiti Putra Malaysia who have lived in their respective countries most of their lives were chosen as the subjects of the study as they were less likely to have been exposed to other cultures. The rational for using undergraduate students rather than postgraduate students was mainly because of the larger number of undergraduate students available. In addition, postgraduate students were more likely than undergraduate students to be more international in their outlook and are therefore more open in terms of the cultural values, a phenomenon that may confound the results of the study.

Cluster sampling method was employed to select the students for the purpose of this study. The respondents from both the universities in Iran and Malaysia were art and management majors and they were selected from freshman to senior levels. For the Iranian subjects, the LCQ was translated into Persian language as many of them were not proficient in English.

Questionnaire Development

Developing a questionnaire that can measure culture is not an easy task, as the concept of culture itself is broad. However, according to Taras, Rowney and Steel (2009), it is a common practice to measure cultural values using self-report questionnaires, in which items corresponding to a cultural framework comprise what has been theorized as cultural dimensions. They also mentioned that cultural values are generally measured along four to eight dimensions or factors in an instrument.

In the present study, a self-report questionnaire (LCQ) was developed using a four-point semantic differential scale to measure the learning culture along Hofstede's (1980, 1986) four dimensions. The students were asked to choose between two options by shading one point on the scale (line) between the two options (A and B) at each end. The distance of the point from each of the options indicates the degree
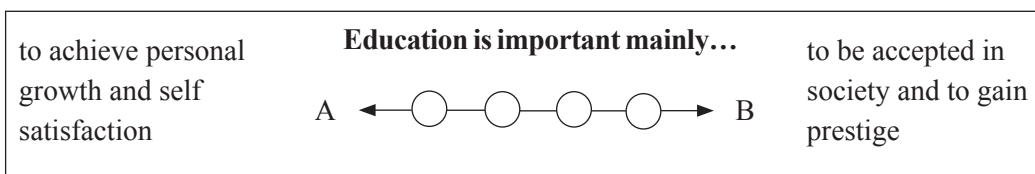

Fig.1: Sample questionnaire item

of agreement with that option. An example of an item to measure the collectivism/individualism dimension in the LCQ is shown in Fig.1.

Development of the LCQ included a face validity check, a focus group discussion, back-translation, and a pilot study to ensure the validity and reliability of the instrument.

Face Validity Check

In order to ensure the face validity of the items in the LCQ, three university students who were proficient in the English language were selected and given a brief definition of the four dimensions of learning culture in oral and written forms. Then, they were provided with the mixed order of the questionnaire items/statements and asked to sort the items into the four dimensions. Where there were obvious inconsistencies in the results from the three raters, the items were changed and edited. Then, the same task was done for the second time with two more students in addition to the previous three students. The purpose of this process was to filter out the items that were not recognized by the five students as measuring the correct dimension. Meanwhile, the items that were ambiguous or had low recognition rates as identified by the five raters were either repaired or removed.

Focus Group Discussion

After the face validity procedure, the need for coming up with new items to be added to the questionnaire became obvious. A focus group discussion was conducted to obtain more insight into what attitudes, beliefs, and expectations about learning and learning practices could characterize Iranian and Chinese-Malaysian students. The focus group consisted of two Chinese-Malaysian and three Iranian postgraduate students in Malaysia. They were asked 15 questions related to their conceptions and ideas about their learning culture (e.g. what was known as appropriate and inappropriate in their culture, what they thought of the opposite group's culture, etc.). Insights obtained from the focus group discussion were drawn on to make changes such as re-phrasing, deleting, and adding further items to the questionnaire so as to reflect the ideas and concerns of the students more accurately.

Translation of the Learning Culture Questionnaire

For the data collection that was done in Iran, the LCQ was translated into Persian to enable the Iranian students to understand it more easily. The questionnaire was translated into Persian and was back-translated into English language and checked for inconsistencies.

Pilot Study and Reliability of the Questionnaire

A pilot study was carried out on 15 Iranian and 15 Chinese-Malaysian postgraduate students in Malaysia. The purpose of the pilot study was to iron out any problem that could arise in the data collection process, and to determine the reliability (Cronbach's alpha) of the questionnaire. The initial LCQ used in the pilot study consisted of 26 statements. Table 1 shows the internal

consistency indices of the LCQ obtained from the pilot study and the items that were either repaired or removed. The resulting reliability indices after deleting or repairing problem items are shown in Table 1.

A second field-test was carried out on the translated version of the questionnaire in Persian on 30 Iranian students in Iran. After computing the reliability indices of the data collected from these 30 students in Iran, further minor changes such as repairing the wording/phrasing of items were made. Table 2 presents the reliability indices of the Persian version of the LCQ before and after item repair.

The actual data for the analysis were collected from 150 Iranian students in Azad University in Iran and 150 Chinese-Malaysian students from Universiti Putra Malaysia.

RESULTS AND DISCUSSION

At a glance, the overall pattern of learning culture between the Iranian and Chinese Malaysian groups appears more similar than different (see Fig.2). Both the groups are high in terms of their Individualism and Femininity (means > 2.5), but are low in the aspect of Power Distance and Uncertainty Avoidance (means ≤ 2.5).

However, the application of the independent sample t-test to the scores

TABLE 1
Reliability of the Learning Culture Questionnaire based on the pilot study

Dimensions	Reliability	Items to be removed	Items to be repaired	Reliability after removing or repairing
COLL/IDV	0.462		4	0.676
PDI	0.218	7, 12	11,13	0.608
UAI	0.596		14	0.723
MAS/FEM	0.643		22	0.654

Note:
COLL/IDV =collectivism/individualism, PDI=power distance, UAI= uncertainty avoidance,
MAS/FEM = masculinity/femininity
30 respondents (15 Iranians, 15 Chinese-Malaysians)

TABLE 2
Reliability of the Learning Culture Questionnaire for the Persian Version

Dimensions	Reliability	Items to be repaired	Reliability after repairing
COLL/IDV	0.673	_	0.673
PDI	0.529	10, 11	0.599
UAI	0.492	12, 17	0.639
MAS/FEM	0.561	18, 20	0.627

Note:
COLL/IDV =collectivism/individualism, PDI=power distance, UAI= uncertainty avoidance,
MAS/FEM = masculinity/femininity
30 respondents (15 Iranians, 15 Chinese-Malaysians)
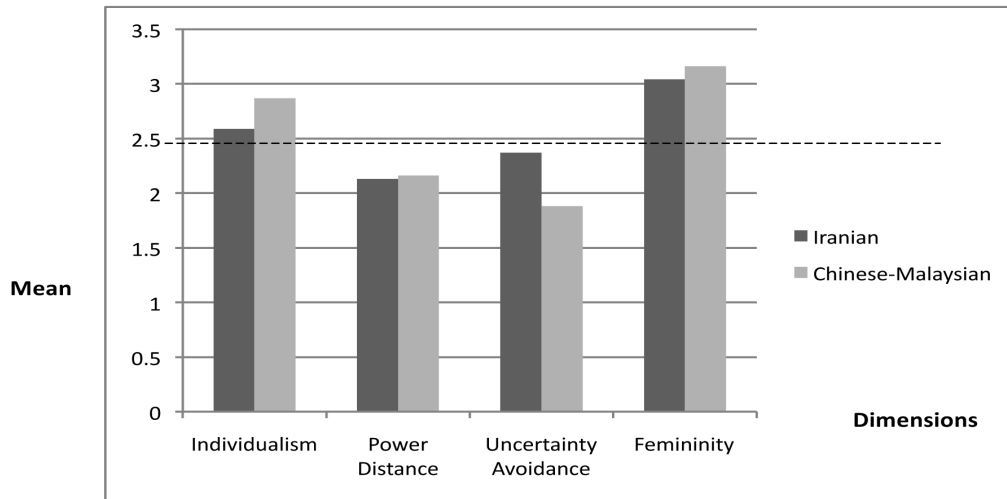
Fig.2: Learning cultures of the Iranian and Chinese-Malaysian groups

TABLE 3
Descriptive Statistics and Independent Samples t-tests for the four dimensions of the learning culture

Dimensions	group	n	Mean	SD	t	Sig.	Result
Collectivism/ Individualism	I	150	2.59	.618	-4.15	*0.00	C>I
	C	150	2.87	.510			
Power Distance	I	150	2.13	.467	-0.55	0.57	I=C
	C	150	2.16	.486			
Uncertainty Avoidance	I	150	2.37	.704	6.66	*0.00	I>C
	C	150	1.88	.563			
Masculinity/ Femininity	I	150	3.04	.489	-2.12	*0.03	C>I
	C	150	3.16	.439			

Note:
I= Iranians; C= Chinese-Malaysians
* statistically significant at p < .05 (Independent samples t-test)

for each dimension showed significant differences between the two groups in the Collectivism/Individualism, Uncertainty Avoidance, and Masculinity/Femininity dimensions (see Table 3).

The following sections compare the learning culture of both the Iranian and Chinese-Malaysian groups of students in terms of the four dimensions of culture.

Collectivism/Individualism

The results indicate that both the Iranian and Chinese-Malaysian students have an individualistic learning culture. However, the Chinese-Malaysians are significantly more individualistic compared to the Iranians in their regard for learning. This, going by Hofstede's (1986) model, suggests that the Chinese-Malaysians are more prone to believe that the purpose of education

is essentially for personal growth and self-satisfaction, while the Iranians, in a relative manner when compared to the Chinese-Malaysian group, may look upon education as an important route to being accepted in the society and to gain prestige. Furthermore, the Chinese-Malaysians may expect teachers to develop individual competence more than group competence, whereas the Iranians may prefer more group support in learning. It is important to note that both Iranians and Chinese-Malaysians are individualistic, except that the Chinese-Malaysians are more so when compared to the Iranians. The interpretation of the results provided here reminds us of Hofstede's (1986) caution that his descriptors are of extremes, and that most societies cannot be characterized in such absolute terms but fall along a continuum between the extremes. Hence, although the mean values of both groups locate them as individualistic, the characteristics of collectiveness still exist in both groups.

Power Distance

The results indicate that both the Iranian and Chinese-Malaysian students are rather low in power distance, and in this respect, both groups are similar (there is no statistical difference). Hence, it is expected that both Iranians and Chinese-Malaysians believe that students should have a say on what and how they should learn, which is in line with their societies' cultural value that the relationship between students and teachers should be like friends outside the classroom and that students are free to initiate communication with their teachers.

Uncertainty Avoidance

Both the Iranian and Chinese-Malaysian students are low in Uncertainty Avoidance, which indicates that they can tolerate uncertainties in their learning environment quite well. However, there is a significant difference between the group means, with the Chinese-Malaysians having significantly lower Uncertainty Avoidance than the Iranians. This further explains that Iranians are less tolerant of loosely structured lessons and unfamiliar methods of teaching. In contrast, the Chinese-Malaysians are more accepting towards innovations in teaching and learning activities and may welcome more freedom in exercising their own creativity and independence.

Masculinity/Femininity

In the masculinity/femininity dimension, the learning culture of both the Iranian and Chinese-Malaysian groups are oriented more towards femininity than masculinity. This means that relationship nurturing and intrinsic interest are important to both groups of students. They also do not believe in harsh punishments for poor performance. However, the Chinese-Malaysians were found to be more significantly feminine than the Iranians. This means that in comparison to the Iranians, the Chinese-Malaysians value collaboration and affiliation skills more. Moreover, the Chinese-Malaysians are more likely to make decisions as regards

their academic future based on their interest or passion, whereas the Iranians may place more consideration on their future jobs (extrinsic rewards).

Learning Culture in Context

The researchers work in a context where teaching a class of students coming from diverse cultures is the norm. The Malaysian university to which the researchers are affiliated has a sizeable number of Iranian postgraduate students. The present study was initiated based on the observations by the researchers on the differences in the behaviour and expectations of the Iranian and local Malaysian students. The results of the study showing fundamental differences in the learning cultures of the Iranians and Chinese-Malaysians have shed light on some of the observed behavioural differences.

For example, Iranian learners are more concerned about their final grades and passing examinations rather than about building competence in a skill. Students seeking out teachers to 'negotiate' for a better grade are more prevalent among the Iranians than the Chinese-Malaysian students. On the other hand, the teachers in the Malaysian university, who are partial towards conducting activities aimed at learning and competence development, may find more eager participants from among the Malaysian learners than the Iranian students. This may be because these class activities are not seen to be directly linked to examinations in the eyes of the

Iranian students, and hence, regarded as unimportant.

Another area of conflict in expectations is in the extent of flexibility and structure provided. Malaysian students are more tolerant of uncertainties, and therefore, are happy to do assignments that give them a good amount of leeway in interpreting the question and providing innovative answers. Iranian students, on the other hand, want structure, and generally expect fixed arrangements and strict guidelines on what they are expected to do.

Cultural incompatibilities may also arise in student-student interaction. Problems sometimes arise during group activities assigned by the teacher. Iranian students come from a learning environment where individual work is the norm, whereas for Malaysians, group work is common in teaching-learning activities. Therefore, many Iranian students are reluctant to participate in group work and this is probably because they are not familiar with the rules of being part of a group and how to work in a group. In contrast, the Chinese-Malaysian students are comfortable with group activities and are more willing to participate in these activities.

Thus, in a classroom that has obvious cross-cultural elements, knowing the learning culture of students will provide teachers with insights that can guide his or her teaching style, the types of activities planned, or the amount of structure to be provided. Teachers could be more sensitive to the needs and expectations of their students, especially those from a culture

that is different from that of the teacher's. Meanwhile, assumptions about learning and learning practices that are obvious to the teacher may be alien to foreign students who come with a different set of assumptions. As suggested by Hofstede (1986), it is imperative for teachers to learn about their own culture in addition to learning about their students' cultures in order to appreciate what implications these differences in culture can bring to bear on the teaching and learning processes. In sum, teachers need to get "intellectually and emotionally accustomed to the fact that in other societies, people learn in different ways" (Hofstede, 1986, p. 316). Such research on learning culture can equip the teacher with knowledge which can be used to enhance inter-cultural understanding and consequently improve learning in the classroom.

CONCLUSION

This study examined the differences in the learning cultures of two groups of students, Iranian and Chinese-Malaysian undergraduate students, using a learning culture questionnaire developed by the researchers based on Hofstede's (1980, 1986) four dimensions of culture. The results show that while the two groups of students are similar in that they are both high in Individualism and Femininity, and low in Power Distance and Uncertainty Avoidance, the comparison of the group means revealed significant differences in three of the dimensions, namely, Collectivism/ Individualism, Uncertainty Avoidance, and

Masculinity/Femininity. This finding shows that there are fundamental differences in the learning culture of the Iranian and Chinese-Malaysian undergraduate students.

The present research is an important contribution to the study of culture as it has shown that a dimensional model of culture, such as Hofstede's (1980, 1986, 1991), can be applied in an educational context to derive the differences in the learning culture between the groups. Such research is important to teachers and culture researchers alike. Future research could focus on the methodological aspect, particularly instrumentation, to compare whether the semantic differential scale as used in the present study is more or less sensitive and reliable as compared to the Likert-type scale that is often used in culture questionnaires. Future research could also address the interactions between national culture and learning culture, or learning culture which is a group measure with a measure of individual difference, such as learning style and learning strategies.

REFERENCES

Ball, A., & Farr, M. (2003). Language varieties, culture and teaching the English language arts. In J.M. Jensen (Ed.), *Handbook of research on teaching the English Language arts* (2nd ed., pp. 435-445). Mahwah: Lawrence Erlbaum Associates.

Blodgett, G., Bakir, A., & Rose, M. (2008). A test of the validity of Hofstede's cultural framework. *Journal of Consumer Marketing*, 25(6), 339-340.

Brislin, R., Bochner, S., & Lonner, J. (1975). *Cross-cultural Perspectives on Learning*. Beverly Hills, CA: Sage.

Bruner, J. (1996). *The Culture of Education*. Cambridge, MA: Harvard University Press.

Chinese Culture Connection. (1987). Chinese values and the search for culture-free dimensions of culture. *Journal of Cross-Cultural Psychology*, 18, 143-164.

Flowerdew, J. and Miller, L. (1995). On the notion of culture in second language lectures. *TESOL Quarterly*, 29(2), 345-374.

Hinkel, E. (1999). Introduction: Culture in research and second language pedagogy. In E. Hinkel (Ed.), *Culture in second language teaching and learning* (pp. 1-8). Cambridge: Cambridge University Press.

Hodkinson, P., Biesta, G., & James, D. (2008). Understanding learning culturally: Overcoming the dualism between the social and individual views of learning, *Vocations and Learning*, 1, 27-47.

Hofstede, G. (1980). *Culture's Consequences: International Differences in Work Related Values*. Newbury Park, CA: Sage.

Hofstede, G. (1986). Cultural differences in teaching and learning. *International Journal of Intercultural Relation*, 10(3), 301- 320.

Hofstede, G. (1991). *Cultures and Organizations: Software of the Mind*. Maidenhead, UK: McGraw-Hill.

Hofstede, G. (2001). *Culture consequences: Comparing values, behaviours, institutions, and organizations across nations* (2nd ed.). Thousand Oaks: Sage Publications.

Hofstede, G. (2002). Dimensions do not exist: A reply to Brendon McSweeney. *Human Relations*, 55(11), 1355-1361.

Lessard-Clouston, M. (1997). Language learning strategies: An overview for L2 teachers. *The Internet TESL Journal*.

Manikutty, S., Anuradha, N. S., & Hansen, K. (2007). Does culture influence learning style in higher education? *International Journal of Learning and Change*, 2(1), 70-87.

McSweeney, B. (2002). Hofstede's model of national cultural differences and their consequences: A triumph of faith - a failure of analysis. *Human Relations*, 55(1), 89-118.

Purdie, N., Pillay, H., & Boulton-Lewis, G. (2000). Investigating cross-cultural variation in conceptions of learning and the use of self-regulated strategies. *Education Journal*, 28(1), 65-84.

Rosaldo, M. (1984). Toward an anthropology of self and feeling. In R. Shweder & R. LeVine (Eds.). *Culture Theory* (pp. 137-157). Cambridge: Cambridge University Press.

Saljo, R. (1987). The educational construction of learning. In J. T. E. Richardson, M. W. Eysenk, & D. W. Piper (Eds.), *Student learning* (pp. 101-108). Milton Keynes: Open University Press.

Scollon, R. (1995). From sentences to discourses, ethnography to ethnographic: Conflicting trends in TESOL research. *TESOL Quarterly*, 29(2), 381-384.

Smith, P., Dugan, S., & Trompenaars, F. (1996) National culture and the values of organizational employees: A dimensional analysis across 43 nations. *Journal of Cross-Cultural Psychology*, 27, 231-264.

Taras, V., Rowney, J., & Steel, P. (2009). Half a century of measuring culture: Approaches, challenges, limitations and suggestions based on the analysis of 121 instruments for quantifying culture. *Journal of International Management*, 15(4), 50-75.

Williamson, D. (2002). Forward from a critique of Hofstede's model of national culture. *Human Relations*, 55(11), 1373-1395: 028923.

SOCIAL SCIENCES & HUMANITIES

Getting Physical with the Market: A Study of Metaphors in the Business Times

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ABSTRACT

This study investigates the metaphorical linguistic manifestations of the conceptual metaphor, MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS, using Charteris-Black and Ennis's (2001) notion of conceptual metaphors. Following a corpus linguistic approach for data collection purposes, it analysed 50 unique Business Times articles randomly identified from a total of 292 articles. An expert within the business context provided expertise in the interpretation of specific types of data derived from the corpus. The findings show that the metaphorical linguistic expressions generally concretise the abstract concept of the economy and market movements and mainly comprise of verbs and nouns. This paper illustrates some of the examples of the relevant metaphorical expressions and discusses how the domain of PHYSICAL MOVEMENTS helps to structure the domain of market movements. The findings of this study, however, can only be generalised to the samples involved in this study.

Keywords: Business English, conceptual metaphor, corpus linguistics, metaphor

INTRODUCTION

This study focuses on written discourse of business journalistic texts. According to Kaplan and Grabe (2002), discourse analysis sees texts as the negotiated communicative achievements of participants; the writer and the reader. For example, when the text is used in specific situational context, the writer's intention and his/her relationship with the reader must be considered as features of meaning (Kaplan & Grabe, 2002). According to Kaplan and Grabe (2002, p. 191), written discourse analysis implicates a wide spectrum of topics (e.g. discourse and gender, discourse, social class and social networks; discourse and sexuality;

business discourse) and approaches (e.g. corpus linguistic approach, content analysis approach) and this study focuses on business discourse using corpus linguistic approach. Based on the definition given by Kaplan and Grabe (2002), it is evident that the study of Business English is a study of how English texts are used in the business context which includes a study of the relationship between the writer's intentions and his/her relationship with readers of business English texts. Thus, this study is geared towards the study of business discourse.

Understanding Business English is essential in the business world. Numerous research articles (Boers, 1997; 2000; Charteris-Black & Ennis, 2001; Charteris-Black & Musolff, 2003; Zagan-Zelter & Zagan-Zelter, 2010; Walker, 2011) have sought to find means of helping students in understanding Business English. One in particular is the growing trend in the study of conceptual metaphors in the corpus of business journalistic texts (Charteris-Black & Ennis, 2001; Charteris-Black & Musolff, 2003; Chung, Ahrens & Sung, 2003; Sharifah Hafizah, 2004; Goban, 2005; López & Llopis, 2010; Jian-Shiung, 2011). According to Charteris-Black and Musolff (2003), it is important for English for Specific Purposes (ESP) learners to be aware of cognitive and pragmatic differences in the purposes to which metaphor can be put in order to understand business texts.

A literature search shows that there is still a lack of local research in conceptual metaphor study in business texts (Sharifah Hafizah, 2004; Goban, 2005), especially within the second language context. There is a need for more studies that examine conceptual metaphors in the business and economics texts in order to capture how metaphorical expressions of conceptual metaphors are manifested to convey the appropriate meaning of business and economics texts.

This study, therefore, seeks to address the following questions: What are the metaphorical linguistic expressions used to present conceptual metaphors in a corpus of share market news presented in the Business Times? What is the relationship between the source and target domains of conceptual metaphor, MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS?

Conceptual Metaphor Theory

Conceptual Metaphor Theory was proposed by Lakoff and Johnson (1980). Lakoff and Johnson (1980) define Conceptual Metaphor as understanding one conceptual domain in terms of another conceptual domain. Based on this, Kovecses (2002) further simplifies that conceptual domain (A) is conceptual domain (B). A conceptual domain is any coherent organisation of experience. For example, the domain of war proposed by Lakoff and Johnson (1980, p. 4) consists of a set of metaphorical linguistic expressions which are related to the said domain. An example of a conceptual metaphor is ARGUMENT IS WAR. Based on this metaphor, the domain of war is used to describe the domain of argument. More specifically, this conceptual metaphor tells us how the knowledge and experience

of the domain of argument is "partially structured, understood, performed, and talked about in terms of war" (Lakoff & Johnson, 1980, p. 5). THE ARGUMENT IS WAR conceptual metaphor is reflected in everyday expressions such as the following:

1. Your claims are <u>indefensible</u>.

2. He <u>attacked every weak point</u> in my argument.

3. His criticisms <u>were right on target</u>.

4. I <u>demolished</u> his argument.

<div align="right">(Lakoff & Johnson 1980, p. 4)</div>

A conceptual metaphor typically utilises a more abstract concept as target domain (a) and a more tangible or physical concept as their source domain (b) (see Fig.1). The underlined phrases in sentences (1-4) above are metaphorical linguistic expressions that are conventionally used to talk about war. In the sentences, these metaphorical linguistic expressions help to provide a more vivid description of the concept of argument.

Conceptual Domains

There are two conceptual domains of conceptual metaphors: the target domain and the source domain as identified by Kovecses (2002) in the following:

"There is a set of systematic correspondences between the source domain (B) and the target domain (A) in the sense that constituent conceptual elements of B correspond to constituent elements of A."

<div align="right">(Kovecses, 2002, p. 12)</div>

According to Kovecses (2002), these conceptual *correspondences* are called mappings. Knowing the set of mappings that applies to a specified source-target pairing (source domain and target domain) is essential to comprehend conceptual metaphor. It is these mappings that provide much of the meaning of the metaphorical linguistic expressions that make a particular conceptual metaphor to manifest itself (ibid.).

According to Lakoff and Johnson (1980), target domain is a conceptual domain that we try to understand with the help of another conceptual domain, which is the source domain. They add that the target domains are typically more abstract and subjective than the source domains. For example, in the conceptual metaphor ARGUMENT IS WAR, the conceptual domain of argument is typically viewed as being more abstract than that of war (Lakoff & Johnson, 1980). Since the target domain of argument

		A	IS	B
Domain		Target Domain		Source Domain
Concept		Abstract		Tangible/Physical
Example		ARGUMENT	IS	WAR

Fig.1: Target domain and source domain

is an abstract concept, it is inevitable that one would need to rely on the concepts from other domains that are more concrete in order to talk about it. For instance, it is difficult to understand that it is a reflection of thought that can be *defended* when the speaker believes his/her stance is right and *supported* by relevant evidences (Lakoff & Johnson, 1980). Therefore, it may be inferred that target domains rely profoundly on source domain to be understood as the example given shows that the concept of war is depicted to concretise the abstract concept of argument.

Based on the explanations given, it may be concluded that target domain and source domain must co-exist as the source domain will clarify the meaning of the abstract target domain (e.g. argument) in a more concrete way (e.g. war).

Metaphorical Linguistic Expressions (MLE)

Table 1 shows how metaphorical linguistic expressions are used in the context of argument.

It is imperative to distinguish conceptual metaphor from metaphorical linguistic expression to further clarify the Conceptual Metaphor Theory. Metaphorical linguistic expressions are words or other linguistic expressions that come from terminology of the more concrete conceptual domain (source domain) (Kovecses, 2002, p. 4). For instance, Table 1 shows the words that come from the terminology of war such as *won*, *shoot*, *demolished* and *shot down* which are used to understand the abstract target domain of argument. From the discussion, it may be concluded that metaphorical linguistic expressions are a set of words that are related to the source domain.

Fig.2 visualises how metaphorical linguistic expressions are grouped under the concept of a building.

MATERIALS AND METHODS

This study adopts Charteris-Black and Ennis' (2001) proposed conceptual metaphor, MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS. Based on the

TABLE 1
Conceptual metaphors and metaphorical linguistic expressions

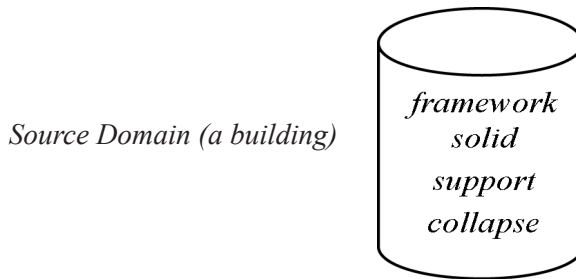| Conceptual Metaphors	Metaphorical Linguistic Expressions
ARGUMENT IS WAR	1. I've never *won* an argument with him. 2. You disagree? Okay, *shoot*! 3. I *demolished* his argument. 4. He *shot down* all of my arguments. (Lakoff and Johnson, 1980, p.4)
AN ARGUMENT IS A BUILDING	1. We've got the *framework* for a *solid* argument. 2. With the *groundwork* you've got, you can *construct* a pretty *strong* argument. 3. If you don't *support* your argument with *solid* facts, the whole thing will *collapse*. (Lakoff & Johnson 1980, p. 98)

Fig.2: Metaphorical Linguistic Expressions (MLEs)

conceptual metaphor, a set of metaphorical linguistic expressions related to physical movements were identified in the corpus.

Corpus of the Study

The corpus for the study was drawn from the *Business Times*. The *Business Times* was established in 1976 to meet the needs of the growing corporate sector, which entails a specialised medium for news on business and industry (NSTP, 2008). It was the first business and financial daily newspaper in Malaysia and published by Financial Publications Sdn. Bhd. before it changed its name to Business Times (Malaysia) Sdn. Bhd. on July 9th, 1992. The *Business Times* was incorporated into the *New Straits Times* on June 1st, 2002 and it combines the best in business reporting with the *New Straits Times* daily providing local and world news. It offers readers in-depth news and analyses of the world of business, government and investment activities locally and globally. Hence, the Business Times was considered to be an appropriate source from which data were extracted for the current study.

Data Collection Procedure

This study focuses on share market news reports, and therefore, articles collected for the corpus of this study are related to share market news reports only. In order to ensure articles collected are from local authors, the articles collected should have by-lines that indicated whether the writer is local or foreign. Once articles meeting the first three criteria have been identified, the process of eliminating articles with insufficient texts was carried out. It should be noted that many articles from the share market news reports comprise of tables and figures. Some reports may not have running texts. This study focuses on running texts only and thus, tables and figures are eliminated in the data collection procedure.

An exploratory study carried out showed that only single author writings would fit all the criteria above. The author, who reports on share market news, was also selected based on the regular articles that carried his by-line, S.N. Lock. When the author had been identified, efforts were made to find the online news archives.

Online *Business Times* newspaper articles were selected from *The New Straits Time*s news archive in order to get sufficient data for the research. The online data are the best method to collect data for this study as the data are easily accessible, similar to printed data and also in computer readable format.

There were 292 articles written by Lock found in 2008. Each article was saved and numbered to limit the topic or title affiliation influences on the order. A random sampling procedure, using a research randomizer programme (Urbaniak & Plous, 2007), was used to generate a set of 50 unique, random numbers ranging from 1 to 292. The 50 articles identified were then saved as a *.txt format file. The corpus collected comprises a total of 19 057 words with average words per text of 381.1. It is necessary for the corpus to be small because the corpus collected is topic and genre specific and requires manual annotation (e.g. semantic annotation and pragmatic annotation).

Corpus linguistics can be a tool to assist ESP researchers to examine the linguistic features and collocations in written discourse (Flowerdew, 1998). Biber, Conrad and Reppen (1998) define corpus linguistics as an empirical methodology that utilises a large, methodically organised body of natural texts (the corpus) to analyse actual patterns of language use. However, Leech (1991, p. 8-28) argues that corpus size is not all-important. According to McEnery, Xiao and Tono (2006), small corpora may contain sufficient examples of frequent linguistic features. They add that

corpora which require manual annotation (e.g. semantic annotation and pragmatic annotation) are necessarily small. The key problem of these arguments is the consideration of the optimum size of a corpus. McEnery, Xiao and Tono (2006) further explain that the optimum size of a corpus is determined by the research questions the corpus is intended to address as well as practical considerations. Sinclair (2004) also stresses on the representative dimension that a corpus should acquire. Apart from that, the sample of the texts were analysed as they were collected until saturation or the 'point of diminishing returns' was achieved - the point where the new data yield no significant new insights (Glaser & Strauss, 1967; Gasson, 2004). Thus, this point was achieved at the total number of 50 when it was found that new articles could add nothing new to the list of identified elements.

Data Analysis Procedure

A concordance programme, Antconc 3.2.1 was utilised to highlight the findings and facilitate the data analysing process. Concordance results were then presented to analyse the words in context. In order to validate and make sense of the results presented, this study employed the assistance of a finance expert to verify the interpretation of the data.

The finance expert is currently teaching business related courses at the Malaysian Institute of Information Technology, Universiti Kuala Lumpur. He earned a Masters degree of Business Administration

from Edinburgh University and has seven years of experience in trading. He has also been involved in the commodity market.

RESULTS AND DISCUSSION

MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS

This study addresses the two entailments of MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS. These two entailments are sub-categorisations of the conceptual metaphor, MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS proposed by Charteris-Black and Ennis (2001).

TABLE 2
MARKET MOVEMENTS ARE WAYS OF MOVING ON THE GROUND

A. MARKET MOVEMENTS ARE WAYS OF MOVING ON THE GROUND	
Fast*	89
Slow	89
Outpaced*	19
Tumble	13
Slip	7
Jump	6
Climb*	5
Roller coaster*	2
Total	230

TABLE 3
MARKET MOVEMENTS ARE WAYS OF MOVING IN THE AIR

B. MARKET MOVEMENTS ARE WAYS OF MOVING IN THE AIR	
Rebound	179
Fall	73
Drift*	11
Plunge	1
Soar	1
Total	266

Tables 2 and 3 display the metaphorical linguistics expressions used to represent the conceptual metaphor, MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS, which entails MARKET MOVEMENTS ARE WAYS OF MOVING ON THE GROUND and MARKET MOVEMENTS ARE WAYS OF MOVING IN THE AIR identified in the Malaysian *Business Times*. It should be noted that the words associated with Charteris-Black and Ennis' (2001) proposed conceptual metaphor, but not in their MLEs list, are asterisked (*). The words are marked to differentiate the existing list with the new words found in the corpus of this study.

MARKET MOVEMENTS ARE WAYS OF MOVING ON THE GROUND

FAST/SLOW: It is apparent from Table 2 that the words *fast* and *slow* share the highest number of occurrences (89 counts) for the conceptual metaphor, MARKET MOVEMENTS ARE WAYS OF MOVING ON THE GROUND, followed by the word *outpaced* (19 counts) and *tumble* (13 counts). The word *roller coaster* (2 counts), however, has the least number of occurrences in this category. A key communicative goal of financial journalists is to discuss changing market values since this is highly newsworthy (Charteris-Black, 2004, p.158). He added that since the function of science is to make forecasts on the basis of rules formed from observation, the difference between the present and past market prices is something that is measurable and can be described. The following explains how personification

is used to describe the abstract share market movements and how a larger target audience (non-specialist readers) may benefit from it.

> *"Personification is often used to describe the abstract process of change in terms of physical movements as it is believed that reification or the linguistic representation of abstract events as if they were concrete makes them more accessible to non-specialist readers."*

> (Charteris-Black, 2004, p. 158)

```
The KLCI's weekly and monthly fast MACDs (moving av
pective slow MACDs. Its daily fast MACD continued t
l's daily, weekly and monthly fast MACDs (moving av
ate-term uptrend.  Its daily fast MACD (moving ave
yesterday. Both of its hourly fast and slow MACDs c
mation yesterday.  Its daily fast MACD (moving ave
yesterday. Both of its hourly fast and slow MACDs c
```

```
stay below its daily slow MACD.   The KLCI's l
ove their respective slow MACDs.   The bullish
stay below its daily slow MACD yesterday. Both
 its hourly fast and slow MACDs continued to s
l cross" of its daily slow MACD yesterday. Both
 its hourly fast and slow MACDs continued to s
cross" of its da ily slow MACD last Thursday.
```

The metaphorical linguistic expressions (MLEs) *fast* and *slow* in Table 2 appeared the highest in depicting the conceptual metaphor, MARKET MOVEMENTS ARE WAYS OF MOVING ON THE GROUND. Words like *fast* and *slow* are usually associated with the physical movements of an entity, for example, 'He runs very *fast*' and 'He moves *slowly*'. The concordances of the word *fast* and *slow* show that the adjectives *fast* and *slow* are used to explain price movement in Moving Average Convergence Divergence (MACD). MACD's fast or slow price movement can be set by the Kuala Lumpur Composite Index (KLCI), investors, or the writer himself and the price movements are usually monitored daily or monthly. MACD is a technical analysis indicator that is used to predict the future direction of prices through the study of past market data, primarily the price and volume of the stock market.

The concordances show that the usages of the adjectives *fast* and *slow* are consistent throughout the occurrences. Both are used to relate to time-based analysis of MACD graphs. This may indicate high reliance on MACD graphs in the analysis of share market news. The uses of *fast* and *slow* in a way concretise the abstract concept of market movements as these terms evoke the image of market movement as an animate entity that is physical and visible (on the ground). When the aspect of PHYSICAL MOVEMENTS is mapped onto MARKET MOVEMENTS, we see the subject (market movement) as an animate object that can physically move fast or slowly. Another example is shown below for the word '*outpace*'.

```
counters continued to outpace its declining counters b
counters continued to outpace advancing ones by 463 to
ll advancing counters outpaced its declining counters
last Friday. Declines outpaced gains by 470 to 172 on
y. Declining counters outpaced advancing ones by 273 t
ll declining counters outpaced its advancing counters
```

OUTPACE: According to Oxford's ALDCE (2003), the verb *outpace* means faster than, for example, 'He easily *outpaced* the other runners'. The verb *outpace* is usually associated with movement on the ground such as a race or a running competition and it is also related to time limit and winning.

The concordances of the word '*outpace*' shows that market movement is seen as a racing pursuit between decliners[1] and gainers[2] in share market price, whereby *outpace* is used to show that declining counters outnumber gaining counters in Bursa Malaysia or vice versa. Earlier, it was mentioned how the literal meaning of the term *outpace* can be related to physical movement. The term *outpace* tends to be associated with the number of increased or decreased share prices which are much more abstract and usually used as a comparison. However, in all the six cases (refer to the concordances of the word *outpace*), when the term *outpace* is used in the context of share market news, it evokes the sense of competitiveness among listed companies and shareholders and it also relates to the condition of a racing event (and in a comparative sense, the 'gainers' *outpace* the 'losers'). The analysis above therefore confirms Charteris-Black and Ennis' (2001) claim that MARKET MOVEMENTS ARE WAYS OF MOVING ON THE GROUND.

[1]*Decliners* refer to share market price of a company which closes lower than the opening price.
[2]*Gainers* refer to share market price of a company which closes higher than the opening price.

MARKET MOVEMENTS ARE WAYS OF MOVING IN THE AIR

The following is an example of the metaphorical linguistic expression *rebound*.


```
following the sharp technical rebound last week. Its overall advanc
.l Bhd staged a follow-through rebound yesterday.   Its daily price
:rday.   Its daily price trend rebounded to close at RM2.47, giving
irsday. Its hourly price trend rebounded to its intra-day high of RM
:l Bhd staged a follow-through rebound yesterday. Its daily price t:
:terday. Its daily price trend rebounded to close at RM1.58, postin(
: before staging the technical rebounds on the last two trading days
iesday. The KLCI staged a mild rebound to close at 1,354.48 points,
```

REBOUND: As shown in Table 3, the word *rebound* has the highest number of occurrences (179 counts). This is followed by the words *fall* (73 counts) and *drift* (11 counts). According to the Oxford ALDCE (2003), the term *rebound* means to bounce back after hitting something. The word *rebound* is usually related to movements in the air after a ball hits the ground. However, the term *rebound* is frequently used in economic discourse to describe price movement. This indicates the ability for a share market price to increase after a fall. It also implies a *rise* in the share price. From the above concordances, it is interesting to find that the term *rebound* plays two different roles; as a verb phrase and a noun phrase. The term *rebound* in economics texts, therefore, refers to a substantial rise in the price of a security, commodity, or overall market, following a decline or a difficult period of time (OBED, 2008). It can be used

as several noun phrases such as 'technical *rebound*', 'follow-through *rebound*', 'price trend *rebound*' and 'mild *rebound*'. These noun phrases give more specific information regarding the term *rebound*. The verb *rebound* in the concordances shows that it is mostly used to refer to a *rising* price trend in general. The concordances also reveal that the term *rebound* either in a noun phrase or in a verb form is used to indicate an increase of share market price after a fall from a certain time duration (last week, yesterday) and closes at a higher rate, which can be described in terms of Ringgit Malaysia (RM) or points.

The noun phrase 'technical *rebound*' in the context of share market news may happen when investors buy the shares as the market reaches the support level causing the share market price to increase. Therefore, 'technical *rebound*' refers to the activity of buying shares based on technical reasons, not based on fundamental value[3] of the company.

The noun phrase 'price trend *rebound*' usually refers to price trend based on a period of time and it could be hourly price trend or daily price trend. A 'mild *rebound*' in line 8 of the concordances of the word *rebound* refers to an increase of less than 1% of the said share market news.

Next, 'follow-through *rebound*' means a consistent rise in price to the maximum possible value of the said commodity after a difficult period of time. Investors usually use this opportunity to gain profit from the investment.

[3]*Fundamental value* means price which reflects the actual value of a company.

The term *rebound* evokes the image of an entity that goes down and then up again. By applying this word, we not only get the idea of price increasing but also the price that has decreased and then increased again. Based on these uses of the term *rebound,* it can be assumed that the instability and capricious nature of prices is akin to what scientists might call a Brownian motion (Brownian Motion, 2011), erratic random movement of molecules which in these cases refer to movements in the air.

It should also be noted that the term *rebound* is used quite frequently in economics texts. It can be assumed that the nature of market movements is active as the prices are always going up and down almost every time. Based on the analysis, the finding supports Charteris-Black and Ennis' (2001) conceptual metaphor, MARKET MOVEMENTS ARE WAYS OF MOVING IN THE AIR, in terms of specific metaphorical linguistic expressions. The following discusses the metaphorical linguistic expression *fall*.

3OUTS of consolidation degenerated into sharp falls over the last f
. The KLCI reacted negatively to the sharp fall on Wall Street a
sulting from the negative influences of sharp falls on Wall Street
oss of 9.38 points, or 0.93 per cent. Sharp falls on Wall Street
to its intra-week low of 963.29 on Thursday, falling below the sup

FALL: The term *fall* in the Oxford ALDCE means to drop down from a higher level to a lower level. For example, 'The rain was *falling* steadily' and 'They were injured by *falling* rocks' (Oxford ALDCE 2003). Based on the examples, it can be assumed that the term *fall* is associated with an entity that goes down from a higher place.

From the concordances, it may be seen that often, the term *fall* is used together with the word 'sharp'. In the share market news, the noun phrase 'sharp *fall'* may be used to indicate a sudden decrease in share market price(s). However, when the term *falling* is used in the context of share market news, it indicates that the share market price is decreasing not only at that point of time but is also predicted to decrease further in the future. The finding also shows that when the term *fall* is in a verb form, it is often used to indicate a decrease in share market price compared to its previous higher price (*fell* from) or to indicate a decrease in share market price to its previous lower price (*fell* back).

The use of the term *fall* in a way concretises the abstract concept of share prices as it depicts the image of share prices falling down from a higher place. Thus, it is possible to relate such a metaphorical use of the word to the conceptual metaphor MARKET MOVEMENTS ARE WAYS OF MOVING IN THE AIR as proposed by Charteris-Black and Ennis (2001). The metaphorical use of the word *fall* can also be associated with Lakoff and Johnson's (1980) conceptual metaphor, LESS IS DOWN.

TUMBLE/SLIP/PLUNGE: The words *slip*, *tumble* and *plunge* have also been used in the share market news to metaphorically describe the decrease in the share prices. Interestingly, these words help to highlight certain aspects of price decrease. For example, the manner in which the market price or share price is declining or declines – to 'tumble' would be more serious than

to 'slip' and to 'plunge' would imply a fast and drastic decline and therefore even more severe than 'tumble'. The concordances analyses below show how different metaphorical linguistic expressions (the source domain) help to delineate the target domain.

```
nts, or 0.87 per cent.   The index slipped into a short conso
dex: Its short-term momentum index slipped below the support
1.  SHARE prices on Bursa Malaysia slipped into their technic
    Sime Darby's hourly price trend slipped into its intermedi
. With that, Gamuda's price trends slipped into its multiple


Exchange sent share prices tumbling on Wall Street. This i
ek high of 1,022.59 before tumbling down to its intra-week


he regional stock markets sent the KLCI plunging to its
```

From the verb *slip*, readers may assume that there is a slight decrease in the share market. It can be seen that the verb *slip* is used more frequently compared to the verbs *tumble* and *plunge* to describe a decrease in the share market prices. Similarly, it is common for share market price to *slip* or decrease a little as it is the nature of the share market price to increase or decrease in order for investors to gain profit. It indicates a slight drop and usually does not involve a significant height. Based on technical analysis, the verb phrase '*slipped* into' in the concordances denotes that there is no clear indication of the market trend whether it is an upward or a downward movement because the share market price has decreased within a narrow range and takes longer time to recover. On the other

hand, the verb phrase '*slipped* below' shows that the prices have gone a little bit lower than its support level and also suggests that it is only temporary. The high recurrence of the verb phrase '*slipped* into' in the above concordances may reflect the market trend of that particular time.

Meanwhile, the word *tumble* is used to describe share market price when the decrease is more than usual, as described by the word *slip*. The word *tumble* evokes the sense of falling, indicating a more significant sense of collapsing. From the concordances, it can be seen that the verb *tumbling* is used in two contexts; either referring to the effects caused by a particular stock price (*tumbling* on) or used as a comparison of its lowest price in a specified time frame (*tumbling* down to). The verb phrase '*tumbling* on' is used to indicate the chain-effect caused by a particular decrease of share market prices to other stock prices on stock exchange such as Wall Street, whereas the verb phrase '*tumbling* down to' signifies that the particular share market price has decreased to its lowest previous price within the time frame compared.

However, when there is a sudden or an extreme decrease in the share market price, the term *plunge* is chosen to indicate a great decrease. The term *plunge* is about descending abruptly and usually associated with cliff or something that is very steep. In the concordances above, the verb phrase '*plunging* to' is used to show a certain share market price that has abruptly decreased to its lowest price. It should be noted that share market prices are usually compared within a time frame (e.g., daily or weekly).

From the discussions, it can be seen that in the share market news, verbs such as *slip*, *tumble* and *plunge* are chosen to indicate the severity of market movements. These verbs are categorised as physical movements and used as the source domain to delineate the abstract concept of market movements of the share market. These findings of the current study correspond with those of Charteris-Black (2004) who claims that by having different types of verbs to signify downward market movement, the writer can express the degree of seriousness with which a downward movement in the market price is observed.

On the other hand, increasing market movements may be conceptualised using words like *climb* and *soar*. These verb phrases and noun phrases are used to give more specific information on the fluctuation of prices. Refer to the concordances below:

```
ily price trend continued to climb along its recentl
hly price trend continued to climb along its long-te
rly price trend is likely to climb higher within its
erm price trend continued to climb along its short-t
kly price trend continued to climb above the support
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sharp increase in fuel prices. Continuing soaring crude oil
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CLIMB: From the concordances, it can be seen that the verb *climb* is commonly used in share market news to describe a normal, gradual increase of share market price. It is also associated with a slow upward movement which needs a certain amount of time before reaching the destination like climbing a mountain. It can be assumed that there are obstacles in the process of reaching the destination.

The concordances show that the recurrence of the verb phrase '*climb* along' is more frequently compared to '*climb* higher' and '*climb* above'. The recurrence indicated that in the year 2008, the gradual increase of share market prices was fairly predictable. The recurrence of these verb phrases may be related to the market trend at that point of time. It should be noted that the three verb phrases convey different market situations. In particular, the verb phrase '*climb* along' is used to indicate that the share market price is gradually increasing to its expected target. However, the verb phrases like '*climb* higher' and '*climb* above' are used when any unusual market movements are involved.

SOAR: When there is a great increase of a share market price, the adjective *soaring,* which reflects movement in the air, is chosen to show the impact of the sharp increase of a share market price. It is literally associated with a strong impact that could make something fly up into the air.

From the results, market movements are described as ways of moving on the ground to indicate a slight or a moderate increase or a decrease in the share market price. In contrast, in instances where there is a drastic increase or decrease in share market price, share market price movements are described as ways of moving in the air to depict a further impact. The results also suggest that a fall or a movement on the ground has lower impact or damage compared to a movement in the air.

This study produced results which corroborate with the findings of Sharifah Hafizah (2004), who claims that these metaphorical linguistic expressions suggest significance of upward and downward movements in the stock market and also point at the subtle message regarding the state or direction of the stock market. Therefore, the findings support Lakoff and Johnson's (1980) notion, MORE IS UP and LESS IS DOWN.

The results of this study have shown that conceptual metaphors are powerful because they are capable of exploiting our knowledge and experience. It has investigated how conceptual metaphors are utilised in the corpus of share market news published in the Business Times compared to that of Charteris-Black and Ennis' (2001). One of the more significant findings emerged from this study is that in the corpus of share market news reports, MLE were mainly attached to noun phrases or verb phrases. It has also discussed how the domain of PHYSICAL MOVEMENTS helps to structure the domain of market movements.

CONCLUSION

The findings from this study have confirmed previous studies which state that the economy is seen as a living thing. Even though the observed relationship is only moderate, this has nevertheless provided further support to strengthen the assumption that the choice of metaphorical linguistic expressions depends on the current economic situation.

The findings have a few pedagogical implications. Since conceptual metaphors are found to be better able to express the situations in economy, there is a need for

business language teachers and instructors to introduce conceptual metaphors in English for Business Purposes to enhance students' understanding of the terms used in the business and economic texts. This may assist students to understand and relate business and economic terms with their surroundings.

This study could also be replicated in at least two ways. Firstly, we could analyse other text types such as textbooks, journal articles and company's prospectus. Secondly, instead of focusing on share market news, we could also select other important business elements such as merger and acquisition. It could be very rewarding to study how conceptual metaphors are used in different types of business and economics discourse other than share market news reports.

ACKNOWLEDGEMENTS

REFERENCES

Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus linguistics: Investigating language structure and use*. Cambridge, UK: Cambridge University Press.

Boers, F. (1997). "No Pain, No Gain" in a Free Market Rhetoric: A Test for Cognitive Semantics? *Metaphor and Symbol*, *12*(4), 231-241.

Boers, F. (2000). Enhancing metaphoric awareness in specialised reading. *English for Specific Purposes*, *19*, 137-147.

Brownian Motion. (2011). In *Encyclopædia Britannica*. Retrieved Jan 2011 from http://www.britannica.com/EBchecked/topic/81815/Brownian-motion.

Charteris-Black, J., & Ennis, T. (2001). A comparative study of metaphor in Spanish and English financial reporting. *English for Specific Purposes*, *20*, 249-266.

Charteris-Black, J., & Musolff, A. (2003). 'Battered hero' or 'innocent victim'? A comparative study of metaphors for euro trading in British and German financial reporting. *English for Specific Purposes, 22*, 153-176.

Charteris-Black, J. (2004). Corpus approaches to critical metaphor analysis. Basingstoke, Hamphire: Palgrave Macmillan.

Chung, S., Ahrens, K., & Sung, Y. (2003*). STOCK MARKET AS OCEAN WATER: A Corpus-based, Comparative Study of Mandarin Chinese, English and Spanish*. Proceeding of the 17th Pacific Asia Conference on Language, Information and Computational (PACLIC). Singapore: 123-133. Retrieved Jan 2010 from homepage.ntu.edu.tw/~ahrens/pdf/PACLIC_5.pdf.

Flowerdew, L. (1998). Corpus linguistic techniques applied to textlinguistics. *System*, *26*, 541-552.

Gasson, S. (2004). Rigor in Grounded Theory Research: An Interpretive Perspective on Generating Theory from Qualitative Field Studies. In Whitman. M. E., & Woszczynski, A. B. (Eds.). *The Handbook of Information Systems Research*. US: Idea Group Publishing.

Glaser, G., & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategy for qualitative research.* Chicago: Aldine De Gruyter.

Hornby, A. S. (2003). *Oxford Advanced Learner's Dictionary.* Oxford: Oxford University Press.

Jian-Shiung, S. (2011). Metaphors and metonymies in New York Times and Times Supplement news headlines. *Journal of Pragmatics, 43*,

1318–1334.

Kaplan R. B., & Grabe, W. (2002). A modern history of written discourse analysis. *Journal of Second Language Writing, 11*(3), 191-223.

Kövesces, Z. (2002). Metaphor: A practical introduction. United States: Oxford University Press.

Lakoff, G., & Johnson, M. (1980) *Metaphors We Live By.* Chicago: University of Chicago Press.

Leech, G. (1991). The state of the art in corpus linguistics. In K. Aijmer, & B. Altenberg (Eds.). *English corpus linguistics: Studies in Honour of Jan Svartvik.* London: Longman.

McEnery, T., Xiao, R., & Tono, Y. (2006). Corpus-based language studies. USA and Canada: Taylor & Francis.

Rizzo, C. R. (2010). Getting on with corpus compilation: From theory to practice. *ESP World, 1*(27), 9, 1-23. Available online from 2010, http://www.esp-world.info.

Rojo López, A. M., & Orts Llopis, M. A. (2010). Metaphorical pattern analysis in financial texts: Framing the crisis in positive or negative metaphorical terms. *Journal of Pragmatics, 42*, 3300–3313.

Sharifah Hafizah Syed Abdul Kadir. (2004). *Metaphors in stock market news reporting.* (Unpublished master's thesis dissertation). Kuala Lumpur: Universiti Malaya.

Smith, G. P. (1995). How High Can a Cat Bounce? Metaphor and the Hong Kong Stock Market. *Hong Kong Papers in Linguistics and Language Teachings, 18*, 43-57.

Urbaniak, G. C., & Plous, S. (2007). *Research Randomizer.* Retrieved March 23, 2009 from http://www.randomizer.org.

Walker, C. (2011). How a corpus-based study of the factors which influence collocation can help in the teaching of business English. *English for Specific Purposes, 30,* 101–112.

Zagan- Zelter, D., & Zagan- Zelter, S. (2010). Teaching business English – a challenge both for students and academics. *Procedia Social and Behavioral Sciences, 3,* 245–250.

Malay Farmers in Johore in the Wave of Capitalism Economy during the Colonial Period of 1910-1957

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ABSTRACT

In general, during the British colonial period of 1910-1957, the agricultural economy of the Johore Malays consisted of a group of farmers who lived in certain settlement areas, especially in the villages. Their agricultural activities can be defined as a group of people who owned or rented lands in small scale and used the manual system in the implementation of their work. This farming community in Johore was usually made up of the Malays. The agricultural activities in Johore in the early 20th century had played an important role to the economic development in the state. Hence, the purpose of this paper is to discuss the patterns of land tenure system that were practised in Johore during the British colonial period from 1910 to 1957. The system had manifested a form of more complex agricultural activity. In fact, land administration during the colonial period had made 'land' as a commercial asset that could be traded. This situation brought a huge impact to the Malays in Johore because it was different from the traditional system which had been practised for centuries. However, the Malays in Johore still enjoyed certain advantages because they still owned their lands until the 'Malay Reservation Enactment' was gazetted in 1913, which brought great influence to the development of agricultural economy of the Malay community. This action was very important in protecting the rights and position of the Johore Malays as the native community in the state. Generally, lands owned privately by the Malays were in small scale. Thus, the situation indirectly led them to undertake agricultural activities which emphasized food crops. This can be seen clearly in several districts in Johore, such as Batu Pahat, Muar, Segamat and Endau. In order to examine the colonial's land administrative system and the impact

towards the Malays' agricultural activities in Johore, this study will use primary and secondary sources obtained from the State Archives of Johore. It is hoped that this study can reveal another side of colonialism, the colonial society and socio-economic development in Johore.

Keywords: Agriculture, land, Malay, colonialism

INTRODUCTION

Administrative changes in a government often lead to changes in economic development policies of the government itself. This can be seen in the case of Malaysia. If we read and explore the history of Malaysia, one may notice that the period between the end of 19th century and before the independence was very much shaped by the British colonial administrative policy. The British had full control over the administration of the Straits Settlements, as well as the Federated Malay States. The British influence also had a huge impact on the Unfederated Malay States, such as Kedah, Terengganu, Kelantan and Johore. However, the local authority still played an important role in facing and dealing with the British colonial policies. The state of Johore was chosen as the focus of this study, as it was one of the Unfederated Malay States that attempted to curb the influence of foreign powers in the region of Southeast Asia at that time. Sadly, a few cunning British officers left Johore with no choice but to accept its first General Advisor in 1914. Since then, the British started to influence Johore's administration patterns while strengthening their position in the state at the same time.

Among a few significant changes that can be seen is the new policy of land management that was introduced to the government of Johore. The policy of indigenous land management had been replaced with a new policy based on experiences, ideas, interests, as well as concepts from the West. Therefore, this paper will discuss the patterns of land management during the British colonial period that were implemented in Johore and also their impact on the agricultural development to the society in the state, especially to the Malay farmers.

BACKGROUND OF MALAY AGRICULTURE

In his study, Gullick stated that majority of the Malay population in the 1870s lived in the villages, which were mostly located along the riverbanks. Back then, the river was actually a means for communication and transportation to carry out their daily economic activities (Jackson, 1965, p. 84 and Andaya, 1975, p.33). In addition, it was also a place for exchanging imported and exported goods. Therefore, if their settlements were located in far remote inland areas, they would have to face economic losses by paying more taxes because they would need to pass through more tax centres. Their settlements were also focused along the riverbanks due the factor of soil fertility. Gullick's analysis explains that the traditional Malay settlements began along

the riverbanks because the area was more convenient and comfortable for the Malays.

In the 17th and 18th centuries, the Malays in Johore were traders, who were in control of the sea. By the 19th century, the population in Johore transformed from a trading society to an agrarian society. The government's economic policy, which focused on collecting forest and agricultural products, had led to the rise of Malay agrarian society. The existence of this Malay agrarian society can be clearly seen after Johore fell under the control of British capitalism economy. According to Amriah Buang (2007), the economic life of the society can be described as "mixed self-sufficiency economy" or "natural economy". Buyung Adil (1971), on the other hand, thinks that the agricultural activities of the society were performed solely for the purpose of supporting the individual family without any commercial motive. The survival of the Malay farmers' families depended heavily on the production of agricultural products, such as rice, fish, vegetables and fruits, both from the wild or cultivated, livestock or wild animals, as well as the production of some commodities for sale. The main crop of the agrarian society was paddy, either the field paddy *(padi bendang)* or the hill paddy *(padi huma)*. This was because, apart from planting the paddy, hill farming also allowed crops such as corn, eggplant, bitter gourd, pumpkin, chilly, onion, potato and cucumber to be planted at the same time, thus ensuring food sufficiency for the farmers' families.

The nature of this natural economy also means that the farmers needed to live as one big family or as a group to undertake a variety of self-sufficiency economy activities. They were heavily relying on each other where cooperation from family members, relatives and friends was crucial for paddy planting activities, fishery, hunting and collecting forest products. The same goes to the implementation of 'public facilities' working routine, such as the construction of irrigation system and new settlements.

In terms of technology, the Malay farmers used only simple agricultural equipment, either by using only animals, or employing human energy which normally came from their family members. As a result, they were only able to produce crops enough for self-sufficiency and no more than that. Besides, these Malay farmers also practised the concept of cooperation in their lives, particularly among the farming community of both the field and hill paddy. Small scale plantation activities were also carried out in the period of 1800-1900. Among the plants cultivated were fruits, coconut, betel nut and vegetables. These activities usually involved land areas of more that 10 acres but not exceeding 30 acres, and they could be found mainly in the west shore of Johore, that was in Senggarang, Batu Pahat, areas around Muar, Kota Tinggi, Segamat and several other districts (Rahimah, 1977, p. 150). However, broader effort and emphasis were placed on paddy cultivation. In 1930, the visit of Rice Cultivation Committee recorded 13,000 acres of paddy cultivation area in Johore, which comprised 6,210 acres of paddy fields. The area extended to cover 25,060 acres in 1932-1933 with

15,800 acres of paddy fields.[1] These 'hot-spots' for paddy cultivation were located in the districts of Muar, Segamat, Batu Pahat, Kluang, Mersing and Kota Tinggi.

TRADITIONAL MALAY LAND SYSTEM IN JOHORE

The land system in the Malay States before the era of British colonialization was deeply influenced by ecological and environmental conditions. The right to own a land depended on the individual's ability to clear the forest areas as well as the ability to pay for any kind of fees (Gullick, 1987, p. 16). Lower population density compared to the total land area also provided many opportunities for individuals to cultivate and even own lands.

The concept of traditional land ownership can be divided into two categories, which are "live land" and "dead land" (Lim, 1976, p. 5). Maxwell (1884, p.80) underlined five regulations regarding the rights of land owners according to the land laws of the Malays:

a. Property rights cannot be applied in the case of "dead land."

b. "Live land" can be defined as one of the following three: (i) land planted with fruit trees (village land), (ii) paddy fields, and (iii) hill land used for farming and is usually not permanent.

c. Property rights in the villages can be maintained at present or in the future as long as the land is occupied with fruit trees as evidence that it is a "live land".

d. Property rights of the paddy fields can be maintained as long as it is occupied and the next three years after that.

e. Property rights for hill land can be maintained as long as it is occupied, which is usually one season.

It can be considered that the concept of land ownership according to the traditional land system of the Malay people was very "loose". It suggests that any individual could own a land as long as he or she was a Muslim, was willing to clear the forest for agricultural activities and did not invade other people's land. Land ownership was also associated with the types of plants which were suitable to be planted in that particular area. Landlords of fruit growing lands were given the rights for a longer period of time compared to the landlords of paddy fields. In addition, abandoned hill lands were open for anyone to develop either by borrowing or renting. These lands were owned by the Sultan. According to Maxwell (1884, p.89), the rights of the Sultan on these lands were very similar to the rights of the kings during the early Hindu period in India, which included: (1) the right to collect the crops, (2) the right to collect taxes, and (3) the right to sell dilapidated lands. Besides that, the Sultan also had the rights on unused lands. Theoretically, a vacant or unused land would be returned to the ruler of the state. The state's ruler also reserved the rights in matters such as the removal of undeveloped lands. Thus, the concept of individual ownership did not exist; instead, the overall power upon lands in the state rested with the ruling elite.

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[1]Report on Agricultural Development in Johore, 1934, in *Journal Tani 1*.

The concepts of renting and mortgage had also been long existed in the traditional land system of the Malay people. Regarding the concept of renting, the laws of the Malay lands stressed that all land tenants must comply with the land owner or they would be fined 10 *tahil* or 1 '*peha*'. The Malay farmers also had the responsibility to contribute voluntarily as human capital to their leaders.[2] On the other hand, the concept of mortgage refers to the selling of land according to its actual price but the seller would only be paid a deposit. In terms of the land ownership rights, the Malays, king or Sultan, in general, reserved the usufructuary rights (Rahimah Abdul Aziz, p.153). The usufructuary rights here can be defined as the right to use a land which had been obtained by clearing the forest and carrying out agricultural activities on the soil. Thus, by occupying and farming the land for certain period of time without leaving, the individuals would eventually gain their rights over the land.

In the state of Johore, the traditional land system had experienced some changes during the reign of Maharaja Abu Bakar.

[2]According to Ishak Shari, there was influence of Islam in the land ownership and land taxation system. Many lands in the state dominated by the Muslims were considered as the lands owned by the government (ruler). The land users were only considered as tenants. In addition, one important characteristic of such lands was the taxation system. Those who were using the lands owned by the ruler were required to pay land tax known as Kharaj. This tax was defined according to one of these three methods: (a) based on the width of the land cultivated, (b) based on the total output, and (c) based on the fixed amount of tax (see, Ishak Shari, 1988; *Pembangunan dan Kemunduran: Perubahan Ekonomi Luar Bandar di Kelantan*, Kuala Lumpur: Dewan Bahasa dan Pustaka, 1988, p. 108).

One of these changes was the issuing of certain letters by the traditional rulers to show that a particular individual was given the permission to explore the forest and carry out agricultural activities there. These letters could usually be obtained through the village head (*penghulu*). A more systematic land management system was established by the government of Johore after the opening of pepper and gambier farms, which resulted in the influx of Chinese labourers into the state. This system was also known as the Kangchu System that refers to the system of settlement, cultivation and land tenure (Rahimah, 1997). Permission to open these farms was given through the *Surat Sungai*, which was a grant that allowed the Chinese to establish pepper and gambier farms on some identified riverbanks with the conditions that the area was not yet owned by anyone and the Chinese must control the agricultural activities in the area covered in the grant (Trocki, 1979; Coope, 1979). The Kangchu also received the mandate from the government of Johore to administer and held the rights and authority over their *kangkar*. Through this mandate, the Kangchu became the government's main agent that was responsible for maintaining the safety in the farms. They also gained the monopoly rights on businesses, gambling, pawning, as well as the right to supply opium, alcohol and pork (Coope; Jackson, 1965). In return, the Kangchu paid rental, license fees and other taxes. The management of the land system

was also enhanced with the existence of the Kangchu Code in 1837.[3]

The development in Johore resulted in the opening of more and more lands by both the Malays and Chinese. In order to prevent disputes and conflicts between the two groups regarding the question of boundary and other land-related problems, administration of these lands was arranged. Reformation related to the registration of land ownership began in 1866 after the end of the Tanjung Puteri controversy. This measure was considered as one useful and profitable action, especially to those who were interested in gambier and pepper plantations.[4] In 1874, the Department of Land (*Jabatan Tanah*), which was merged with *Kerja Raya*, was established. However, the two were divided into *Jabatan Kerja Raya and Jabatan Ukur dan Tanah* after a few years. In 1883, *Jabatan Ukur dan Tanah* was further split into *Jabatan Ukur* and *Jabatan Tanah* (Ahmad, 1988).[5] In general, the traditional form of land management in Johore had already evolved into a more systematic form of management before the intervention of British colonial power.

[3]This code explains the administrative responsibility of the *Kangchu*, who administered on behalf of the government. In addition to the 1873 code, there were also *Undang-Undang Kesejahteraan Kerana Gambir Lada (1868)* and *Undang-Undang Nombor Satu Kerana Memelihara Hak Yang Bergantung Atas Gambir Lada (1875).*

[4]Logan to Secretary of Government. 21.11.1864. CO273/16. PRO.

[5]One of the new tasks of *Jabatan Ukur* was to handle the affairs of gambier and pepper plantations. However, the registration of gambier and pepper farms was still operated by the Office of State Police Commissioner, while *Jabatan Tanah* led by Datuk Bentara Luar was responsible in work measurement for the whole state of Johore.

However, even with the legally assignation of a General Advisor in Johore, the British only continued and further expanded the existing system by introducing the function of capitalism into the system.

JOHORE UNDER THE BRITISH INFLUENCE

Johore was one of the member states of the Unfederated Malay States. There were five Malay states classified as the Unfederated Malay States, namely, Johore, Kedah, Terengganu, Kelantan and Perlis. These states were influenced indirectly by the British colonial rule. How did these states differ from the Federated Malay States? According to Rupert Emerson, there was no one single ruling method in terms of politics in the Unfederated Malay States (Emerson, 1979). Although the rulers still enjoyed autonomy in their states, the truth was these states were under the dominance of British Governor and High Commissioner. The Unfederated Malay States, together with the Federated Malay States and the Straits Settlements, all resided under the dominance of the British colonial power. However, these five members of Unfederated Malay States did not develop any special relationship among themselves. Apart from their participations as members of the Malayan Commonwealth, the five states maintained their status as Malay states which practised the monarchy system freely in Malaya. Even though they were not located under one common administration centre, the five states did cooperate with one another in their effort to ensure their independence respectively, as well as to

curb the invasion threat from Singapore and Kuala Lumpur. They learned their lessons from the Federated Malay States which were under the British dominance, and this was crucial for their decision to adopt a separation policy organized by Johore and Kedah.

According to Rupert Emerson, Johore was a state in which its nature was difficult to describe easily and clearly. Although its formal position was no different with the other Unfederated Malay States, it had its own unique administrative structure that distinguished it to its own characteristic. This uniqueness was what made Johore the last state to accept a British advisor, even though it was the only Malay state that had developed the longest and closest relationship with the British. The reason for this was because the government of Johore depended mainly on the characteristic and strength of its rulers, who had occupied the throne since Raffles's intervention in Singapore. These rulers had talent in the field of politics and knew when to give in, in order to get the best benefits for themselves. During that time, the elites and administrators of Johore knew how to adapt themselves to the needs of the new imperialist world which pressured the East. Meanwhile, they also had good understanding of the British colonial tactics used in bargaining various interests between

the Europeans and Asians.[6] The utilitarian characteristic of Johore at that time had made it a sovereign state that had successfully established a modern image through its local administration. Although there were interactions between the government of Johore and British colonial power, Johore had set its own interests as the priority in the Johore-British relations, and at the same time, making British as its only protector from the threat of other imperialist powers.

THE INFLUENCE OF ENGLISH LAWS IN JOHORE

During the ruling period of Maharaja Abu Bakar in 1873, Johore already had a State Council which served as an advisor to the Maharaja. In addition, there were also eight other separated government

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[6]The wisdom of Johore's administrators, especially during the era of Temenggung Daeng Ibrahim and Sultan Abu Bakar, was evident because they realized that Singapore was not the centre of the empire. The Sultan of Johore felt more comfortable in dealing directly with London. With that, the government of Johore was able to resist the influence of British officials in Malaya. With the consent of Queen Victoria, an agreement was made and it was stated in its content that the emperor would be recognized as the Sultan, while his state would be officially placed under the British protection (see Maxwell dan Gibson, *Treaties and Engagements*, p. 132-133). This agreement was not signed by the Governor of the Straits Settlements, but it was instead signed by the Secretary of State for Colonies, which was different with the agreements made with the other Malay states. The third clause of the agreement mentioned about the appointment of a British officer in Johore as the representative of the consul. Therefore, Johore's action in dealing directly with the British government in London without going through the Governor of Straits Settlements had a huge impact on the government of Johore in terms of politics and economy. Johore's freedom lasted until 1914 where the government had to accept its first British General Advisor.

departments in the state including the Treasury, Court, Police, Prisons, Surveyor, Medical and Railways.[7] The Maharaja also appointed a British named William Hole as his personal secretary (Hasrom Harun, 1971). These administrative developments could be seen through the strengthening of the ruling Maharaja's position in a more comprehensive manner. By the last half of the 1870s, Johore was still a despotic state under the control of Maharaja Abu Bakar, where his orders or words were obeyed and respected by the citizens of Johore. This situation continued until 1910 when Johore's glory began to fade as the British influence strengthened in the state due to its near location to Singapore (Wu, 1984). The government of Johore had several legislative bodies that played a major role in the state's administration. These bodies were made up of the *Majlis Mesyuarat Kerajaan Jemaah Menteri* and *Majlis Mesyuarat Kerja*, which were established in 1912.[8] It is important to examine the tasks performed by these bodies because they played a major role in Johore's legislative system in approving, amending or drafting the laws.

The Cabinet (*Jemaah Menteri*) was important in Johore due to its members' role in running the state's administration.[9] It was stated in *Undang-Undang Tubuh Kerajaan*

Johor, that the Sultan must, should and voluntarily accept the advice of this body in all aspects for the benefit of the people. Among the functions of this body were to run the state's daily administration, draft laws and prepare the framework for budget and policies before they were brought to another body which held the legislative authority for approval. The members of the body were strictly limited to the Malays who were also Muslims. *Mufti* and *Kadi* were also members of Johore's Cabinet. Based on the descriptions above, one can sum up that the Cabinet was a body which functioned in accordance with *Undang-Undang Tubuh Kerajaan Johor 1895*. However, its role was eventually taken over by *Majlis Mesyuarat Kerja* in 1912, headed by the British officers. Meanwhile, *Majlis Mesyuarat Kerajaan Johor* was a body which helped the Sultan and the Cabinet in the state's administration. In theory, this body was responsible to formulate policies to pass a law, except in matters regarding religion and *shariah*, which were the responsibilities of the *Kadi* and *Mufti*. The members of this body were not limited to the Malay Muslims only, but they must also be the local citizens of Johore.[10]

At this stage, the Sultan's role was to verify the laws that were approved by *Majlis Mesyuarat Kerajaan Johor*. Not to be forgotten, since the reign of Sultan Abu Bakar, a British advisor was specially employed by the Sultan to serve in the body as an advisor that would help

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[7]The Colonial Director of the Straits Settlement, 1873, p.1.

[8]*Undang-Undang Tubuh Kerajaan Johor 1895 dan Tambahannya*, 17hb. September, 1912.

[9]The members of the Cabinet consist of high ranking officers in the government, Government Secretary, Department Heads and Regional Commissioner (*Pesuruhjaya Wilayah*) (refer to Clause 28, *Undang-Udang Tubuh Kerajaan Johor,* 1895).

[10]Clause 49, *Undang-Undang Tubuh Kerajaan Johor,* 1895.

to develop Johore. This situation continued until the reign of Sultan Ibrahim. Due to the formulation of *Undang-Undang Tubuh Kerajaan Johor 1895*, the Sultan officially handed over the role of Cabinet and legislation to the body, while the justice system was handed over to the court. Each elite and chief was given certain tasks, and this job division for the Sultan was a restriction on his power to act alone. Before 1910, Johore's administration was made up of Malay officers headed by the Chief Minister assisted by the State Secretary. However, starting from 1910 and the subsequent years, there was a gradual change where the local Malay department heads were replaced by the British officers. The General Advisor appointed in 1913 had expanded his role at the same level of importance as the State Secretary.

The role played by the British officers also gained increasing importance as the administrative officers. Besides, they were given the responsibility to discuss issues or proposals that would be brought up to *Majlis Mesyuarat Kerajaan* and *Majlis Mesyuarat Kerja* with other British officials. The issues or proposals would only be brought up to the two bodies if an agreement was reached among the British officers. Recommendations by the General Advisor were often well-received by the members of the two bodies mentioned above.

In 1910 alone, a total of three British officers were appointed in Johore. On December 25, 1910, M. H. Whintley was appointed as the General Advisor as well as the Legal Advisor of the state, while

J. W. Simmons, on the other hand, was appointed as the Commissioner of Customs on December 21, 1910 (Johor Annual Report, 1911). In 1911, four other British officers were appointed, namely, J. Giffith as the Surveyor Superintendent (*Penguasa Juruukur*) since September 1911, J. L. Humphreys as the Judge of Batu Pahat since February 12, 1911, H. H. Byrne as the Chief Engineer starting February 1911, and W. B. Y. Drapper as the Superintendent of Johor Bahru starting May 1911 (Johor Annual Report, 1911). On May 30, 1913, the Legal Advisor was also appointed as the Judge of High Court. In the subsequent year, a Police Commissioner was positioned under the supervision of British officers (Johore Government Gazettes, 30 May 1913 and 30 December 1912). With more and more British officers being appointed in the administration of Johore, the number of British investors investing in Johore also increased drastically. Following this, the security and safety of these British officers needed to be assured, and thus, a Legal Advisor was appointed to formulate laws to be applied in Johore. The Legal Advisor was also in-charge in monitoring the development of justice in the state's courts. The police force fell into the hand of British colonial in 1913 and in 1914, whereby a Superintendent named M. H. S. Sircom was appointed as Johore's Prison Superintendent (Johor Annual Report, 1914).

Majlis Mesyuarat Kerja was given the role as stated in *Undang-Undang Tubuh Kerajaan Johor* and its amendments in 1912,

which was to give recommendations in the formulation of laws in Johore. This means that the council would have to prepare or draft the laws to be approved by another body, while the courts would enforce the laws once enacted. The responsibility of laws formulation lied in the hand of the Legal Advisor of Johore named M. H. Whintley.

Most of the laws were taken from the Straits Settlements and the Federated Malay States because these states were the first to carry out the British laws before Johore. In the early stage, the General Advisor would ask for the agreement and approval of *Majlis Mesyuarat Kerja* to pass and implement a particular law in Johore. If an agreement could be reached, the General Advisor together with the Legal Advisor and State Secretary would process the law and amend it to suit the situation and condition in Johore. Therefore, it can be seen clearly here that there were three important figures in the field of laws in Johore. These three figures were the Legal Advisor, General Advisor and State Secretary of Johore, where two of them were British officers.

One may notice that, although *Majlis Mesyuarat Kerajaan* was given the role to pass laws that would be implemented in Johore, its role can be best described as a "rubber stamp". This means that, even though the council held the highest legislation power in Johore in theory, practically, a huge part of its role was taken over by *Majlis Mesyuarat Kerja* made up largely by the British officers. The treaty signed between Sultan Ibrahim and the government of Britain in May 18, 1914 further strengthened the British power and influence in Johore. The treaty officially appointed a General Advisor to be stationed in Johore.[11] According to the treaty, the recommendations or advice of the General Advisor must be required in all administrative matters. As a result, the ruling power was fully passed to the General Advisor from the Sultan of Johore.[12] Therefore, it is undeniable that the position and conditions of Johore, the Sultan and his officers were just the same with the other Malay state.

Although the Sultan was recognized as the Head of the State, his position was rather symbolic. The political power that had been the pillars of the state's administration and legislation system was taken over by the British through the General Advisor and other British officers. Furthermore, the 1914 Treaty also officially caused the Malay elites to lose the power that they used to have in *Majlis Mesyuarat Kerja*. It was stated in the treaty that if there were disagreement between the Sultan and the General Advisor, the advice of *Majlis Mesyuarat Kerajaan* would be sent to the Governor for consideration. Thus, it is clear that the government of Johore was dominated by the British since 1914 where all matters regarding decision-making had to be referred to the British Governor.

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[11]Anderson to Campbell. 28 February 1910. CO273/360.PRO.
[12]See telegram from CO to Young. 28 April 1914. CO273/406, Anderson's minute dated 16 September 1913 in Young's delegacy. 7 August 1913. CO273/396. PRO.

TRANSFORMATIONS IN COLONIAL LAND MANAGEMENT

To ensure that the British could influence the policies, plannings and administration of Johore, *Mesyuarat Kerja Dewan* was established on September 17, 1912 through the extension of *Undang-Undang Tubuh Kerajaan Johor* (Emerson, p.205; Mohamed Said Haji Sulaiman, 1950). This *Mesyuarat Kerja Dewan* was an executive body in charge of matters regarding land, agriculture, mining, public work, job promotion of government servants, legislation and other important fields (Mohamed Said Haji Sulaiman p.80). In 1914, D. G. Campell formulated a new land management law in order to overcome the weakness in the existing traditional land system in Johore. These changes were done for several reasons. Firstly, the existing traditional land system gave the Sultan or even his government officers the potential to misuse the authority and power they had on the land. Secondly, the existing traditional land system might lead to the collapse of norms practised in relation with land. Through this, the British would be able to introduce changes that would bring benefits to the people by eliminating unclear elements in the existing traditional system (Lim, 1976). The British also thought that the existing land management system in the 19th century was confusing because there were no standard procedures in relation with land application. As a result, the power of the government was limited since it was unable to impose its rights in collecting taxes.

D. G. Campbell urged for the Land Law that was approved and adopted by *Majlis Mesyuarat Kerajaan Johor* on September 17, 1910 to replace the land rules formulated based on the Malay customs. This 1910 law adopted the Western law concepts regarding land ownership. In early 1910, there were few categories of land ownership: (i) land owned forever and was not subjected to any cultivation conditions and did not have to pay rent, (ii) land solely for the purpose of planting pepper and gambier, (iii) land acquired through long-term rental, usually given to the Europeans, and (iv) small sized land occupied by mostly the Malays based on the custom law. In general, changes that occurred in the land management system in Johore were in line with capitalism economic requirement, as well as the colonial economic and political policies in the state, which were no different with the policies implemented in the Federated Malay States.

In 1890, the price of coffee had dropped significantly, while the price of rubber increased drastically due to the high demand which exceeded its production as a result of the development of automobile industry (Lim, 1967). Since then, rubber became one of Johore's primary exports. The high demand of rubber had led the British to offer land ownership with loose terms and conditions as well as capital loan assistance to anyone who wished to cultivate rubber trees in August 1897.[13] In fact, the British administration in the Federated Malay States

[13]Secretary to RG to BR of Negeri Sembilan, 16 August 1897, NSSF 2139/97.

allocated $4,000 for rubber experiments in 1900 (Lim, 1976). As a result, many western and local capitalists converted their agricultural activities to the planting of rubber trees (Badariyah, 1990). In 1899, the first delivery of rubber commodity from Malaya to the market in London was accepted with a very high price and this further encouraged the cultivation of rubber trees. Due to the increasing demand for rubber, the British restructured their land management policy in all their colonies, including the state of Johore.

The British colonial land law combined the law of land ownership, land registration, land revenue, as well as a number of administrative instructions to the land valuation and land registration officers. The purpose of such law was to simplify the procurement and ownership transfer process to give a sense of security and gain confidence from the investors. The law also aimed to examine, evaluate and register all occupied lands, and issue ownership certificates to all Malay land owners stating the type and total taxes they had to pay. The land management system introduced by the British was similar to the Torrens System in Australia (Lim, 1977). Through this system, the Land Department was given the task to verify and control ownership of land, as well as to increase annual rental registration and register land with the same possession letters.

Meanwhile, the grant system was established for large holdings, while small farms (10 acres and below) would be registered with the County Registration.

Possession of all large sized land blocks for rubber cultivation and other agricultural activities was given through grants. These two types of land possession were subjected to annual land tax. With this, it was hoped that all privately owned lands could be registered and the boundaries of all holdings could be evaluated for the purpose of mapping (Rahimah, 1997). The interesting part in the colonial land management system was that, individuals could now have their own land. This was a significant change to the traditional Malay land management system. Besides owning the land, the individuals also had the power to sell, loan and pass down the land without difficult legal formality. Any unowned land or land kept for public use, which was not a reserved forest, was regarded as the 'state land' that belonged to the Sultan.

THE EFFECT OF BRITISH COLONIAL LAND ADMINISTRATION ON MALAY AGRICULTURE LAND

This backwardness of the third world is caused by how these countries were dragged into the orbit of western capitalism expansion, which could be traced back to Karl Marx's debate on "foreign trade" and "expansion of capitalism". The theory has been further discussed and expanded by a few other prominent scholars, such as Lenin, Paul Baran and Andre Gunder Frank. The fundamental aspect of this theory is the concept about the dialectical relationship between the development of the "first world" and the backwardness of the "third world". The dialectical term shows

us two interconnected causes, meaning the development in the West has led to the backwardness in the third world. This is a result from the unilateral transfer of wealth from Asia, Africa and Latin America to the European's economy. The economic surplus is largely accumulated in the hands of the capitalists, who use it for industrial investments.

In the case of Johore, one may notice that its economy was very much driven by the development of capitalism economy in late 19th century and early 20th century. The functions of land during that period of time were more as an output factor in the field of agriculture. The land could also be traded freely with ownership transfers. Keith Sinclair, who used the assumption of Hobson and Lenin, found out that the development of capitalism economy in Johore lied in the hands of administration groups, such as the "Colonial Office" and "Governor of Straits Settlements", which had been driving capital exports into Johore (Sinclair, 1967). The years between 1896-1910 witnessed an encouraging growth of rubber industry simultaneously with the automobile industry and ended with the peak price of rubber (Chai, 1964). This period also witnessed the influx of British capitalists and engineers into the mining industry in Johore (Wong, 1965). Eventually, Johore became a state which encouraged the entry of capitalists, not only for the sake of development, but also to ensure the interests of its investors.

The most obvious effect of the British colonial land management was the domination in commercial agricultural

activities by foreign capitalists. For example, in 1878, Johannes Mooyer of Gt. Winchester Street, London, was given the permission by Abu Bakar to establish a corporation which was entitled with virtual monopoly of economic development in Johore for 99 years (Sinclair, 1967). The corporation was involved in multiple fields, such as banking, commerce, agencies, farming, and mining. It was also the owner of bridges, ferries and railways. The capitalists in Johore had succeeded in establishing large corporations operated on a large scale (Tate, 1980). The Guthrie & Company Ltd. founded by Alexander Guthrie, which acted as an agent of the Singapore London Banking House and insurance companies, also involved in the rubber industry by 1895 (Allen, Donnithorne, 1954). In 1931, it became the agent of 26 rubber companies with the capital almost reaching 6 millions. In addition, the company was also the owner of 132 acres of rubber plantation area and 10,500 acres of palm oil plantation area. The Kukub Rubber Estate Limited represented by Bruce Petrie Limited, Union Building, Singapore, also involved in the rubber, sago and coconut plantation sectors. The firm owned lands as wide as 12,000 thousand acres, in which 1,328 acres were planted and 575 acres already generated income for the firm (Allen, Donnithorne, 1954). Although there were many other foreign firms based in Johore for agricultural activities, not all had their own land. Some of these firms rented their land under a grant called "Capital Lease", for example, the land cultivated under the possession

of Alsagoff Concession. Thus, we can see a number of strengths in the foreign agricultural economic in terms of capital, land, technology, manpower, organization and market. The domination of capitalism in agriculture was not solely caused by the colonial land management factor, but also due the Sultan's attitude in bringing in foreign capitalists to develop the economy of Johore since the government was having financial problems due the debt it bores during the ruling period of Sultan Abu Bakar. The statistic of the foreign capitalists' domination in commercial agriculture in 1934 is illustrated in Table 1.

TABLE 1
Plantation owners in Johore 1934

Ethnic Groups	Acreage
Europeans	278 000
Chinese	160 000
Japanese	54 000
Indians	14 000
Malays	3 000
Others	1 000
Total	510 000

Source: A report on agriculture department in Johore. H.A. Tempany. Director of Agriculture, SS and FMS. 17.3.1934. GA 248/34

Capitalism based on capital accumulation dominated a large area with economic potential to gain wealth from the resources of Johore. This was the main cause for the shrinking of Malay agricultural activities that were mostly confined to only the cultivation of crops and small scale farming. Basically, the Malay agricultural activities were still under the supervision of the *penghulu* and

orang-orang kaya. Both positions were located under the power of District Office and they only worked in accordance with the instructions of Commissioner Land and Mines. The functions of *penghulu* were reduced compared to the traditional period. During the colonial era, the *penghulu* was only given the right to collect the products from small scale agricultural activities of the Malays and non-Malays.

In addition, the *penghulu* also acted as the middle man in matters related to land management with the superior officer. The colonial land management system that allowed land to be traded had impacted upon the agricultural activities of the Malays in Johore because they could only afford lands of not more than five acres. In addition, there were only a small number of Malay elites who had ventured into commercial farming activities with greater capital. Capital was an important factor in influencing the production area of agricultural activities. To open or cultivate land subjected to the grant of Land Enactment 1910, an individual had to pay as much as 50 cents per acre for the first six years and the payment would increase to $2.50 per acre for the subsequent years.[14] This was actually a very high price for the Malay farmers during that time because their agricultural activities differed from the foreign capitalists who

[14]Johore Annual Report, 1911. Based on the report, there were 63 rubber estate owners, whereby majority of these owners were foreign capitalists. The maximum land area owned by these foreign capitalists measured 106,479 acres, while the minimum land area measured 280 acres. These figures did not include the land area exploited by them in other agricultural activities, such as betel nut, coconut and so on.

had strong capital strength. Notably, the Malay agriculture at that time was cultivated in groups or individually on a small scale. However, the Malays had dominated paddy planting in both field and hill paddy. This can be seen in several districts in Johore, such as Muar, Batu Pahat, Kluang and Endau. An interesting point was that, the function of Malay agriculture grew at a level that only met the domestic needs. Now, the agricultural activities are cultivated by the locals not only on self-sufficiency basis, but also to meet the demand of foreign workers and other foreigners in Johore.

According to the Torren System, those who wished to own a new land may send in an official application and register at the Land Office or at the *Pejabat Penghulu* for each county. The liberal Colonial Land System actually benefited the foreign capitalists. Most of the lands owned by these capitalists consisted of large grants compared to the Malay farmers, who were mostly with small grants. In general, it can be said that the basis of British colonial agriculture policy in Johore was the development of huge farms or estates, which was very different from the small farms owned by the locals.

Agricultural activities in Johore can be divided into two. The first was huge farms or estates owned mostly by European and Asiatic capitalists, while the second was small farms (Rahimah, 1997). Large scale farming involved the use of vast lands for agricultural activities for export. These activities also required a lot of manpower and capital, which were the two factors that the indigenous economy failed to meet. These characteristics were different from small scale farming which emphasized simplicity and self-sufficiency with only a little manpower to cultivate the small lands. Generally, the colonial land management system was more systematic compared to the existing traditional system. However, since the 1910, Land Law did not guarantee the rights and positions of Malay agriculture, in which two different development trends had occurred. First, commercial agriculture was growing as it was able to meet the needs of the British colonial economy. The second trend, on the other hand, showed backwardness in the agricultural activities dominated by the Malays. Therefore, Lenin and Hobson assumed that dualism can be seen in the effect of colonialization, which means that, those in favour of the colonists would thrive, while those being colonized would be left behind. This was what happened to the Malay agriculture in Johore during the era of British colonialization.

MALAY RESERVED LAND

Apart from the expansion of plantation area owned by the foreign capitalists, the British colonial land management system also contributed to the land trading activity. The increase in land price as a result of the implementation of 1910 Land Law led many of the Malays to sell or mortgage their heritage lands without thinking of the consequences. This phenomenon worried the Sultan as the lands were sold to the non-Malays, thus, leaving the Malays landless.

Consequently, in 1912, the Sultan of Johore decreed all the Malays not to sell their lands to the non-Malays because the action would bring them harm.[15] This concern became the main issue discussed at that time because there were some dissatisfied Malay elites who tried to defend the position of the Malays. The British were also concerned about this issue because they realized that if they did not protect the rights and position of the Malays, their imperial economic interests would be threatened.

The British also realised that if the matter was not solved wisely, it might bring pressure from the local administrators that would indirectly intervene in the bureaucratic procedures against the principles enshrined in the 1910 Land Law. Thus, in 1913, the Malay Reserved Enactment was passed by *Majlis Undang Negeri-Negeri Melayu Bersekutu*. The enactment consisted of four important parts. Section 3 empowered the resident to select and announce the Malay reserved areas. Section 7 asserted that the lands gazetted as the Malay reserves shall not be transferred to the non-Malays, while Sections 8, 9 and 10 placed several restrictions on the ownership of the reserved area (William, 1975). The background of the policy was related with the development of socio-economy and politics in the Malay states. There were also a few British officers who were sympathetic with the situation faced by the Malays. For example, H. C. Eckhardt, who was the *Pemangku Pesuruhjaya Tanah* for the Federated Malay

States in 1930s, felt that the act of granting land ownership to foreign interests should be prevented. Eckhardt seemed to be more aware of the need to highlight the role of the natives on foreign interests as can be measured through land width in acre.[16] During that time, the District Officer in Ulu Langat, R. C. Clayton said that the Malay farmers should be viewed differently from the Chinese and Indian farmers because they were the indigenous people of the state. This awareness might be the result of the outbreak of peasant movement in a few third world countries in Latin America, Asia and Africa in the 20th century. Among the early revolts was the Mexican Revolution in 1910, which was a war launched against the colonialization of the British, Germany, France, the United States of America and especially Spain.

However, there were also British officers who disagreed with the proposals mentioned above. G. A. Elcum, as the Acting General Advisor, refused to change the Land Law to prevent the sale of land as proposed by the Malay elites. As a result, the instructions to the Government's Commissioner were changed, which stated that, if necessary, the Malays could sell off their lands to pay debts, to go for Hajj and so on.[17] This might seem like an act to defend the position of the Malays, but the colonial policy always emphasized its imperialist economic interests. The policy was influenced by the phenomenon of crops

[15]See SUK to PJK Muar. 13.5.1912. GA 145/1912. ANJ. Also see SUK to PJK Batu Pahat. 14.5.1912. CLM680/25. ANJ.

[16]Eckhardt, "Malay Reservations", Memorandum 19/5/30, Sel Sec File G1195/1930.
[17]Government Secretary to Government Commissioner, Batu Pahat. 18.6.1912. CLM680/25. ANJ.

shortage in the end of the First World War. The introduction of rubber industry by the British in Malaya had changed the mind of the Malays to join the new economic field by leaving their traditional agricultural activities or trying to dominate both fields. Due to the increasing number of Malays who were involved in small scale rubber cultivation, the production of crops for domestic needs had decreased. Thus, the implementation of this policy was one of British's efforts to ensure that the Malays would remain their focus in cultivating paddy in order to accommodate those who were in the rubber and mining industry. With the Malay Reserved Enactment 1913, the Malays were expected to continue their traditional agricultural activities and stay away from modern industries. The approval of the enactment reflected the desire of Federated Malay States' governments to help maintain the Malays on their land, and if possible, continue to cultivate their traditional agricultural activities (William, 1975). This also resulted in agriculture polarization among the people of Johore. The Malays were limited to undertake self-sufficiency agricultural activities and as crop producers, but their chance to participate in commercial agricultural activities was relatively thin compared to the foreign capitalists who monopolized the field. There were also effects resulted from the changes in the British colonial administration that was too focused on estates, as well as urban and mining areas. As a result, the rural areas continued to be left behind and this further reduced the functions of Malay

agriculture. Clearly, the liberal colonial land management system had threatened the local economy. International capitalist entrepreneurs played a more intensive role in the state's economy without helping the locals.

The Malay Reserved Land can also be interpreted as an act of the British colonial to help prevent the selling of the Malays' lands to the non-Malays in the reserved areas. In order to prevent the Malay land owners from losing their lands, the General Advisor, G. Shaw in 1929 was instructed by the British High Commissioner, Sir Hugh Clifford, to overcome the situation. On February 24, 1929, Shaw suggested the establishment of two reserved lands in eastern Johore, which were in the southern part of both Endau and Sedeli River.[18] It might seem like this was an effort to help the Malay farmers; however, a question arose - were the lands fertile and suitable for agriculture? The lands in eastern Johore were not suitable for agricultural activities as compared to the lands in western Johore, because the area was more suitable for mining activities. In fact, the area of the Malay reserved land set by the British was incompatible with the status of the Malays and the indigenous people in the state.

The issue of the Malay Reserved Land arising from the colonial land management system lasted till 1933. At one point of view, the effort to help the Malays could also bring losses to them. As in the opinion of Jones[19],

[18]CLM to CLR Kota Tinggi. 5.10.1929. CLM101/29. ANJ.
[19]Memorandum. S.W. Jones. 19.11.32. CLM101/29. ANJ.

he filed an objection saying that the market value of the Malay Reserved Land decreased due to obstacles relating to matters like the sale, mortgage and rent of the land. As a result, the owners of the Malay Reserved Land could not earn any profit if they were to sell or rent their land. Thus, to address this problem, R. O. Winstedt, the General Advisor of Johore at that time requested the Commissioner of Muar, Batu Pahat and Segamat, as well as Assistant Advisor in every district to get the advice and opinion of the *penghulu* and the village head on the pros and cons of introducing the Malay Reservation Enactment as notified on March 4, 1931.[20] The *penghulus*, village heads and the elderly in the villages of all districts agreed for the law to be introduced.[21] Thus, negotiation for the implementation of Malay Reservation Enactment was brought to *Mesyuarat Kerajaan* on May 30, 1933 by Abdullah bin Esa, the Government Commissioner of Segamat. The reservation scheme for the entire state was approved by *Mesyuarat Kerajaan* in 1935.[22]

Broadly speaking, the Malay Reserved Policy was one of the British colonial economic programmes that seemed to be pro-Malay. However, the sincerity of the colonial power can be disputed. This was because, up till 1932, there were only two Malay reserved lands in the state of Johore. This was not a good solution because it caused the Malay agriculture to remain static without any development and was left far behind compared to the agricultural activities cultivated by the foreigners. This, however, was not the concern of the British. What they desired was to accumulate wealth from Johore's resources and bring it back to London. The Malay Reserved Policy should be implemented state-wide with emphasis on the terms and conditions of the land agreement, and not by choosing a specific area as the Malay reserved land. This indicates that the lands for the Malay agriculture were being narrowed.

CONCLUSION

With the influence and intervention of the British colonial power in the administration of Johore, multiple changes could be spotted in the organizational structure in its economic aspects. This can be clearly seen in the land management system of the state. The British policy assumed that the loose traditional land management system, which was unable to use the land economically, needed to be changed to a land management system in line with the British economic policy. The liberal colonial land policy resulted in the influx of foreign capitalists, especially the Europeans, who carried out agricultural activities in Johore. This phenomenon further limited the Malay agriculture in Johore since there were not many Malay capitalists who

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[20]Winstedt to Government Commissioner of Muar, Batu Pahat and Segamat, and Assistant Advisor of Muar, Batu Pahat, Pontian, Kluang, Segamat and Kota Tinggi. 15.12.1932. CLM101/29/ANJ.

[21]AA Batu Pahat to GA.21.12.1932.; PJK Batu Pahat to GA. 22.12.1932.; PJK Segamat to GA. 28.12.1932.; AA Segamat to GA. 31.12.1932; AA Kluang to GA. 28.12.1932.; AA Muar to GA. January 1933.; PJK Muar to Ga (not dated); AA Kota Tinggi GA. 16.1.1933. AA Kukup to GA. 15.2.1933, in CLM 101/29. ANJ.

[22]AA Muar to GA. January 1933. CLM1O1/29. ANJ.

participated actively in expanding their agricultural activities. The agricultural structure of the Malays was still focused on individuals who only cultivated the lands owned by themselves. In addition, the *penghulu* and village head still played a role in determining their agricultural activities. The Malay agriculture during the colonial era was unable to grow alongside with commercial agriculture due to the lack of capital. Capital was an important factor in securing manpower, energy use and facilities that would help optimise the production of the agricultural activities. The Malay agriculture in Johore suffered the same fate as the agriculture in the Federated Malay States, which focused only on crop planting and small scale farming. Although not many Malays were involved in commercial agriculture economy, they played a role in domestic agriculture economy. The commercial economy activities in Johore were only profitable for the British colonial. That was why the Malays focused more on crop planting to meet their own needs.

REFERENCES

Ahmad Fawzi Basri. (1988). *Johor 1855-1917: Pentadbiran dan Perkembangannya*, Petaling Jaya: Fajar Bakti.

Amriah Buang. (2007). *Pertanian Kecil Melayu dan Kelestariannya, Syarahan Perdana* (Universiti Kebangsaan Malaysia). Bangi: Universiti Kebangsaan Malaysia.

Andaya, L.Y. (1975). *The Kingdom of Johore 1641-1728*. Kuala Lumpur: Oxford University.

Badariyah Haji Salleh. (1990). Imperialisme Ekonomi: Kajian Kes mengenai Industri Getah di Malaya. Dalam Cheah Boon Kheng dan Abu Talib Ahmad (Peny.), *Kolonialisme dan Imperialisme di Malaysia dan lain-lain negara*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Buyong Adil. (1971). *Sejarah Johor*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Chai, H. C. (1964). *The Development of British Malaya 1896-1909*, Kuala Lumpur.

Coope, A. E. (1979). The Kangchu System in Johore, *JMBRAS* 14(3): 247-263.

Emerson, R. (1979). *Malaysia: Satu Pengkajian dalam Pemerintahan Secara Langsung dan Tidak Langsung*. Ariffin Haji Hamzah (terj.). Kuala Lumpur: Dewan Bahasa dan Pustaka.

Gullick, J. M. (1987). *Malay Society in the Late Nineteeth Century*. Singapore: Oxford University Press.

Ishak Shari. (1988). *Pembangunan dan Kemunduran: Perubahan Ekonomi Luar Bandar di Kelantan*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Jackson, J. C. (1965). Chinese Agricultural Pioneering in Singapore and Johore, 1800-1917. *JMBRAS* 88(1).

Lim C. Y. (1967). *Economic Development of Modern Malaya*, Kuala Lumpur.

Lim T. G. (1976). *Origins of a Colonial Economy: Land and Agriculture in Perak 1874-1897*, Pulau Pinang: Universiti Sains Malaysia.

Lim T. G. (1977). *Peasant and Their Agricultural Economy 1874-1941*, Kuala Lumpur: Malaya Press.

Maxwell, W. E. (1965). The Law and Custom of The Malays with Reference to the tenure of Land. *JSBRAS*, Jun 1884.

Mohamed Said Haji Sulaiman. (1950). *Malaya: Unfederated Malay States*. (Jawi). Johor Bahru: Jabatan Percetakan.

Rahimah, A. A. (1997). *Pembaratan Pemerintahan Johor (1800-1945) Suatu Analisis Sosiologi Sejarah*. Kuala Lumpur: Dewan Bahasa Dan Pustaka.

Roff, W. (1975). *Malay Nationalisme.* Kuala Lumpur: Universiti Malaya.

Sinclair, K. (1967). Hobson and Lenin in Johore: Colonial Office Policy Towards British Concessionaires and Investors, 1878-1907. *Modern Asian Studies*, 1(4), 335-52.

Thio, E. (1969). *British Policy in the Malay Peninsula 1880-1910*. Singapore: University of Malaya Press.

Trocki, C. A. (1979). *Prince of Pirates: Temenggong and the Development of Johore and Singapore*, Singapore University Press.

Wong L. K. (1965). *The Malayan Tin Industry to 1914*.

Wu, M. A. (1984). *Pengenalan kepada Sistem Perundangan Malaysia*. Kuala Lumpur: Percetakan Heinemen Educational Books (Asia).

Early History of Bugis Settlement in Selangor

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ABSTRACT

The Bugis have already forged trading relationship with the government of Melaka since the 15[th] century. At the end of the 17[th] century, they started to establish new settlements along the coast of the Malacca Strait. As a foreign power, their intervention in the politics of Malaya especially at the end of the 17[th] century and the beginning of 18[th] century could be seen obviously without any doubt. Their existence has shaped the history of Malaya in particular, and the Malay Archipelago in general. Majority of the Bugis could be traced in two states in the Malay Peninsula, namely, Johor and Selangor. In fact, both these states are said to be ruled by the rulers who had descended from the Bugis. The presence of the Bugis community in Johor can still be traced in several settlements which remain until today. Since their arrival in Johor, the Bugis community has managed to put their names in the local history to the extent that this particular community was said to be more pronounced than the other ethnic groups in the state. This situation is different from the state of Selangor, despite the fact that the Bugis community arrived there much earlier. Based on the Dutch's record, the Bugis settlements in Selangor (Sungai Selangor and Sungai Klang) were established by 1681. In 1700, Tuk Engku Klang, the relative of Sultan Abdul Jalil Riayat Shah of Johor, gave a power seal to Yamtuan Bugis to move freely in Selangor (Kuala Selangor). The gift marked the beginning of the Bugis influence in Selangor. In fact, the Dutch was worried to see the increasing number of Bugis in Selangor. However, a recent study shows that the number of Bugis in Selangor is relatively low in comparison with other Malay groups. Thus, this paper is an attempt to discuss the dissipation of the Bugis community in Selangor.

Keywords: Bugis, Migration, Settlement, Selangor, Malaya

INTRODUCTION

The Bugis community, who was active and famous in the politics of the Malay Peninsular, especially around the 18th century, was not entirely made up of the Bugis ethnic.[1] In fact, they came from several different ethnic groups under the auspices of two dominant groups, namely, the To-Ugi (Bugis) and To-Mengkasar (Makasar). The Bugis consisted of several tribal groups including Wajo, Soppeng, Bone and Balannipa, whereas the Makasar comprised of tribal groups such as Gowa, Bontonompo, Takalar, Jeneponto (Janaponto) and Tembolo. Both To-Ugi and To-Mengkasar groups occupied a large area in South Sulawesi. In general, the living in this area generally use the Bugis and Makasar languages. In reality, both the groups form a single unit of culture which is inseparable. Therefore, they are also known as Bugis-Makasar. In Indonesia, often use only the term Bugis without using the term Makasar (Hamid Abdullah, 1984). Thus, in this paper, the term Bugis is also used to represent the Bugis-Makasar in general.

The Bugis were well-known as seafarers and traders in the Malay archipelago (Nordin Hussin, 2011, 2010, 2009, 2008). Their mastery of trading and commercial networks in the Malay-Indonesian archipelago was recorded in both the Dutch and British documents (ibid). Their dominance could be reflected by the evidences and reports stating that they were the traders or merchants who had sailed through the Java Sea, Borneo, the Spice Islands, Strait of Malacca and even Pegu in Burma. Their mastery in the trading activities also led to the establishment of many settlements, majority located in major ports such as Java, Riau, Borneo, Siak, Siam and the Malay Peninsula (ibid).[2] Therefore, studies on the Bugis have long been done by both western and eastern scholars, as well as local scholars. What was truly interesting about the Bugis-Makasar was their passion, courage and bravery which, as recognized by the international community since the pre-colonial era in Asia. In fact, they were also determined, competitive and able to face challenges in upholding the dignity and prestige of their .

In addition, the culture of *siri'* has also been identified as the stimulant for the Bugis to improve themselves, promote their families and community in order to build a great civilization that will enable them to compete with other ethnics, races and nations in the world. In particular, the *siri'* factor has given motivations to the lives of the Bugis who have positive and dynamic characteristics, causing many of them to be wanderers. Pires (1944) has described the Bugis as with muscular body, brave, strong, handsome and speaks in language that they understand. These characteristics were the basis for their feeling of patriotism as a part of the Malay . With their determination, courage and heroism, the Bugis have become one of the immigrant ethnics based in Malaya. There are also records in the history that the Bugis were actively involved in the politics of several states in Malaya including Kedah, Perak and particularly in Johor and Selangor. In Selangor, the Bugis successfully founded a government in the

mid 18th century and the state is now said to be ruled by the kings who descended from the Bugis. However, a recent study shows that the number of Bugis in Selangor is relatively low as compared to other Malay groups, such as Java, Minangkabau, Mandailing, Banjar and Kerinci. Thus, this paper will attempt to discuss the dissipation of the Bugis community in Selangor.

THE HISTORY ARRIVAL AND SETTLEMENT

The exact arrival date of the Bugis in Malaya is yet to be proven. In general, their early arrival was recorded through the presence of five Bugis brothers from an aristocrate family. However, according to Pires's record in *Suma Oriental*, it was stated that Bugis and Makasar seafarers visited Melaka in 1511, although their numbers were relatively small compared to other nations (Pires, 1944). In addition, it was also mentioned in the *Malay History* that an invasion was done on Melaka by a person who was said to have originated from Makasar during the reign of Sultan Mansur Shah, whose name was written in Jawi as *s-m-r-l-w-k* (Semerluki or Samarluka) (Shellabear, 1975). Assuming that the real name of this particular person is Karaeng Sama ri Luka, i.e. a king of Bajau from Luwuk, who was probably also referring to a figure named Karaeng Bayo mentioned in the tradition regarding the founding of the Makasar Government, by the name of Gowa (Pelras, 1991).

The arrival of the Bugis and Makasar in Malaya was more noticeable in the 17th century when the city of Makasar fell into the hand of the Dutch. The Dutch's domination in South Sulawesi through its Governor had indirectly ruined the career of a large number of the Bugis merchants, whose lives depended heavily upon spice trade. As a result, this particular group of Bugis merchants chose to migrate to another place or state rather than living under the Dutch's administration. These smart and armed Bugis left their homeland and sailed under the leadership of their traditional leaders to initiate and establish new residences in other states instead. Some of them established the new settlements in the northern and southern Borneo (Sabah and Kalimantan today). Some went to the eastern part of Java Island, while the rest sailed west to the Strait of Malacca.

Those who came to the Strait of Malacca established new settlements inland, but were not far from the sea, especially in the valley of Sungai Klang. This view is also supported by Andaya who stated that the Bugis and Makasar were found living in Klang in 1678. In fact, Raja Ibrahim from Minangkabau, who had the support from the Minangkabau in Rembau, Naning and Sungai Ujong, also requested for the help of the Bugis-Makasar people in Klang when he wanted to launch an attack on the Dutch in Melaka in 1678. Even though the Bugis did not answer Raja Ibrahim's call to perform a jihad attack on the Dutch, the Dutch were alarmed to see the influx of the Bugis-Makasar migrants from South Sulawesi (Watson-Andaya & Andaya, 1983) who established their settlements on the west coast of the Malay Peninsula under

the authority of Johor, including Selangor, Linggi and Klang. Andaya also mentioned about a Makasar prince named Daeng Mangika who was involved in the war between Johor and Jambi in 1679 (Andaya, 1975). Furthermore, the *Dagh Register* of the Dutch also mentioned that there were several large Bugis villages in the valley of Sungai Klang and Selangor by 1679 (Winstedt, 1962). At that time, the state of Selangor was still under the authority of Johor (Winstedt, 1962).

Wilkinson said that the Bugis had settled down in the state of Selangor and resided in Klang in the 17th century. The Bugis leader who first came to establish the new settlements in Selangor was Daing Lakani (Buyong Adil, 1971). In *Dagh Register* dated 1625-1685, it was mentioned that a Kedahan who claimed to be the brother of Sultan Kedah had asked for the permission from the Dutch to use Dinding as a gathering spot for 150 Bugis from Klang who would assist him to attack the Sultan of Kedah (Buyong Adil, 1971). In January 1682, the same person asked for the permission from the Dutch once again to go to Selangor to seek for assistance from the Bugis to attack his brother, the Sultan of Kedah (Buyong Adil, 1971). He even said that with two ships and three or four hundreds of Bugis, he would be able to claim the throne as the Sultan of Kedah. According to Bonney, this is a very interesting phenomenon in the context of power struggle in Kedah, where members of the royal family sought for the assistance and support of the foreign army in their efforts to become the Sultan (Bonney,

1977). There was a possibility that the Bugis could be regarded as the first foreign Malay power from the western part of the archipelago, who in fact were involved in the throne struggle in Kedah.

In 1700, Tuk Engku Klang, the relative of Sultan Abdul Jalil Riayat Shah of Johor gave a power seal to the Yamtuan Bugis to move freely in Selangor (i.e. Kuala Selangor) (Winstedt, 1934, 1962). The move marked the starting point of the Bugis influence in Selangor. Although the official power was still in the hand of the Sultan of Johor, through his representative - Tuk Engku Klang, in reality, the Yam tuan Bugis was more influential in the local governance and the lives of the people.[3]

On 25 October 1701, the Treasurer by the name of Tun Mas Anum[4] from Johor briefed the members of the Dutch mission from Melaka about the Bugis settlements in Linggi. In the briefing, the Treasurer Tun Mas Anum reported that the settlements consisted of approximately 600 Bugis, excluding women and children. They were said to have moved there from Selangor without the consent and permission of the government of Johor (Andaya, 1975). Based on this report, it seems that the Bugis had started establishing their settlements in Linggi around the end of the 17th century or early 1701, while their settlements in Selangor were established much earlier than that.

The arrival of the Bugis to Linggi was not in the form of a large group, but in a small group instead. Based on the information available, there were at least

three groups of the Bugis migrants that set up their settlements in Linggi. Among their leaders were Punggawa to'Mingo, to'Campo and Datuk Janggut. According to the report of the Treasurer Tun Mas Anum, the Bugis who came from Selangor probably came from the district of Langat (Norhalim Ibrahim, 1998). The presence of the Bugis in Linggi had raised the concern of the Dutch government, whereby they became too worried that they asked the government of Johor to expel the Bugis from Linggi.[5] Nonetheless, the government of Johor was slow in taking action.[6] On 2nd November 1701, however, the Tresurer Tun Mas Anum assured the Dutch ambassador in Johor that he would send his representatives to solve the problem of "illegal settlements" in Linggi in a month. By February 1702, the government of Johor had not taken any action. Thus, in February 1702, the *Syahbandar* of Melaka, Willen van der Lely immediately contacted the Treasurer Tun Mas Anum and sternly warned him that the Bugis in Linggi could not be trusted and needed to be punished (Andaya, 1975).

Thus, in September 1702, the Bugis leaders in Linggi were called by the government of Johor to go to the state to discuss about their "illegal settlements" there. The Bugis were asked to leave Linggi in the discussion. They were also asked to return and settle down in Selangor. After a long and serious negotiation, the Bugis agreed to the government's request. Starting from November 1702, the Bugis started to leave Linggi in stages. The last Bugis group to leave was the group led by Datuk

Janggut in the early 1703. They moved back to Selangor (Norhalim Ibrahim, 1998). The relocation of the Bugis at the end of 1702 and early 1703 signified the end of the Bugis settlement in Linggi (Kuala Linggi)[7] was rather a temporarily.[8]

At the beginning of the 18th century, the five sons of the King of Bugis (namely, Daeng Parani, Daeng Manambun, Daeng Marewa, Daeng Cellak and Daeng Kemase[9]) received an offer to assist Sultan Sulaiman to defeat Raja Kecil in Riau in 1721. The five brothers also received assistance from the Bugis in Selangor. They also went to Langat and Kuala Selangor to recruit the Bugis army and to prepare for the equipment needed for the war with Raja Kecil that might happen again. At that time, there were many Bugis in Langat and many of them owned businesses in Melaka and were extremely wealthy (Buyong Adil, 1971).

In 1721, a Bugis force from Selangor led by Daeng Merewa and his brothers launched an attack on Linggi because the *penghulu* of Linggi had been mean to the Bugis fishermen who caught fish in Kuala Linggi. After the five brothers defeated Raja Kecil in Riau and surrendered the government of Johor-Riau to Sultan Sulaiman Badrul Alam Shah, they travelled back and forth from Riau to Selangor to recruit the Bugis in Selangor into their troops and forces.

During the reign of Sultan Muhammad Jiwa II (1710-1778) in the early 18th century, the Sultan faced pressure and challenge from his step brother 'Raja Nambang' who had claimed to be more qualified to have the throne as Sultan Kedah; thus, Sultan

Muhammad Jiwa II requested for the assistance of the Bugis troops who were led by Daeng Parani. Raja Nambang, on the other hand, sought the assistance from Raja Kecil from Siak. After 1724, i.e. when the war finally ended, Raja Kecil retreated to Siak and the Bugis returned to Selangor (Mohamad Isa Othman, 1990).

From the facts mentioned above, it could be stated that Selangor had been a strong base for the Bugis ever since their arrival. One could also assume that the strength of the five Bugis princes was not be strong enough without the support from the Bugis who had been living in Selangor before them. Thus, it is undeniable that the position of Bugis in the Strait of Malacca was strengthened and became more influential with the arrival of the five brothers at the beginning of the 18th century, as they assisted the Malay rulers in regaining their throne in Kedah, Johor and Perak, respectively. However, Selangor was the place to gather and mobilize the Bugis troops and their *hulubalang* for all the assistance given (Paiman Keromo, 1989). In fact, the five brothers had also successfully dominated the politics in the government of Johor-Riau. This could be seen through the appointment of Daeng Marewah as the first Yamtuan Muda in Riau. Selangor remained as a strong base for the Bugis to the extent of the emergence of a Bugis dynasty in Selangor.

This also indicated that the small settlements founded by the Bugis along the shore of the Malacca Strait, especially in Kuala Selangor, Klang, Jeram and Langat,

continued to develop. Eventually, the Bugis managed to appoint a Bugis prince (Raja Lumu) as the first Sultan of Selangor (Khoo Kay Kim, 1985). From its base in Kuala Selangor, the sultanate managed to combine the provinces such as Jeram, Klang, Langat, Jugra Lukut and Sungai Raya. In the northern part, the Bugis had always been fighting for Bernam and areas in Perak. The Bugis won every war they fought. Finally in the 18th century, the Bugis in Selangor succeeded to gain control over Bernam (Suleiman & Lokman, 1999).

Although the Bugis had been successful in gaining power and control over the Sultanate of Johor-Riau under the leadership of the five Bugis princes, the Bugis in Selangor prefered establishing their own base without being influenced by the Malay rulers. Since the state of Selangor had been occupied by the Bugis since the 17th century, it was appropriate to serve as their base in the Malacca Strait so that they could carry out their own political system as in Sulawesi (Suleiman & Lokman, 1999). Their dream came true when Raja Lumu, the prince of Daeng Chelak succeeded in building a Bugis dynasty which has reigned in the Sultanate of Selangor until today.

The Dutch started to worry about the Bugis' activities in Malaya when their power and influence reached its peak in the state of Selangor, particularly in a few other states in Malaya in general. This signified the feeling of being threatened. The influence and power of the Bugis was taken seriously and it started to dissapoint the Dutch monopoly in the tin trade in

Malaya. The Dutch in Melaka also realised that they were surrounded by the Bugis who were well-known for their bravery and determination in fighting. Thus, the Dutch tried their best to avoid any open conflict with them. Johore's attempt to eliminate the Bugis gave the opportunity to the Dutch to sign a cooperation treaty with Johor in 1745. According to the treaty, Johor was required to hand in Siak to the Dutch in return for their assistance to overthrow Yamtuan Muda Bugis in Riau. However, the result of this treaty was rather unpromising. Both parties signed another treaty 10 years later, and this really brought tensions to the Dutch-Bugis relations.[10] As a result, wars between the Dutch and Bugis erupted for a few times. The Dutch attacked the Bugis forts in Selangor and left the Sultan with no choice but to fled to Pahang. However, the Sultan managed to expel the Dutch from Selangor and to regain his throne with the help of Pahang.

ECONOMIC ACTIVITIES AND COMMUNITY

Since their early arrival, the Bugis in Selangor had demonstrated their existence in the field of politics and trade. They even brought colours to the politics in Malaya in general and Selangor in particular. Although their contributions in the field of socio-cultural were not obvious and prominent, their settlements could still be traced in a few areas in the state of Selangor by the 19th century. During the time of Sultan Abdul Samad, i.e. when Raja Abdullah's mines in Ampang started producing tins, many

Chinese from Lukut, Sungai Ujong and Larut came to Kuala Lumpur and Kanching to open roof shops and to work in the tin mines in the areas. Four years later in 1861, these Chinese looked up to Taukeh Hiu Sieu as their leader, who was also known as "*Kapitan China*". Other areas in Selangor such as Langat, Jugra, Klang and Kuala Selangor on the other hand were said to be inhabited by the Malays who originated from the land of the Bugis because those areas were ruled by the kings of the Bugis descent (Buyong Adil, 1971).

However, the population census carried out several times in the early of the 20th century (as shown in Table 1 below) raised a question about the existence of the huge Bugis community living in Selangor all these while. Have they moved to other areas, or have they been assimilated into other Malay ethnic groups to the extent that many of them said that they are Malays and only a few have claimed that they are actually Bugis? Or they probably have no idea about their origin due to the lack of exposure regarding this matter from the previous generation.

Despite all the questions mentioned above, a field study conducted revealed that there were indeed challenges to detect the Bugis settlements in Selangor. This situation was not only caused by the difficulties in characterizing the Bugis settlements, such as the name of an area, but this was also due to the lack of the Bugis traditions found in the field study, either in terms of food or oral traditions. In fact, many Bugis in Selangor can no longer speak the Bugis language.

TABLE 1
Bugis in Malaya (1911-1947)

State	1911	1921	1931	1947
Singapore	1280	1142	792	705
Penang	20	-	4	4
Malacca	25	18	34	49
Perak	23	91	42	20
Selangor	**52**	**56**	**84**	**64**
Negeri Sembilan	5	1	5	11
Pahang	2	1	16	9
Johore	5033	7026	8983	6080
Kedah	16	41	21	7
Kelantan	-	-	1	2
Terengganu	-	-	7	11
Perlis	-	11	8	-
Total	6456	8387	9997	6962

Source: Tunku Shamsul Bahrin (*The Indonesians in Malaya*, p. 160)

However, one remarkable trend from these ethnic immigrants from Indonesia is that they tend to establish their own associations or groups. The Bugis associations and groups, whether or not they are recognized by the government "have grown like mushrooms after the rain". This has become an enthusiasm generator among the Bugis to search for their origin, whereby many of them have already started to rearrange and restructure their family tree.

This is because from these associations and groups, one can still trace many Bugis descendants in Selangor today. Although many of them have no idea about the part of Sulawesi they were from, they have firmly claimed that they are of the Bugis descent. These are the people living in areas such as Kuala Selangor, Jeram, Permatang,[11]Klang,[12]Batang Berjuntai, Tanjung Karang and Sabak Bernam.

They are the members of several Bugis associations including *Persatuan Anak-Anak Melayu Bugis Daerah Kuala Selangor*,[13] *Persatuan Zuriat Almarhum Raja Abdullah Ibni Almarhum Raja Jaafar*, *Persatuan Bugis Sabah*, *Persatuan Kebajikan Ekonomi Bugis Malaysia*, *Persatuan Keluarga Haji Rajuddin* (which also published their own family magazine – *Teraju*), *Persatuan Bugis Sabak Bernam* and many more. Many of the Bugis traditions and customs, however, are no longer in practice. Hence, majority of the younger generation of Bugis only know about Bugis by its name.

CONCLUSION

Based on the historical information discussed above, one can sum up that the main goal or objective of a Bugis life is to always preserve, construct, rehabilitate and enhance the reputation, pride and dignity of

the Bugis. All these are closely related to their culture, thinking and the philosophy of their lives which are based on the system of *siri', sara', pessé babua* dan *paccé*. In order to achieve a meaningful and blessed life, the Bugis will have to adhere to the practices and guidance of Islam, *adé'* system and logic thinking. Thus, historical and oral prose, such as proverbs and other expressions, play a very important role as source of reference in order to enhance the spirit of perseverance, courage, determination and hardwork. Besides *siri'* and *sara'*, the Bugis will also need to believe in their own ability, capability and skills so that they will not solely rely on fate or luck. Therefore, the concept of *takéderé* in the lives of the Bugis will not turn them into a fatalistic ethnic.

Meanwhile, the factors mentioned above enabled them to become successful sailors, wanderers and settlement establishers outside Sulawesi. They also always ensured self-changes such as becoming successful merchants or high-level, powerful and charismatic leaders through *masompé*. The Bugis had to be alert in new places once they left their homeland (South Sulawesi) because they brought along with them the *siri'* that was still in the process of enhancement or upgrading. Therefore, a practical and rational strategy was needed. This certainly involved the strategy with three ends, namely, tongue, *keris* and genital. This strategy was successfully carried out where the Bugis emerged as powerful and successful leaders overseas. Similarly, in their efforts to establish their new settlements, they accepted the

fact that they must mix around with the local community, and this resulted in the occurrence of intermarriages. The situation in Selangor showed that the Bugis had realized that they would not be able to maintain their overall genuine culture and traditions. Furthermore, Selangor was one of the Malay states which received much attention from non-Malay foreigners as well as wanderers from a variety of Malay ethnics, such as Java, Minangkabau, Mandailing, Banjar, Rawa and many more. The Bugis were also very active in the field of commerce and trade besides being active in land exploration and establishing new settlements. Although everything they did were based on *siri'*, the interactions and assimilations with the Malay community have actually diluted the original spirit of the *siri'* and transformed it into a new form of *siri'* to achieve success in a foreign land. This is one of the major factors why the younger generation of the Bugis in Selangor today are not sure about their own origin or do not know that they are actually the descendants of the Bugis. Educational factor, as well as the integration with the non-Bugis, has also played an important role in influencing the collapse of the Bugis culture and traditions. However, there are a small number of Bugis descendants who are still aware of their origin, especially those who are from the Bugis aristocrat families even though a huge part of their Bugis nature and characteristics have disappeared, including the terminology and culture of *siri'* which is no longer known nor understood by them. Thus, it seems like

they need a nostalgic history of the Bugis in Malaysia, which is in fact a source of inspiration and pride for their contributions to the history of Malaysia.

From the point of view of a developing Malaysian society, there is no doubt that the historical experiences of the Bugis have made major contributions as traders, diplomats, political refugees, sojourners, and land settlers because of their determination, desire, perseverance, courage and open-mindedness, which can be regarded as good examples to motivate the new generation today and in the future.

REFERENCES

Abdul Halim, N. (1977). *Sejarah Perak, Sri Pertama Zaman Prasejarah Hingga Zaman Kedatangan Pengaruh Orang Luar.* Kuala Lumpur.

Andaya, B. W., & Andaya, L. Y. (1983). *Sejarah Malaysia.* Kuala Lumpur: Macmillan Publishers Sdn. Bhd.

Andaya, L. Y. (1975). *The Kingdom of Johor (1641-1728): Economic and political developments.* Kuala Lumpur.

Bonney, R. (1977). *Kedah, 1771-1821: The Search for Security and Independence.* Kuala Lumpur: Oxford University Press.

Buyong Adil. (1971). *Sejarah Selangor.* Kuala Lumpur: Dewan Bahasa dan Pustaka.

Dagh Register Gehouden int Castell Batavia (Batavia, 1887, etc.) 1682.

Gullick, J. M. (1998). *History of Selangor, 1766-1939.* MBRAS no.28.

Hamid Abdullah. (1982). Pandangan hidup dan Kepimpinan Masyarakat Bugis Asli" dalam *PURBA* No. I. Kuala Lumpur: Persatuan Muzium Malaysia.

Hamid Abdullah. (1984). Perubahan Sosial di Kalangan Masyarakat Keturunan Bugis di Linggi dan Kesannya ke Atas Masalah Kepemimpinan. (PhD Thesis dissertation). Universiti Malaya, Kuala Lumpur.

Kennedy, J. (1970). *History of Malaya.* New York: Macmillan St. Martia's Press.

Khoo, K. K., Abdullah Zakaria, G., Mohamad, A. B., & Adnan, H. N. (Eds.) 1985. *Selangor Dahulu dan Sekarang.* Kuala Lumpur: Muzium Negara.

Lotfi Ismail. (1980). *Sejarah Malaysia, 1400-1963.* Kuala Lumpur: Utusan Publications & Distributors, 5th Printing.

Mohamad Isa Othman. (1990). *Politik Tradisional Kedah, 1681-1942.* Kuala Lumpur: Dewan Bahasa dan Pustaka.

Noorduyn, J. (1988). The Bugis Genealogy of the Raja Muda family of Riau-Johor. *JMBRAS, 61*(2), 63-92.

Nordin Hussin. (2003). Kepahlawanan, Kejujuran, Kegagahan, Kebijaksanaan dan Keberanian: Lambang Keperbadian Pedagang-Pedagang Bugis di Selat Melaka. *Seminar Internasional Sawerigading, Masamba.* Makassar 10-14 December 2003.

Nordin Hussin. (2008). Pedagang Bugis dan Kuasa Eropah di Selat Melaka, 1500-1800. *Journel SARI, 26*, 199-211.

Nordin Hussin. (2010). Dunia perdagangan Melaka. In Nordin Hussin, & Mohd Yusoff (Eds.), *Empayar Melaka.* Melaka: Perbadanan Museum Melaka, 141-161.

Nordin Hussin. (2011). Coastal Port-towns and the Trading Network of the Straits-Malay Traders. *PERTANIKA Journal of Social Science and Humanities, 19*(1), 197-126.

Nordin Hussin. (2008). Geografi dan Perdagangan: Kepentingan Selat Melaka Kepada Perdagangan Dunia, Asia dan Dunia Melayu, 1600-1800". *Akademika, 73*, 3-26.

Nordin Hussin. (2009). Textile Trade between India and the Malay World. *Heritage Asia*, December, *6*(3), 20-24.

Nordin Hussin. (2010) (Ed.). *Empayar Melaka*. Melaka: Melaka State Museum.

Nordin Hussin. (2005). Networks of Malay Merchants and the Rise of Penang as a regional Trading Centre. *Journal of Southeast Asian Studies*, *43*(3), 215-237.

Norhalim Ibrahim. (1998). *Sejarah Linggi Pintu Gerbang Sejarah Pembangunan Negeri Sembilan*. Shah Alam: Fajar Bakti Sdn. Bhd.

Paiman Keromo. (1989). *Sejarah Adat Istiadat Kesultan Negeri Selangor.* Colloquium Working Paper on the History of Selangor Darul Ehsan. History Department of University of Malaya and the State Government of Selangor on 21st January 1989.

Pelras, C. (1991). Penghijrahan dan Penyesuaian Orang-Orang Bugis di Johor: Suatu Proses Perubahan Budaya. Unpublished paper.

Shellabear, W. G. (1975). *Sejarah Melayu*, Kuala Lumpur: Oxford University Press.

Suleiman, M. & Lokman, H. M. Z. (1999). *Sejarah Kampung Bahru, di Sini Awal Segalanya Bermula,* Institut Alam dan Tamaddun Melayu (ATMA) Universiti Kebangsaan Malaysia, Bangi.

Tome, P. (1944). *The Suma Oriental,* translated and edited by Armando Cartessao, London.

Tunku Shamsul Bahrin. (1964). The Indonesians in Malaya: A Study of the Pattern of Migration Into Malaya (MA Thesis dissertation). University of Sheffield, USA.

Vlekke, B. H. M. (1967). *Nusantara (Sejarah Indonesia).* Kuala Lumpur: Dewan Bahasa dan Pustaka.

Wan Muhammad, B. W. S. (1985). Sungai Pinang, Kelang Sebelum 1900. In Khoo, K. K., Abdullah,

Z. G., Mohamad, A. B., Adnan, H. N. (Eds.), *Selangor Dahulu dan Sekarang*. Kuala Lumpur: Muzium Negara.

Winstedt, R. O. (1934). A History of Selangor. *JMBRAS, XII*(III).

Winstedt, R. O. (1962). *A History of Malaya*. Singapore: Marican and Sons.

ENDNOTES

[1] The population in Southern Sulawesi actually consists of several ethnic groups. Generally, there are four major ethnic groups, namely Bugis/ to' Ugi, Makasar/to' Mengkasar, Mandar/to' Menre and to' Raja. However, the Mandar and Raja groups are almost unknown in the political chessboard of the Malay states. See Hamid Abdullah, "Pandangan hidup dan Kepimpinan Masyarakat Bugis Asli" in *PURBA* No.1, Kuala Lumpur: Persatuan Muzium Malaysia, 1982, p. 32.

[2] Ibid. For further explanation, please refer to Nordin Hussin. (2003). "Kepahlawanan, Kejujuran, Kegagahan, Kebijaksanaan dan Keberanian: Lambang Keperbadian Pedagang-Pedagang Bugis di Selat Melaka", Seminar Internasional Sawerigading, Masamba, Makassar 10-14 December 2003.

[3] In the opinion of Buyung Adil, the state of Selangor was no longer under the authority of Johor after the government of Johor-Riau was ruled by Raja Kecil Siak (1718-1722). During that time, there was already a Bugis ruler in Selangor (i.e. Kuala Selangor) who was called "Yamtuan Selangor" (the real name remains unknown). In this period of time, Selangor was also the place where the strength of the Bugis from the western part of the Malay Archipelago was located (see Buyong Adil, 1971). Sejarah Selangor, Kuala Lumpur: Dewan Bahasa dan Pustaka, p. viii.

[4] Treasurer Tun Mas Anum was an influencial minister in the government of Johor between year 1699-1708. He is the brother of Sultan Abdul Jalil Riayat Syah.

[5] The Dutch were still haunted by the bitter event during their encounter with the people who liked to fight in Sulawesi and Java. For further explaination, see Vlekke (1967), Nusantara (Sejarah Indonesia). Kuala Lumpur: Dewan Bahasa dan Pustaka. The Dutch also questioned the real purpose of the Bugis who had moved from Selangor to Linggi, a place which was near to the Dutch's border in Melaka. Was that an early incentive of the Bugis in their efforts to seek revenge from the Dutch who had

conquered Makassar? In addition, Kuala Linggi was also a militarily and economically strategic area. It was the exit route for trading goods from remote areas such as Rembau, Sungai Ujong and Naning. Approximately one year after the 1699 coup, most of the trading goods especially tins from the remote area of Sungai Linggi valley were brought to Melaka through Kuala Linggi and not to Johor like before. Andaya (1975). The Kingdom of Johor (1641-1728): Economic and Political Developments. Kuala Lumpur, p. 198. Therefore, if the Bugis were to strengthen their position in Kuala Linggi, and this situation would directly or indirectly affect the economic growth and 'peace' in Melaka. The presence of the Bugis in Kuala Linggi was like 'a thorn in the flesh' for the Dutch. These were the reasons for the Dutch to urge the government of Johor to expel the Bugis from Linggi.

[6]The delay in the response of the Johor's government was due to the fact that the presence of the Bugis had never been a threat to the government itself. See Andaya (1973). The Kingdom of Johor (1641-1728): Economic and political developments. Kuala Lumpur, p. 31. The government of Johor, however, also understood the culture of the Bugis, who would remain under the leadership of the Johorians but would only offer their loyalty to the government on name. Such attitude was what made the government of Johor to become suspicious towards the Bugis.

[7]This did not mean that Linggi was unoccupied. The area was still occupied by the Malays who were mostly the descendants of Minangkabau from Sumatera (Siak, Rokan and Kuantan) under the leadership of a penghulu. See also Norhalim Hj. Ibrahim (1998). Sejarah Linggi Pintu Gerbang Sejarah Pembangunan Negeri Sembilan, Shah Alam: Fajar Bakti Sdn. Bhd, p. 32.

[8]It was mentioned here as 'temporary' because the Bugis came back to Linggi and established their settlements there few years later. According to the Dutch's report in the late 1711, Daeng Manompok and his father Daeng Matimo, together with their followers, arrived in Kuala Linggi. See Andaya (1975). *The Kingdom of Johor (1641-1728): Economic and Political Developments,* Kuala Lumpur, p. 230. They left their homeland Soppeng in Southern Sulawesi around 1691, with the blessing of Sultan Ibrahim Shah, Raja Lompoko. They left their homeland because Daeng Matimo was punished by Arung Palakkan by cutting off both of his lips for committing insult. From Sulawesi, they then went to East Java and sailed to Bentan and then to Selangor. Finally in 1711, they moved to Kuala Linggi. See

Norhalim Hj. Ibrahim (1998). *Sejarah Linggi Pintu Gerbang Sejarah Pembangunan Negeri Sembilan.* Shah Alam: Fajar Bakti Sdn. Bhd., p. 35. Andaya further elaborated that when Daeng Manompok arrived in Kuala Linggi, Daeng Marewah was already came into power there. This indirectly showed that the five brothers of Daeng had reached Kuala Linggi earlier than Daeng Menompok. The presence of Daeng Menompok in Kuala Linggi signified the emergence of a new power in the area. Andaya (1975). *The Kingdom of Johor (1641-1728): Economic and political developments.* Kuala Lumpur, p. 230.

[9]For the origin of these five figures and their relations with raja-raja Luwu', see Noorduyn (1988)..The Bugis Genealogy of the Raja Muda family of Riau-Johor. *JMBRAS, 61*(2), 63-92. Two other Bugis figures who who were siblings included Daeng Menompok and Daeng Matimo from Soppeng also played an important role during the period of time in the Malay political arena. See Andaya (1975). *The Kingdom of Johor (1641-1728): Economic and political developments,* Kuala Lumpur, p. 228. At the same time, a Bugis man named Daeng Sulili was traced in Perak. Some stated that he was the cousin of the five Bugis brothers. See Abdul Halim Nasir (1977). *Sejarah Perak, Sri Pertama Zaman Prasejarah hingga Zaman Kedatangan Pengaruh Orang Luar,* Kuala Lumpur, pp. 176-189.

[10]According to this agreement, the Dutch promised Johor to regain all the territories which had been taken away and ruled by the Bugis, provided that they would gain control over the tin trade in the states under the Bugis authority such as Selangor, Kelang and Linggi. Also, with the condition that they would be given control over a part of the textile trade in Siak. Sultan Johor also agreed to exclude taxes on all the Dutch vessels trading in Johor. On the other hand, the Dutch were required to prohibit other powers from trading or interfering in the internal affairs of Johor. The agreement caused the Bugis to become infuriated to the extent that in 1756, a war almost erupted between the Bugis on one side with the Dutch and Malay-Johor, on the other side. The Bugis then burned down the area of Melaka and the Dutch responded by attacking and capturing Linggi in 1757. The Bugis were then forced to handover their trading monopoly rights to the Dutch and promised not to pressure Johor anymore. The minor won but failed to maintain the Dutch's interest in assisting Johor. As a result, the Bugis took the opportunity to rearrange, restructure and regain their strength. Knowing that the Dutch were unreliable,

Sultan Johor permitted the return of the Bugis power into the state. Between 1760 and 1780, the Bugis-Dutch relation was smooth. At that time, the Bugis were busy transforming Riau into a prosperous state in the east. This peaceful period encouraged Raja Haji (a top Bugis figure at that time) to expand the influence of the Bugis to the northern part of Malaya. He launched an attack on Kedah and then travelled to Borneo in search of wealth. When the *Yamtuan Muda* of Bugis (Daeng Kemboja), who ruled Riau had passed away, Raja Haji went back to Riau and declared himself as the new *Yamtuan Muda* Bugis. Raja Haji had always been ambitious. He wished to expand the influence of the Bugis not only in Malaya, but also in Sumatera. The Dutch were offended by Raja Haji's ambition to revive the power of Johor in a few places in East Sumatera and Perak. In 1782, a conflict erupted between the Dutch and Raja Haji regarding the arrest of a British vessel carrying opium in the waters of Riau. Raja Haji urged the Dutch to surrender parts of the seizure since it was done in the waters of Riau. However, the Dutch insisted not to fulfil the request. Meanwhile, there were also tensions in the Bugis-Dutch relations because the Bugis had used Riau as a centre to export tins which were smuggled from Malaya. The Bugis were also said to attack the Dutch vessels in the Straits of Malacca. The Dutch then sent their armada to conquer Riau but the effort failed due to the strong opposition from the Bugis. On the contrary, the Bugis turned to be the aggressors. In 1784, the Bugis troops led by Raja Haji lauched a massive attack on the Dutch in Melaka by taking the port under siege for quite some time before the war actually broke out between the two parties. In this war, Raja Haji got himself the support of Sultan Ibrahim from Selangor, while the Dutch in Melaka received assistance from Terengganu and Siak, as well as from Batavia. Eventually the Dutch have won the war in June 1784, while Raja Haji with his army of 500 were killed in the war. The Dutch then launched an attack on the Bugis forts in Selangor. Sultan Ibrahim was forced to run away to Pahang and some other Bugis were also forced to flee to Borneo. The Dutch then moved on to attack Riau as the centre of the Bugis power. The Bugis forces were decisively defeated. As a result, the Bugis were expelled from Johor which was protected by the Dutch thereafter. However, Sultan Ibrahim who had fled to Pahang regained his throne when he succeeded in eliminating the Dutch from Selangor with the help of Pahang (Ibid, pp. 85-87).

[11]According to Dato' Dr. Hj. Yusuf Bin Hasan, the name *Permatang* has been there since the 17th century, i.e. since the arrival of the Bugis and the establishment of their power in Selangor. See Dato' Dr. Hj.Yusuf Bin Hasan (2005). *Sejarah Kuala Selangor 2*, p. 9. However, based on the field work conducted by Ahmadin Bin Muhd Yussoff, Kampung Permatang was established by his ancestor in the early 18th century. His ancestor mentioned here is the grandson of Megat Sri Rama (one of the officials of the Johorian government before the death of Sultan Mahmud Mangkat Dijulang). According to Ahmadin, approximately four miles of the area in Permatang was opened Tuk Usuh and his family. Although many of Tuk Usuh's descendants have moved to Perak, Ahmadin and other family members who are still living in Permatang have claimed themselves to be the descendants of the Bugis, as well as the descendants of Megat Sri Rama. In terms of marriages, they often get married among themselves. It was until the generation of Ahmadin that they started to get married with people from outside their community/group. An interview was carried out with Hj. Ahmadin Bin Muhd Yussuff at his house (No. 419 Jalan Permatang Pasir Penambang, Kampung Permatang, Kuala Selangor) on 21st October 2010. This is quite interesting or even contradictory if we assumed that the Bugis interference in the government of Johor started after the five Bugis brothers had succeeded in helping Sultan Sulaiman to eliminate Raja Kecil. If it was so, it cannot be said that Ahmadin is a Bugis descendent, and this is further made impossible by his own statement saying that all the descendants of Tuk Usuh married those from among their own community, except for those of or after Ahmadin's generations. If mix marriages were assumed to have occurred between the descendants of Tuk Usuh with the Bugis who had already arrived in Permatang before Ahmadin was born, there is a possibility that Ahmadin is a Bugis descendent. Moreover, if we look further back to 1679, Daeng Mangika assisted Sultan Ibrahim Shah in Johor (1677-1685) to attack and conquer the government of Jambi. If Daeng Mangika stayed in Johor after the war and had relationship with Megat Seri Rama, it is then possible that Ahmadin is a Bugis descendent. Although Ahmadin has claimed to be a Bugis and even registered himself in the *Persatuan Anak-anak Bugis* in the district of Kuala Selangor, his family members do not practice any of the Bugis customs and traditions. Furthermore, Ahmadin does not even know which part of Sulawesi his ancestor

hailed from. This means that the origin of Ahmadin and his family can still be doubted.

[12]Sungai Pinang, which is an area in Klang, is also occupied by many Bugis. It is said that in the late 19th century and early 20th century, there were already close relationships between the Malays and Bugis, Kampar and Javanese. Here, they established new settlements and began farming in the area. By the end of 1911, the Malays (including Bugis, Kampar and Javanese) were the most numerous, with approximately 900 persons, while the Chinese were with only 300 people. Based on the research by Wan Muhammad bin Wan Sulong in 1975, there were only 30 to 40 Bugis families traced in Sungai Pinang. The earliest settlement of these families was in the 1890s. Today, the Bugis families are difficult to trace due to their close relationships with the Malays in the area either through marriages or migration which occurs every year. See Wan Muhammad B. Wan Sulong, "Sungai Pinang, Kelang Sebelum 1900" in Prof. Khoo Kay Kim, Dr. Abdullah Zakaria Ghazali, Mohamad Abu Bakar, Adnan Haji Nawang (eds.), *Selangor Dahulu dan Sekarang,* Muzium Negara Kuala Lumpur, 1985, p. 57-59.

[13]Based on the name list and address stated in the membership book of "*Persatuan Anak-Anak Bugis Daerah Kuala Selangor*" with approximately 584 members, 284 of them are living in Kuala Selangor, 107 in Tanjung Karang, while the rest are staying in Jeram, Klang, Batang Berjuntai, Kapar, Bukit Rotan, Banting, Sungai Buloh and Batu Cave. See the book of "*Senarai Nama-Nama Ahli Persatuan Anak-Anak Melayu Bugis Daerah Kuala Selangor*", Selangor Darul Ehsan, 2009 (unpublished).

SOCIAL SCIENCES & HUMANITIES

Early Settlements of the Minangkabaus Community in Selangor

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ABSTRACT

In the studies of land and forest exploration, as well as the establishment of new settlements in the Malay Peninsula, one could not neglect the presence of Indonesian settlers in general and the Minangkabau in particular. Their custom to travel served as a catalyst in the development of rural settlements in the Peninsular Malay states, thus making the relationship of history, blood ties and cultural ties between the Minangkabaus and Malay Peninsula throughout the history. In the British colonial era, the colonial documents showed that the Minangkabau settlers had been very active in playing a direct role in the implementation of the colonial policies that helped to ensure the retention of the characteristics of indigenous rural settlements. Although there are still uncertainties about the exact arrival date of the Minangkabau to the Malay Peninsula, their existence could be traced through their settlements which are not only concentrated in Negeri Sembilan, but also in Melaka, Pahang, Perak, Johor and Selangor. In Selangor, their settlements concentrated in areas such as Hulu Langat, Hulu Selangor, Klang and around Kuala Lumpur. This paper aims to discuss the Minangkabau settlements in the Malay Peninsula, particularly in Selangor.

Keywords: Minangkabau, arrival, settlements, Selangor

INTRODUCTION

The arrival of the Malays from the Malay Archipelago to the Malay Peninsula is not a new historical phenomenon. In fact, it occurred a long time ago. Travelling, wandering and trading were a few of the important factors in the lives of the

Malays. The Minangkabaus are one of the many Malay ethnics residing in several states, as well as the urban and rural areas in the Malay Peninsula. Their arrivals to these areas began not during the era of British colonial, but were actually a continuous practice even before the arrival of the westerners, without the barriers of boundaries and time. The existence of the Minangkabaus is very important in the history of settlement development and community building in several Malay states. The Minangkabaus were not only active in land and forest exploration for farming or cultivation purposes, but they were also active in establishing new settlements to be occupied by the Minangkabaus themselves. Their settlements did not only concentrate in Negeri Sembilan, but also in states like Melaka, Pahang, Perak, Johor and Selangor. Selangor is one of the states in the west coast of the Malay Peninsula that had drawn the attention from the wanderers from Minangkabau. Many areas in Selangor had been explored by the Minangkabau since the last two decades of the 19th century, such as Hulu Langat, Hulu Selangor, Klang and area around Kuala Lumpur. Hence, this paper will discuss about the Minangkabau settlements in the Malay Peninsula, particularly in the state of Selangor, which is rich with the history of their arrival and the establishment of their settlements.

HISTORY OF THE ARRIVAL

It is difficult to determine the exact arrival date of the Minangkabau in Malaya. There are views saying that the Minangkabau arrived in Malaya as early as in the 14th century. Among those who share such thought are Parr and Mackray (1919) who stated that the Minangkabau arrived in Malaya and opened up Rembau in 1388.[1] Newbold (1834), on the other hand, reported that they had actually arrived much earlier than that. According to him, the arrival of the Minangkabau settlers in the Malay Peninsula was in the 7th century of Hijrah, the date which is equivalent to the 12th century of A.D.[2] This view is supported by Favre, a Catholic missionary, who said that both Rembau and Naning were explored by the Minangkabau 100 years after the opening of Temasik by Tun Nila Utama. According to him, Temasik was established since 1160 (Favre, 1884). This means that Favre has indirectly reported that Rembau and Naning were explored by the Minangkabau in 1260 (Favre, 1884).

Other opinions indicate that at the end of the 15th century, i.e. around the 1490s, a Minangkabau custom chief named Datuk Lateh arrived in Rembau. He was the first Minangkabau chief that came to the Peninsula. His arrival was as a settler and leader of the Minangkabau community and not as a merchant or trader. In fact, he was the personal representative of Tuan Mahudum in Sumanik (i.e. one of the Minangkabau *Basa Ampek Balai*) whose duty was to monitor the region of Rembau.[3]

At the beginning of the 16th century, a group of Minangkabau came to Kampung Kotor (Kota) to see Datuk Lateh. The group was led by Datuk Lela Balang from Batu

Hampar.[4] According to Parr and Mackray (1919), a few years after the arrival of Datuk Lela Belang, another group from Sumatera which was co-led by four Datuks came to the place. Each of the Datuks was accompanied by their followers from the same village. The four Datuks were Datuk Budi from Sri Melenggang, Datuk Laut Dalam from Paya Kumbuh, Datuk Baginda Putra from Batu Belang and Datuk Putih from Sri Lemak.[5] They were the ones who had cleared the forest and established new settlements there. They named their tribes according to the names of their homeland in Minangkabau.[6]

According to Winstedt (1934), and based on the view of D'Eredia (1613), the arrival of the Minangkabau to the Malay Peninsula occurred after the conquest of Melaka by the Portuguese in 1511. He said that a huge part of the inland areas was "*uninhabited and disested occupied by Manancabos* (Minangkabau)..." (Winstedt, 1934). While Kern said that Albuquerque mentioned about the arrival of the Minangkabau in the Strait of Malacca in 1512.[7] Furthermore, the *Daghregister* of Dutch in 1682 also mentioned that areas such as Klang, Sungai Ujong, Naning, Rembau, Jelai, Hulu Pahang, Jelebu, Johol and Segamat were the areas heavily occupied by the people from Minangkabau.

The arrival of the Minangkabau in the Malay Peninsula before the era of British colonial was not concentrated only in Negeri Sembilan and Melaka, but they also established their settlements in some other areas. According to Linehan, and based on the family tree of Maharaja Perba Jelai, Seri Maharaja Perba I, who was the ancestor of the present Maharaja Perba Jelai arrived in Pahang around the 16th century (Linehan, 1973). He came from Lima Puluh Kota Minangkabau Sumatera. In fact, some residents who live around Raub and inland areas in Pahang such as in Pulau Tawar, Semantan, Chenor, Jelai and Lipis have also claimed themselves as the descendants of the Minangkabaus who came to the Malay Peninsula before the British colonial era.[8]

In the case of Penang, it was said that long before the arrival of Captain Francis Light in Penang in 1786, the three brothers who were related to the royal family of Minangkabau had travelled to the island and received the permission from Sultan Ahmad Tajuddin, who was also a Minangkabau decendant, to stay in Penang with their followers. The three brothers were Nakhoda Bayan, Nakhoda Intan, and Nakhoda Kechil who was also known as Nakhoda Ismail. They gained control over the shore of Bayan Lepas and Balik Pulau, as well as Gelugor and Tanjung. Nakhoda Kechil even helped Captain Francis Light in building a fort which is now called Fort Cornwallis. He also opened up the area of Jelutong and built the Jelutong mosque. Nakhoda Intan, on the other hand, opened up the area of Batu Uban and built the Batu Uban mosque.[9]

THE MINANGKABAU SETTLEMENTS IN SELANGOR

The history of the opening of several villages by the Minangkabau in Selangor, with a more rapid rate, can be clearly traced

after the mid-19th century, especially after the British took over the administration of the state. However, relationship between Selangor and Minangkabau has actually been forged for a long time. This can be seen through a famous saying in the traveling tradition of Minangkabau called *pai ka Kolang*,[10] which carries the meaning go to Klang.

Gullick points out that in the 1850s, a few groups of people from Sumatera have come and built several settlements in a few districts in Selangor,[11] especially in Hulu Langat.[12] A small number of them were engaged in small-scale tin mining in the inland (Gullick, 1960). Meanwhile, some later moved to other more profitable areas, especially town areas like Kuala Lumpur or nearby areas such as Cheras or Bangsar. At the same time, there were also a number of figures and leaders of the settlers from Sumatera who were very active in establishing new settlements and villages around Kuala Lumpur and Klang. Among them were then appointed as Dato' Dagang to manage and take care of their respective areas. An example for this is the appointment of Soetan Chenga as the head of Minangkabau.[13] Other figures included Haji Abdullah Hukum and Haji Mohammad Haji Tahir.[14]

Even before the British took over the administration officially, the Malays had already established their settlements around the river valleys in every district, such as Kuala Langat, Hulu Langat, Klang, Kuala Selangor or Kuala Kubu[15] and Kuala Lumpur. These areas were not widely explored before

the era of the British administration. Hulu Langat can be said as one of the oldest areas in the state of Selangor, believed to have been explored in 1860. This statement was made based on the statement by the Resident of Negeri Sembilan. According to him, Lenggeng had been occupied by the people of Minangkabau for approximately 30 years in 1897, as indicated in the following, "….the Leggeng Valley has been occupied by settlers from Minangkabau for about 30 years" (Annual Report of the State of Negeri Sembilan, 1897). This means that the district of Hulu Langat was occupied by the settlers from Minangkabau since the 1860s (Annual Report of the State of Negeri Sembilan, 1897).

Ulu Langat consists of six districts, namely, the district of Kajang, Ulu Langat, Ulu Semenyih, Semenyih, Branang and Cheras,[16] with the people of Minangkabau formed the majority of its residents. According to David Radcliffe,[17] people who originated from Sumatera in Ulu Langat were not less than 80% of the total resident there in the 19th century.[18] During the era of the British administration in Ulu Langat, the Ulu Langat Valley was the largest settlement in the district. There were approximately 300 people from Sumatera who have lived in the valley.[19] They were engaged in agricultural activities.

It was reported in 1894 that there was an influx of 1,000 immigrants from Sumatera, made up of the people from Rawa, Mandailing, Kampar and Minangkabau who established their settlements in the district.[20] In the Selangor Journal dated 28 May 1897,

it was mentioned that although Kajang was opened and founded approximately 120 years ago (around 1777) by Tok Lili from Riau, the other areas surrounding it such as Cheras, Semenyih, Beranang and a few areas in Hulu Langat were mostly explored by the people from Minangkabau. Cheras was opened up by a person named Khatib Rawi from Rembau, Negeri Sembilan[21] in 1857. However, according to Yap Wei Kiong, the early opening of Cheras was done by five settlers from Minangkabau in the 1870s, namely, Abdul Rashid bin Haji Abdul Wahab,[22] Haji Talib bin Ngah,[23] Said Yahya, Ahmad Kerling and Haji Dahlan.

In 1864, it was reported that Tengku Sultan Rawa brought along his few followers to build up a settlement in Semenyih. He was also the one who led a few others to open up Beranang around 1878 for paddy cultivation.[24] Among the people from Minangkabau who owned lands in Semenyih and Beranang was Mat Dum bin Mat Sah.[25] Thus, it is obvious that there were already several settlements established by the immigrants from Sumatera in Ulu Langat since the 1860s.[26]

In addition to Hulu Langat, Hulu Selangor was also the focus point of the Minangkabau settlers. Serendah,[27] which is located in the district of Hulu Selangor is said to be opened in the 1870s by the *Air Bangis* from Minangkabau led by Tuk Pinang. These early *Air Bangis* settlers in Serendah earned their livings through farming. They chose to build their settlements and to cultivate the land in a lower area at the riverbank of the Serendah River. When

this area was first explored, Tuk Pinang and his followers got their food supplies, such as sugar and salt, from the Chinese mining centres in Ampang and Kanching. They took barge via the Serendah River to Kuala Selangor to get the supplies mentioned above.[28]

Tuk Pinang then decided to move to a new settlement in the south, which is now a sawmill site owned by a Chinese - the Hong Seng Sawmill.[29] This new settlement was then known as *Kampung Tuk Pinang* or *Kampung Datuk Pinang*. The lives of the *Air Bangis* community became more organized after the establishment of the new settlement and Tuk Pinang was automatically accepted by the community as their leader. The *Air Bangis* community also said that Sultan Abdul Samad had appointed Tuk Pinang as the *penghulu* for the Malays in the area. Hence, by early 1880s, Tuk Pinang was honoured not only by the Air Bangis community, but also by the community of "orang dalam" (Belandas).[30]

The continuous admission of the *Air Bangis* Malay led to the establishment of a new village in the upstream of Terachi River, which is quite far away from *Kampung Tuk Pinang*. These new *Air Bangis* settlers lived in the newly established village led by a village head or Datuk Ampat. The first village head appointed was Tuan Syeikh Abdul Samad. The second village called *Kampung Sungai Terachi* was established not long after that.[31] Majority of the Minangkabau people earned their livings through trading activities, while the rest lived as farmers.[32]

Due to the land sale around Serendah to the tin miners, the Malays were forced to explore new land in the area of *Hulu Yam Lama* in northern Serendah and *Kampung Padang Lalang* in southern Serendah, while the Chinese *towkays* had then brought in the Malays from Melaka into Serendah.[33] With the appointment of a Chinese Capitan as the leader of the Chinese community, all the three ethnic groups had their own respective leaders. The *Air Bangis* Malays and other Malays from Sumatera were led by Tuk pinang, with the assistance of Tuk Ampat Tuan Syeikh Abdul Samad and Tuk Ampat Mersat. *Orang dalam,* on the other hand, were led by Tuk Batin, while the Chinese miners were led by a Chinese Capitan named Lou Fong. The *Air Bangis* Malays then moved to the south to *Kampung Gunung Runtuh*, about four kilometres to southern Serendah, which was then named as *Stesen Sungai Choi*. This is the area that has become the settlement of the people of Air Bangis until today.[34]

Kampung Kalumpang[35] which is also located in the district of Hulu Selangor was opened in 1883 by Haji Salam bin Datuk Berkanun, one of the Minangkabau travellers from Rao (Rawa) Minangkabau. Haji Salam bin Datuk Berkanun was then known as Panglima Kanan.[36] Before opening Kampung Kalumpang, Panglima Kanan used to live in Bernam/Tanjung Malim with Tun Haji Mustapha bin Raja Kamala, who was the *penghulu* of Tanjung Malim. In fact, Panglima Kanan also used to be the assistant of the *penghulu* of Tanjung Malim when Tun Haji Mustapha

was the *penghulu*.[37] In 1883, Panglima Kanan and his wife moved and explored Kampung Kalumpung with several other Minangkabaus including, Nawi Raja Mulok, Khatib Yunus, Saleh and Limau.[38]

Meanwhile, Imam Kuang or Imam Bendahara from Rao, Minangkabau also opened a village in Pekan Kalumpang.[39] On the other hand, Puncak or Haji Said from Kampar established Kampung Sejantung.[40] Others who were involved in the establishment of Kampung Sejantung included Haji Abdullah, Awang Duja, Malim Shariat, Mat Pasak, Haja Halijah, Haji Mat Rukum, Pak Bedu and Buyong Karim.[41]

Besides that, Panglima Kanan, together with Panglima Kiri or Tabuan, Taib and Tahil[42], also established Kampung Gumut. Haji Kassim bin Tabuan was elected as the first village head.[43] Others who were involved in the establishment of Kampung Gumut were Sutan Nasin from Minangkabau, as well as Haji Saleh and Minal from Sumatera. On the other hand, Kampung Bukit was opened by Hasan Janggut Pawang, Jadi, Abdul Rashid Tua, Daga, Arshad, Jala, and Panglima Besar. Last but not least, Kampung Ulu was established by Haji Ali, Kebun, Hasan, Manan and Datuk Ahmad.[44]

In addition, the Minangkabau settlers also established a lot of other settlements around Kuala Lumpur although it is difficult to tell when exactly Kuala Lumpur became one of their settlements.[45] The development in Kuala Lumpur was more focused on the left bank of Sungai Klang as compared to Sungai Lumpur. In the early days of

Kuala Lumpur, i.e. when tin mining was an important economic activity, the city was divided into two settlements, with the Malays occupying the northern part of the city and the Chinese in the southern part. There were two main Malay villages in the northern part of the city including Kampung Rawa which was located around the site of Bank Bumiputera headquater and Jalan Melaka today, as well as Kampung Jawa which was located around the site of Masjid Jamek at present and Kampung Semarang in Jalan Kuching where Kompleks Bank Negara is situated. At that time, the Malays in Kuala Lumpur consisted of several different ethnic groups such as Bugis, Rawa, Jawa, Minangkabau, Mendeiling, Batu Bara and Kampar. The position for the leader representing the overall Malay population was called Dato Dagang.[46] Based on the record of Haji Abdullah Hukum,[47] during the time when he was in Kuala Lumpur around the 1850s, the Minangkabau settlers had built a mosque near the Gian Singh warehouse in Jawa Street.[48]

The presence of the Minangkabau settlers in the urban areas is an interesting historical phenomenon. This is because majority of them were travellers who originated from the rural areas, but they established their settlements in the urban areas in Malaya.[49] According to an American researcher named William Hornaday who visited Kuala Lumpur in July 1878, there were houses owned by the Malays which were built on hard wood 10 feet above the surface of the clay soil along the riverbank. These houses were owned by the Malays

descendents from Sumatera, including the Minangkabaus.[50] In fact, there were many Minangkabau traders and merchants in Kuala Lumpur in the 1880s and 1890s. Among them was Haji Mohd. Taib who lived in Jalan Pudu.[51]

Before Bloomfield Dougles was appointed as the British Resident who held the responsibility to enlarge the roads from Kuala Lumpur to the whole Selangor state, according to the colonial record, the British had met a person known as Panglima Garang who was one of the Malay leaders in Kuala Lumpur. He was one of the war commanders from Pahang and also a *penghulu* in Selangor. He welcomed the arrival of Bloomfield Dougles in 1879. Besides the people from Pahang, there were also people from Minangkabau who had their own leader for their community, i.e., Haji Muhammad Saleh.[52] On 7th May 1879, i.e. when Sultan Abdul Samad visited Kuala Lumpur, he also paid a visit to the old fort at Bukit Nenas. He was welcomed by Raja Saaban and Datuk Sati at the fort. These two figures were among the influential Minangkabau settlers in Kuala Lumpur with approximately 1,000 followers.[53]

Among the famous Minangkabau descendent *penghulu* appointed in Kuala Lumpur in the 20th century was Dato' Khatib Koyan who was appointed in 1924.[54] On 5th July 1926, the first among the two well-known Malay figures in Kuala Lumpur who received the Bintang Imperial Service Medal (ISM) for his excellent service in Kelab Sultan Sulaiman Kampung Bahru was Datuk Khatib Koyan. He served as the *penghulu*

in the county of Setapak in Kuala Lumpur for more than 46 years. His name was very popular among the Malay community in Kuala Lumpur. The award was delivered by the British Resident; and a parade of honour, as well as a band performance, was presented by the *Rejimen Sukarela Melayu* led by Leftenan Muda Raja Uda Bin Raja Muhammad and *Infantri Sukarela Melayu*.[55] There were also several Minangkabau residences and villages in the areas around Kuala Lumpur which were named upon their homeland in Minangkabau, such as Kampung Palembayan and Kampung Pua.[56]

Abdul Rahim Kajai, who was also known as the *Father of Malay Journalists* among the Malay journalists in the 1930s was the son of a Minangkabau settler. He was born in Setapak, Kuala Lumpur in 1894[57] and passed away in Singapore on 5th December 1943. His father's name is Haji Salim or better known as Haji Salim Kajai because he came from Kampung Kajai in Minangkabau Sumatera.[58] Muhammad Zakaria bin Malim Kuning was another Minangkabau settler that could be traced to have stayed in Setapak. He was the assistant of the *penghulu* in Setapak before 1931.[59]

Kampung Cangkat, which is located in the district of Gombak, was said to be opened by Maha Raja Ula Hj Mohd. Arshad or better known as Datuk Kuning in 1880s. He was a Minangkabau settler who came from Pariaman.[60] Kampung Simpang Tiga was opened by Tuk Kah who was also originated from Minangkabau in 1890s,[61] while Kampung Cangkat Kiri was opened by the Minangkabau settlers from Batang

Kapas and Bonjol Pasaman around 1911.[62] There was also a Minangkabau settlement in Kampung Tengah Batu 6 Gombak. One of the early settlers in the village was the father of Pak Saad who came from Melampah, Bonjol Minangkabau. He was said to have left behind a lot of lands that he had explored from Setapak to Batu 6. Today, Pak Saad and his son Pak Ahmad have inherited the ancestral land.[63] Abdul Hamid was another Minangkabau settler who had travelled to the Malay Peninsula in the early 20th century and bought parts of lands belonging to Pak Saad's father.[64] In 1939, a woman named Juna Binti Mandaro Hitam from Batang Kapas, southern coast of Minangkabau arrived in this area. She used to work as a religious teacher to other Minangkabau settlers in Kampung Tengah Batu 6. Pak Buyuang was one of her students.[65]

There are also many Minangkabaus in Kampung Kuang which is situated in the district of Gombak. They originated from a variety of places such as Tembusai, Rawa, Lubuk Sikaping, Talu, Melampan, Bonjol, Pariaman, Padang Batang Kapas, Jambi, Kerinchi, Kampar, Indera Giri, and Kuantan.[66] They differentiated themselves through their homeland. For example, Minang Kuantan means they had originated from Kuantan in Sumatera, while Minang Rawa means that they had originated from Rawa in Minangkabau. Among them, the Batang Kapas people are the majority group.[67]

CONCLUSION

The Minangkabaus arrived and established their settlements in Malaya long before the arrival of the British colonial. Although the early stage of their settlements was concentrated in areas in Negeri Sembilan and Naning in Malacca, they also established their settlements in other places such as Selangor later on. Many areas in the Malay Peninsula, especially Selangor had been explored by the Minangkabau settlers who built their settlements. Their settlements in Selangor were concentrated in Hulu Langat, Hulu Selangor and also the areas around Kuala Lumpur.

The presence of the Minangkabau settlers in the urban areas is an interesting historical phenomenon. This is because majority of them were travellers who originated from the rural areas, but established their settlements in the urban areas of Malaya. Generally, the opening of an area was followed by the giving of name to the place. The Minangkabau settlers often named the places they explored upon the name of their homeland. For example, Kampung Palembayang, Kampung Pua, Kampung Rawa, Kampung Batu Hampar and many more. In addition, they also had the tendency to name their tribes in the Malay Peninsula based on the name of their homeland. One good example is the Rawa tribe. This is one way for the Minangkabau settlers to preserve their identity.

Since the Minangkabau travellers who came to the Malay Peninsula were settlers with enough experience in the fields of exploration and agriculture, the works involving clearing the forests, establishing farm and building new settlements were not something impossible. In fact, their efforts in land exploration demonstrated their determination. Therefore, the role played by the Minangkabau settlers in the development of the rural areas, as well as the urban development in the Malay Peninsula is undeniable because the areas explored by them could still be traced and identified in the present day. However, identifying Minangkabau villages is not as easy as identifying the Jawa villages because the villages built by the Javanese usually contained the word 'Jawa' in their names. For example, Kampung Jawa, Asam Jawa, Padang Jawa and many more. This is different with the Minangkabaus who seldom used the word 'Minangkabau' in naming their settlements, but tended to use the name of the villages they came from in Minangkabau instead for the same purpose.

REFERENCES

Adnan Haji Nawang. (1997). *Kuala Lumpur Dari Perspektif Haji Abdullah Hukum*. Kuala Lumpur: Berita Publishing Sdn. Bhd.

Adnan Haji Nawang. (1997). *Kuala Lumpur Dari Perspektif Haji Abdullah Hukum*. Kuala Lumpur: Berita Publishing Sdn. Bhd. p.30.

Annual Report: District of Ulu Langat, DOUL Annual Report for the year 1938.

Birch, E. W. (1897). *Annual Report of the State of Negeri Sembilan for the year 1897*. Kuala Lumpur : The Selangor Government Printing Office, 1897.

Dzulkifli Buyong. (2008). *Sejarah Kalumpang (Riwayat Keturunan dan Tokoh 1883-2003*.

Farida Bt. Thalib. (1985). Masyarakat Minangkabau di Kuang, Selangor. *Malaysia dari Segi Sejarah,* 14.

Gullick, J. M. (1960). *A History of Selangor, 1742-1957*. Singapore.

Gullick, J. M. (1972) *Sistem Politik Bumi Putera Tanah Melayu Barat.* Kuala Lumpur. Dewan Bahasa dan Pustaka.

Irving, C. J. (1872). Affairs of Selangor and Perak 1872. S.S.R. G7. Appendix to C.J. Irving's Memo of Affairs of Selangor & Perak.

Ismail bin Abdul Hamid. (1981). History of Serendah 1880-1940. *Malaysian in History, 24*, 62.

Ismail bin Abdul Hamid. (1990). Sejarah Serendah 1880-1940. *PURBA, 7-9*. 1988-1990, 1-20.

Ismail Hussain. (1959). Abdul Rahim Kajai. *Dewan Bahasa, 3*.

Junipah Hj. Wandi. (1995). Pendatang Indonesia di Selangor: Proses Penghijrahan dan Penyesuaian", Latihan Ilmiah Universiti Malaya.

Khazin Mohd. Tamrin. (1992). Penghijrahan Penduduk dari Indonesia ke Selangor, Khususnya orang-orang Jawa. In Adnan Haji Nawang, & Mohd. Fadzil Othman (Ed.), *Selangor, Sejarah dan Pembangunannya.* Selangor Darul Ehsan: Jabatan Sejarah Universiti Malaya.

Khoo, K. K. (1990). *Album Kuala Lumpur 100 Years as a Local Authority*. Kuala Lumpur: Penerbitan Puteris, December 1990.

Laidin bin Alang Musa. (1995). The Background of the Ulu Langat Valley in Selangor , *Malayan Historical Journal, 2*(1), 8-11.

Laidin bin Awang Musa (1955). The Background of the Ulu Langat in Selangor. *The Malayan Historical Journal, 2*(1), 8-11.

Mardiana Nordin. (2007). Kuala Langat: Sejarah Awal sebelum Persemayaman Sultan. *PURBA, 26*.

Mochtar Naim. (1979). *Merantau Pola Migrasi Suku Minangkabau*. Yogyakarta: Gadjah Mada: University Press

Nik Anuar Nik Mahmud (1995). Dalam Lipatan Sejarah, 1857-1974. In Hairi Abdullah (Ed.), *Titian Warna Sejarah Pembangunan dan Perubahan Citra Kuala Lumpur.* Kuala Lumpur: Penerbitan Sejarah.

Norisa Nasar. (1985). Penghijrahan Suku Minangkabau ke mukim Hulu Langat. Dalam Malaysia Dari Segi Sejarah. *Jurnal Persatuan Sejarah Malaysia*, *14*, 36.

Radcliffe, D. (1969). The Peopling of Ulu Langat. *Indonesia.* 8 Oct 1969.

Ramli Saadon. (1996). Sejarah Kuala Langat. *Malawati. Jurnal Persatuan Sejarah Malaysia Cawangan Selangor*, 2.

Sadka, E. (1970). *The Protected Malay States 1874-1895.* Kuala Lumpur: Universiti Malaya Press.

Selangor Government Gazette, *2*, XII, June-December, 1901.

Selangor Government Gazette, *2*, XII, June-December, 1901. p. 401.

Suleiman M., & Lokman H. M. Z. (1999). *Sejarah Kampung Bahru, Di sini Awal Segalanya Bermula.* Institut Alam dan Tamadun Melayu (ATMA), Universiti Kebangsaan Malaysia. Bangi.

Winstedt, R. O. (1934). "Negeri Sembilan: The History, Polity, and Beliefs on the Nine State" *JMBRAS, 12,* pt.3

Yap Wei Kiong. *Sejarah Mukim Cheras 1880an – 1940*. (Theses dissertation). Department of History Faculty of Social Sciences and Humanities. UKM 1990/1991.

ENDNOTES

[1]According to Parr and Mackray, the year 1388 is equivalent to 773 Hijrah. See Parr, C. W. C. and Mackray, W. H. (1919). *Rembau One the Nine States: Its History, Constitucion and Customs*. *Journal of the Straits Branch Royal Asiatic Society,* 56, 1-157 and Norhalim Hj. Ibrahim. (1995). *Negeri Yang Sembilan, daerah Kecil Pasaka Adat Warisan kerajaan Berdaulat*. Shah Alam: Fajar Bakti Sdn. Bhd. Meanwhile, Abas Haji Ali suggested the date to be earlier, i.e. in 1338. See Abas Hj. Ali (1953). *Rembau Sejarah Perkembangan Adat dan Istiadatnya* Rembau: Jabatan Undang dan Perlembagaan adat istiadat Melayu Rembau. Ooi Jin-bee also said that there was an influx of the Minangkabau settlers into the Malay Peninsula in the 14th century. This opinion is supported by the statement saying that there is a tomb in Sungai Ujong Linggi which belongs to a person named Syeikh Ahmad Makhdum. The construction of the tomb could be associated with or even similar to the inscription stones in Batu Sangkar Pagar Ruyung. See Ooi Jin-bee (1976). *Peninsular Malaysia.* Hong Kong, p. 123. There are Arabic writings on the tombstone which are corresponding to the year 1467. On the tombstone, the reign of Sultan Mansur Syah in Melaka was explained as a religious teacher (ulama') from Minangkabau who had became the teacher of other Minangkabau settlers in Malaya. Abdul Samad Idris. (2970). *Hubungan Minangkabau dengan Negeri Sembilan dari Segi sejarah dan Kebudayaan*. Seremban, p.13. See also Hamka. (1985). *Islam dan Adat Minangkabau.* Jakarta: Penerbit Pustaka Panjimas, p.91-92.

[2]Newbold is among the earliest writers who discussed about the arrival date of the Minangkabau settlers to Rembau and Naning. He wrote articles about Rembau and three other Minangkabau states in the Malay Peninsula in 1834. Since there is no solid historical statement about the date, he used the local oral tradition as his guide. He also interpreted the date of the arrival of the Minangkabau based on the oral tradition. See Newbold. (1834). Sketch of the Four Menangcabowe States in the Interior of the Malayan Peninsula. In J. M. Moors (ed.) p. 265. See also Murray, J. (1839). British Settlements in the Straits of Melacca, vol. 2, London, p. 77-78. Reprinted by Oxford University Press. Kuala Lumpur, 1971.

[3]According to Terombo's story, Datuk Leteh originated from Batu Hampar and came from the Caniago tribe. His followers included the people from Batu Hampar, Paya Bidara, Pagar Cincang

and Agam. See Rasjid Manggis and Dt. Radjo Penghoeloe (1971). Minangkabau, Sejarah Ringkas dan Adatnya, Sri Darma, Padang, p. 41-42. See also Hervey, D.F.A. (1884). Rembau. in JSBRAS, 13, 241-258.

[4]Based on his title, Datuk Lela Belang was a well-known person in Minangkabau (Harvey, 1884, p. 241-58).

[5]After navigating Sungai Penajis, they then entered Sungai Mampong and navigated further to the upstream until the point where Sungai Mampong is split into two, one heading to the north - Sungai Batu Hampar, while the other heading to the east - Sungai Tanjung Kling. The group was split at that point. Datuk Budi and his people headed to the north through Sungai Batu Hampar and ended up establishing their settlement on the east bank of the river and established a village known as Kampung Batu Hampar today. On the other hand, Datuk Laut Dalam and his people navigated through Sungai Tanjung Kling before entering Sungai Layang and established a village in the area of Kampung Sungai Layang today. The group of Datuk Baginda Putera explored the area of Bintongan today, which is located across the swamp (now a dried paddy field) to the north of Kampung Sungai Layang. Meanwhile, Datuk Putih navigated further upstream and established a settlement in Lubuk Rusa, which is situated in the area of Kampung Selemak Hulu in the present day.

[6]For example, the tribe of Paya Kumbuh means that they originated from Paya Kumbuh, while the tribe of Mungkal means they came from the district of Mungkal Payakumbuh. The same goes to the other tribes such as Sri Lemak, Tiga Nenek, Seri Melenggang, Tanah Datar and many more. Nine out of the 12 earliest tribes in Negeri Sembilan are made up of the district names in Minangkabau, which reveal to us their origins. These tribes include the tribe of Tanah Datar, Batu Hampar, Mungka, Payakumbuh, Sri Lemak Minangkabau, Sri Lemak Pahang, Bary Belang, Seri Melenggang and Tigo Batu. The other three tribes are Biduanda, Tigo Nenek and Anak Aceh. In fact, some of them also named their new settlements in the Malay Peninsula based on the names of their homeland, such as Kampung Batu Hampar.

[7]Portuguese record of Malaka, M.10/47. National Archive of Malaysia.

[8]Jang Aisjah Muttalib, *Pemberontakan Pahang,* p. 32. While the descendants of Dato' Bahanam are confident that they originated from Mengkinan, Sumatera. Swettenham in "Journal Kept During A

Journey" (p. 20) stated that the father of To' Gajah was a Malay from Sumatera, while his mother was from Pahang.

[9]Penang historian, Ahmad Murad Merican, also stated that as early as the 18th century, a few areas in Penang including Batu Uban and Gelugor had already been occupied by the Malays. According to him, at the begining of 1700, Batu Uban was explored by a group of Malays from Pagaruyung, Sumatera which was led by Muhammad Salleh or better known as Nakhoda Intan. Gelugor, on the other hand, is an area around 40 hectares was explored by Datuk Janatun and his followers who were also from Pagaruyung. See Abdur Razzaq Lubis. 'Orang-Orang Indonesia di Pulau Pinang' Working Paper on Pengkisahan Melayu Pulau Pinang, Organized by Persatuan Warisan Pulau Pinang (*Penang Heritage Trust*), and English newspaper, *The Star*, Saturday, 25 August 2001, at City Bayview Hotel, Lebuh Farqurah, Penang.

[10]In fact, the Minangkabau settlers from Bukit Tinggi, Pariaman and Batang Kapas made Klang as a transit point for them to travel to other places in Malaya. See Mochtar Naim (1971). *Merantau: Causes and Effects of Minangkabau Voluntary Migration*, Singapore, p.11-12.

[11]In the 19[th] century, the districts included in the state of Selangor were Bernam, Selangor, Klang, Lukut and Langat.

[12]There are many opinions about the origin of the name Langat. The name itself certainly refers to the Langat River, which flows through the area of Kuala Langat. See Gullik J.M. (1972). *Sistem Politik Bumi Putera Tanah Melayu Barat,* Kuala Lumpur, Dewan Bahasa dan Pustaka, p. 5. However, according to oral sources, the word Langat originated from a Minangkabau term which carries the meaning 'air hangat' (warm water). This is because during the time when the Langat River was the main communication system to the traders and merchants, they have noticed that the water of the river is always warm. See Ramli Saadon (1996). Sejarah Kuala Langat", *Malawati,* Jurnal Persatuan Sejarah Malaysia Cawangan Selangor, *2*, 39. See also Mardiana Nordin (2007). Kuala Langat:Sejarah Awal sebelum Persemayaman Sultan. *PURBA*, *26*, 56-67.

[13]Selangor 133/76, "Re-nomination of Soetan Chenga the Headman of the Menangkabau People." Pejabat Setiausaha Kerajaan Negeri Selangor, 15-7-1876.

[14]Based on the results of the interview conducted by Khazin bin Mohd. Tamrin with Haji Abdul Karim bin Haji Mohd. Noor, the village head of Kampung

Jawa on 19.4.1973, it was said that Haji Mohamad Tahir came from Batu Bara, Sumatera. His arrival was undetectable; however, based on the information given by his grandson, Haji Abdul Karim (the village head of Kampung Jawa in Klang), it is believed that his grandfather came to Selangor around the 1850s. See also Khazin Mohd. Tamrin. (1992). Penghijrahan Penduduk dari Indonesia ke Selangor, Khususnya orang-orang Jawa. In Adnan Haji Nawang & Mohd. Fadzil Othman (ed.), *Selangor, Sejarah dan Pembangunannya* (p. 215). Selangor Darul Ehsan: Jabatan Sejarah Universiti Malaya and Lemabaga Muzium Sultan Alam Shah. Selangor Darul Ehsan.

[15]Kuala Kubu or Ulu Selangor located in the inland was occupied by the Malays since the 18[th] century. In the beginning, the area was only occupied by the natives. Then came the Malays from several places including Bugis and others from Sumatera. The evidence of their presence at the place since the 18[th] century is the existence of a dam built in Sungai Kubu for tin mining activities. The dam which was broken in 1883 was built by the Malays approximately 100 years before the incident. The letter from Bristow to the Resident of Selangor. 12.11.82, in SSF, KL 1708/83. National Archive of Malaysia. The existence of the dam shows that they lived there because they were involved in the tin mining activities.

[16]DOUL Annual Report for the year 1938. National Archive Kuala Lumpur, p.1. See Selangor Government Gazette, part. 2, vol. XII, June-December, 1901. p.401.

[17]David Radcliffe (1969). The Peopling of Ulu Langat. *Indonesia.* 8 Oct 1969.

[18]There are only minor changes in the population composition today, except with the entry of the Chinese into Kajang, Semenyih and Branang. Among almost 40,000 Malays in the district of Ulu Langat, with the majority of them descended from Sumatera or Minangkabau. Mochtar Naim (1979). *Merantau Pola Migrasi Suku Minangkabau*. Yogyakarta: Gadjah Mada University Press, p.149.

[19]See Laidin bin Awang Musa (1955). The Background of the Ulu Langat in Selangor. *The Malayan Historical Journal,* 2(1). July 1955.

[20]Other migrants included 180 people from Jawa, 50 from Kuantan, 311 from Rembau, 43 from Jempul and 189 from several other places. DOUL District Office Ulu Langat. 1748/94.

[21]*Selangor Journal*, no.19, dated 28.5.1897. *Penghulu* Yahaya, the *penghulu* of Cheras and kajang said that Cheras was firstly explored by Khatib Rawi from Rembau, followed by Panglima Raja from Kuantan. In the report to the district officer about

Kajang, he said that Kajang was firstly explored by Mr. Lili with six of his friends from Riau somewhere in 1776. See Kajang-Past History from Penghulu of Kajang. DOUL 236/07.

[22]Abdul Rashid bin Haji Wahab was one of the members of the Rawa tribe who had travelled to Cheras when he was 21 years old. His early job was farming. He then sold firewood carried by cart from Cheras to Kuala Lumpur. He was also involved in the rubber planting activity.

[23]Haji Thalib bin Ngah originated from Minangkabau, Sumatera and was a member of the Minang tribe. The fertile land in Cheras encouraged him to establish a settlement and cultivate a variety of crops. He was an important betel planter in Cheras.

[24]District Office Ulu Langat (DOUL) 729/97, *Compensation for Opening up the districs of Semenyih and Branang*. Since some of the Minangkabau settlers who came and explored Branang were from Rembau and some came directly from Minangkabau, the new villages that they set up were also named upon their homeland. Those Minangkabau from Rembau set up a village called Sasapan Batu Rembau, while those who came directly from Minangkabau named their village as Sasapan Batu Minangkabau.

[25]This matter referred to the claim letter from Ujang bin Mat Sah on the land and also the notice from the Selangor administration. Ujang bin Mat Sah claimed a piece of land in the county of Semenyih and another half in the county of Beranang which was previously owned by Mat Dun bin Mat Sah. As Mat Dun bin Mat Sah has passed away, as his relative, Ujang bin Mat Sah claimed the land to be his. See U.L. Lds: 547/18.

[26]Haji Abdul Manan Chik, a Minangkabau descendant who was born in Beranang in 1911 said that Beranang was explored by the Minangkabau people. His parents originated from Minangkabau, Sumatera because his grandfather has travelled from Minangkabau, Sumatera to Rembau. Upon Haji Abdul Manan Chik's arrival in Rembau, he found his heirs in Kampung Chembong since a lot of his relatives had travelled to Rembau before him. At the time when the grandfather and the parents of Haji Abdul Manan arrived in Beranang, the area was still a forest yet to be explored. It was the group of the Minangkabau settlers from Rembau who had set up the village there. Transcript of an oral interview with Tuan Haji Abdul Manan Chik by Miss Mahani Muhamad, National Archive of Malaysia, at the house of Tuan Haji Abdul Manan Chik in Beranang on 26 July 1984 at 9.45a.m.

[27]In terms of its location, the city is located in a valley bordering the Titiwangsa Mountains which seperates the state of Selangor and Pahang. On its west, there is a range of low mangrove hills, while on its south, there are three low hills which separate the town of Serendah with the Bangkahulu's settlement in Sungai Choh as well as the Air Bangis Minangkabau's settlement in stesen Sungai Choh. These three hills mentioned above are Bukit Tambun Tulang, Bukit Benggali and Gunung Runtuh. There are also mangrove hills bordering the Minangkabau's settlement in Hulu Yam Lama and Batu Tiga Puluh.

[28]See Ismail bin Abdul Hamid. (1981). History of Serendah 1880-1940. *Malaysian in History* no.24: .59-76; Ismail bin Abdul Hamid. 1990. Sejarah Serendah 1880-1940. *PURBA*, 7-9. 1988-1990: 1-20

[29]The moving of =Tuk Pinang to the new area might simply base on the geographical and economic needs of his people at that time. The condition of the agricultural soil that had become less fertile indicated that a new land needed to be explored. Another possible reason was the frequent flood at the riverbank of Sungai Serendah which often caused great loss to the people. In the 1910s, 1920s and 1932, it was reported that frequent floods usually occurred in the areas surrounding Sungai Serendah. In 1932, heavy rainfall caused flood in areas near Sungai Serendah which caused a great loss including a damaged bridge. See *Annual Report For Selangor,* 1932, 25. Therefore, there was a possibilty that floods often occured during the time of Tuk Pinang.

[30]The natives in Serendah are called *orang dalam* who lived in peace and harmony with the Malays from Sumatera. The success of these early settlers had encouraged more Malays from Sumatera to move to Serendah in the 1880s. Unlike the early settlers, these newcomers did not come from the same group or tribe. In fact, they came from several different groups and tribes of the Minangkabau and Mandailing. Their arrival gave rise to the need to set up new settlements and lands. In addition, the newcomers also differed from the early settlers, whereby their arrival was accompanied by their children and other family members. See Ismail bin Abdul Hamid (1981). History of Serendah 1880-1940. *Malaysian in History, 24*, 62.

[31]The opening of this village has brought in other Malay groups/ethnics from Sumatera such as the Kerinchi, Kuantan, Lampan Bonjol, Rawa and Batu Bara besides the Minangkabau and Mandailing.

[32]Majority of the Kerinchi lived as hardworking forest workers who earned their livings by collecting forest

products such as rattan (*rotan*). Although there were a variety of groups from Sumatera who had settled down in Serendah, there was no conflict between them. This might due to the sense of the Islamic brotherhood among them. Furthermore, although all the three villages (Kampung Tuk Pinang, Kampung di hulu sungai Terachi and Kampung Sungai Terachi) were located quite far away from one another, all the settlers shared and prayed in the same mosque. The earliest mosque was built in an area where the government houses were placed later on. Its first Imam was an Air Bangis settler called Mohd. Syukur or better known as *Imam Pangkah*. The mosque was then moved when the site was bought from the Sultan of Selangor by a Chinese *towkay* named Foog Wah for the purpose of tin mining. For the presence of the Chinese *towkay* here, see the record of Ulu Selangor District Office file, serial no. USD 107: 313/26. As a result, by the end of 1880s, Serendah experienced a population growth that was made up by various races until the area was no longer a settlement that consisted of only the people of Air Bangis, Sumatera and *orang dalam* like before. See Ismail bin Abdul Hamid. (1981). History of Serendah, 1880-1940. *Malaysian in History, 24*, 62.

[33]Majority of the wealthy Chinese entrepreneurs who had invested in the mining activities in Serendah came from Melaka. Thus, they tended to hire the Malays from Melaka to work for them. Meanwhile, the people of Kerinchi, who were famous as hardworking forest explorers, were also hired by the Chinese to clear the forest and to establish companies. See Ismail bin Abdul Hamid. (1981). History of Serendah 1880-1940. *Malaysian in History*, *24*, 62.

[34]See Ismail bin Abdul Hamid. (1981). History of Serendah 1880-1940. *Malaysia in History, 24*, 61-76.

[35]Kampung Kalumpang is a village located in the district of Ulu Selangor in the state of Selangor. It is situated at the side of the road from Kuala Lumpur to Tanjung Malik, which is approximately 45 miles from Kuala Lumpur and four miles from Tanjung Malim.

[36]The title was given by the Sultan of Selangor (Sultan Mahmud) because he had successfully killed the Commander of Pahang during the war between Pahang and Selangor. In addition, Panglima Kanan also succeeded in controlling the pirates in Sabak Bernam. He then moved to Kalumpang from Bernam with his wife and followers. The area was a forest before his arrival. Panglima Kanan and his followers named the area Kampung Kalumpang upon the name of a big tree where they had rested during their migration. The tree was located near

the old market of Kalumpang. Panglima Kanan was the first person who set up his house there. The walls of the house were made of *pelupoh* and the roof was made from *rumbia* leaves. The house of Panglima Kanan also used to be *rumah pasong* and the new *rumah pasong* was built by the ruler in 1888. Panglima Kanan was also the one responsible to bring in the Chinese from Sekinchan and other districts in the state of Selangor for the purpose of tin mining activities in Kalumpang. This statement was derived from the writing of Dzulkifli Datuk Hj. Buyong that was handed over to the National Archive Kuala Lumpur. Dzulkifli Datuk Hj.Buyong. (2008). Sejarah Kalumpang (Riwayat Keturunan dan Tokoh 1883-2003).

[37]Panglima Kanan was also the brother-in-law of the *penghulu tua* of Tanjung Malim, i.e. Tun Haji Mustapa bin Raja Kamala, who originated from Kota Raja, Rao Mapat Tunggal Minangkabau. He was the first *penghulu* of Kampung Kubu and also the one who established Kampung Bernam/ Tanjung Malim. Tun Haji Mustapha bin Raja Kamala was called *penghulu tua* because he was one of the leaders from the Rao tribe in Gali Raub who had migrated to Tanjung Malim somewhere in 1870/1871. He also set up a Madrasah as a place for theology studies. As a remembrance of his merit, his name was immortalized as the name of a road in the area of Kampung Kubu, near the old bus station in Tanjung Malim, which is Jalan Hj.Mustapha Bin Raja Kamala. His tomb is located near the tomb of Tuan Syeikh Ismail Naqsyabandy Ar-Rawi in the Cabang cemetery, Tanjung Malim.

[38]One of the children of Panglima Kanan, i.e. Mat Yassin bin Panglima Kanan, applied for the ownership for a 14 acres of land in the county of Sungai Gumut. The land was previously owned by his brother. Since his brother went to pursue the hajj in Mecca, he then wished to transfer the land ownership to his brother, Mat Yassin who was living in the county of Kalumpang. See Sel-Sec.149/1925.

[39]At first, he travelled from Rao to Negeri Sembilan and passed by Bukit Kancing Selangor before moving on to Kuang Selangor. He used to hold the position as the *Imam* for the Kuang mosque and was called Imam Kuang. His son, Imam Hj. Daud, was the first Imam of the At-Taqwa mosque in Kalumpang. So did his grandson Hj. Mohd Tahir and his great grandson Ustaz Ali Badri Sheikh Ismail Naqsyabandiah Arrawi.

[40]Puncak was also a famous shaman. The same goes to his descendants. His son, Tuan Haji Mohd.Zain, was good at healing besides being the village head,

as well as the *bilal* and *khatib* of the mosque. His granddaughter Mymunah binti Hj. Ohd Zain was a specialist in traditional massage.

[41]Panglima Kanan owned a durian orchard around 12 acres in size in Sejantung. Due to its vast area, it was described by some that "an elephant will die if it passes through the orchard when the durian fall so much that they can be piled up." Panglima Kanan defensed Bernam during the Raub-Bernam war and Raub-Gumut war, together with Panglima Besar and Panglima Kiri. Panglima Kanan, together with pendekar Ulung Kalumpang, Khatib Yunus, assissted Mat Kilau in his resistance towards the British. However, they retreated when the British successfully conquered Pahang. Dzulkifli Datuk Hj.Buyong. (2008). Sejarah Kalumpang (Riwayat Keturunan dan Tokoh 1883-2003).

[42]In order to build an irrigation system in Kalumpang, Tun Haji Mustapha bin Kamala and Panglima Kiri received a sum of $50. See File Kuala Lumpur 427/93.

[43]Haji Muhd. Zain, the son of Puncak or Haji Said, became the second village head of Kampung Gumut. He served as the village head for almost 20 years. In the beginning, Haji Muhd Zain was the village head of Kampung Beringin, which was a small village near to the old cemetery of Kalumpang named Kubah. Then in around 1923, Kampung Beringin was taken by a tin dredger company owned by an Australian. The residents of Kampung Beringin moved to Kampung Gumut.

[44]Dzulkifli Datuk Hj.Buyong. (2008). Sejarah Kalumpang (Riwayat Keturunan dan Tokoh 1883-2003).

[45]There are a lot of speculations about the name of Kuala Lumpur. Some said it refers to Sungai Lumpur, where Kuala Lumpur actually carries the meaning "Kuala Sungai Lumpur". This view was supported by John Anderson's writing in 1824 about the tin producing states in the west coast of Malay Peninsula, who also mentioned about a river called Sungai Lumpur. In addition, there was also a map attached in the report of C.J. Irving regarding "Affairs of Selangore and Perak" 1872. See S.S.R. G7. Appendix to C.J. Irving's Memo of Affairs of Selangor & Perak. 1872. Irving was asked to prepare a report regarding the political conditions of these states and the attached map showed that the river which met Sungai Klang is now known as Sungai Gombak (it was previously known as Sungai Lumpur). See Album Kuala Lumpur 100 Years as a Local Authority. Penerbitan Puteries. December 1990, p. 3-4. See also Nik Anuar Nik Mahmud. (1995). Dalam Lipatan Sejarah, 1857-1974. In Hairi

Abdullah (ed.) *Titian Warna Sejarah Pembangunan dan Perubahan Citra Kuala Lumpur* (pp. 3-5). Kuala Lumpur: Penerbitan Sejarah.

[46]See Album Kuala Lumpur 100 Years as a Local Authority. Penerbitan Puteries. December 1990, p.3-4.

[47]A Kerinci descended Sumatran traveller who came to the Malay Peninsula with his father when he was 15 years old in 1850. He used to stay in Sungai Putih and explored the forest in Bukit Changgi Puteri with his men. Then, he was elected as the leader with the agreement of *Penghulu* and the Collector of Revenue called Datuk Dagang. Haji Abdullah Hukum lived in Selangor for more than 85 years, begining he was 24 years old under the administration of the Malay government (1850-1874) and when he was 61 under the British colonial administration (1874-1930s). Haji Abdullah Hukum was a leader in the exploration of Setapak, Gombak, Pudu-Bukit Bintang, as well as the farms in Bukit Nenas, in addition to Sungai Putih (now known as Jalan Bangsar). In the area of Sungai Putih, there is a Malay village which is named upon him, that is Kampung Abdullah Hukum. See *Warta Ahad*. (27 October 1935) and *Warta Ahad*. (17 November, 1935), 9, 10, 16. See also Adnan Haji Nawang. (1997). *Kuala Lumpur Dari Spektif Haji Abdullah Hukum*. Kuala Lumpur: Berita Publishing Sdn. Bhd.

[48]Since there are two different mosques nearby, which are the Melaka Mosque and Minangkabau Mosque, the disagreement occurred among the Malays because they carried out their Friday prayers in their mosques, respectively. According to the Syafie School, the Friday prayers should not be conducted in multiple places in a state except in the state of emergency. In addition, if the Friday prayers were conducted in two or more different mosques, then the valid prayer would be the one conducted in the mosque that first reached *takbiratul ihram*. The disagreement among the Muslims was solved by Sultan Abdul Samad with his wisdom. The Sultan suggested that the Friday prayers be conducted by taking turns. Once in the Melaka Mosque and the next in the Minangkabau Mosques and so on. See Adnan Haji Nawang. (1997). *Kuala Lumpur Dari Spektif Haji Abdullah Hukum*. Kuala Lumpur: Berita Publishing Sdn. Bhd., p. 30. See also *Warta Ahad*. (1935, 27 October).

[49]They were also involved in the political arena of Selangor such as the war between Raja Mahdi and Tengku Kudin which was also helped by the people of Minangkabau who were in favour of Raja Mahdi.

[50]Dato' Dr. Suleiman Mohamed & Lokman Haji Mohd. Zen. (1999). *Sejarah Kampung Bahru, Di*

sini Awal Segalanya Bermula. Bangi: Istitut Alam Tamadun Melayu, Universiti Kebangsaan Malaysia, p. 87.

[51]Haji Mohd. Taib was a well-known and rich Minangkabau merchant in Kuala Lumpur who had arrived in Malaya in 1876. He also owned tin mines, decoration shop, farms and a number of huge houses and shops in Malay Street. See Secretariat 4304/1896, *Certificate or Pass to Enable Haji Mohamed Taib bin Haji Abdul Samad to Visit Sumatera,* Pejabat Setiausaha Kerajaan Negeri Selangor. 1896.

[52]The people of Minangkabau were closely tied with their ethnicity and had the practice of helping each other in their community. Not long after that, Sheikh Muhammad Ali proposed to the Minangkabau to move to Rembau and helped to solve the murder of one of them there. Back then, Sheikh Muhammad Saleh was a *penghulu* in Hulu Kelang and Hulu Langat. He was the leader of the Minangkabau community in Kuala Lumpur and its southern part. His brother Sheikh Muhammad Taib was very famous in the state of Perak, where Hugh Low had appointed him as the state's *Kadhi* because he was a Islamic leader from Sumatera. See E. Sadka. (1970). *The Protected Malay States 1874-1895.* Kuala Lumpur: Universiti Malaya Press. p.112.

[53]Dato' Dr. Suleiman Mohamed and Lokman Haji Mohd. Zen. (1999). *Sejarah Kampung Bahru, Di sini Awal Segalanya Bermula.* Institut Alam dan Tamadun Melayu (ATMA), Universiti Kebangsaan Malaysia. Bangi. p. 93.

[54]The area under his control was from Batu 2 (now Chow Kit) to the area of Gombak. He came from Kampung Dalam, Pasaman Minangkabau. In carrying out his duty as the penghulu, Datuk Khatib Koyan was assisted by a few assistants such as Datuk Abbas, Datuk Muning and many more. These assistants replaced Dato' Khatib Koyan as the *penghulu* by taking turns after his death. Dato' Dr. Suleiman Mohamed & Lokman Haji Mohd. Zen. (1999). *Sejarah Kampung Bahru, Di sini Awal Segalanya Bermula.* Institut Alam dan Tamadun Melayu (ATMA), Universiti Kebangsaan Malaysia. Bangi.

[55]Datuk Khatib Koyan ended his administration in this area when he was 80 years old and passed away in Gombak. There is a road in Kampung Bahru which was named upon his name. See *100 Tahun Kuala Lumpur.* (1990, p.102); Dato' Dr. Suleiman Mohamed & Lokman Haji Mohd. Zen. (1999). *Sejarah Kampung Bahru*, *Di sini Awal Segalanya Bermula*. Institut Alam dan Tamadun Melayu (ATMA), Universiti Kebangsaan Malaysia. Bangi.

p. 95-97.

[56]In these villages, they lived as the Malays; they planted vegetables, fruit trees and also cultivated rubber plantation. As the Malay residents, they had the opportunity to own lands. At certain times, some of the men would go and search for jobs in the city as carpenters, repairmen, painters, gardeners and so on. See Mochtar Naim (1979). *Merantau Pola Migrasi Suku Minangkabau*. Yogyakarta: University Gadjah Mada Press. Yogyakarta. p.148.

[57]Abdul Rahim Kajai was one of the well-known literary and journalist among the readers in the 1930s. He was a Minangkabau descendant. Besides his fame as a famous journalist, he was also popular as a short story writer. The stories were among his contributions to the literature and journalism world that had made his name live in the heart of his fans until today. It is incredible that he was able to produce so many short stories in such a short time. Overall, he produced 48 short stories in six years, i.e. from 1936-1941. Although Abdul Rahim Kajai did not live a long life and only had the opportunity to participate in the field of literature and journalism for less than 20 years, he had successfully carved his name in the history of journalism and the Malay literature as a famous literary and journalist at his time. Ismail Hussain. (1959). Abdul Rahim Kajai. *Dewan Bahasa,* 3, 185-197.

[58]Haji Salim Kajai was born in a rich family with a strong faith in Islam. He used to serve as a *syekh* in Mekkah. In 1893, he met Hajah Safiah in Mekkah after her husband passed away while pursuing the hajj. In 1894, Salim Kajai sent his wife home with the group pursuing hajj from Setapak because his wife was pregnant. Salim Kajai then went back to Mekkah to continue to serve as a *syekh*. In the same year, Hajah Safiah gave birth to a baby boy who was named Abdul Rahim (better known as Abdul Rahim Kajai, or Kajai) who was raised by Hajah Safiah and her mother, Wan Sri Dayang. See Ismail Hussain (1959). Abdul Rahim Kajai. *Dewan Bahasa,* 3, 185-197.

[59]This matter referred to the Kuala Lumpur Land Office on 1st April 1931, which reported that Mohamed Zakaria bin Malim Kuning, assistant *Penghulu* of Setapak had retired at the end of April 1931. See Sel-Sec. S.369/1931.

[60]In Kampung Cangkat, Datuk Kuning explored paddy fields and farms. See Junipah Hj. Wandi. (1995). *Pendatang Indonesia di Selangor: Proses Penghujrahan dan Penyesuaian*. Dissertation. University of Malaya, p. 65.

[61]This opinion was based on an early cemetery in the village which was believed to be the tomb of Tuk Kah. Other opinion suggests that this village was established after the establishment of Kampung Cangkat which is situated next to this village. When Kampung Cangkat was established, Kampung Simpang Tiga was still a forest. See Junipah Hj.Wandi. (1995). *Pendatang Indonesia di Selangor: Proses Penghujrahan dan Penyesuaian*. Dissertation. University of Malaya, p. 65.

[62]This assumption was made based on that the grant of the land bought by Pak Untai and his friends for their descendants. Pak Untai also mentioned the names Pak Mazlan Khusain and Latifah who were among the Minangkabau descendants in Gombak where their ancestors also originated from Pasaman, Minangkabau. This is the statement of Pak Untai (Kasman bin Suman) when he was interviewed on 13-11-2007 at Kampung Cangkat Kiri, Gombak.

[63]This statement was obtained from Pak Buyuang when he was interviewed at his house located in Kampung Tangah Batu 6, Gombak on 13-11-2007. The real name of Pak Buyuang is Abdul Aziz bin Abdul Hamid, one of the Minangkabau descendants in Kampung Tengah Batu 6 Gombak. He was born in Kampung Tengah Batu 6 Gombak in 1936.

[64]Abdul Hamid is the father of Pak Buyuang. The interview was carried out with Pak Buyuang in Kampung Tangah Batu 6, Gombak on 13-11-2007.

[65]She was brought by her *Paman* (*mamak*). *Mamak* of Juna's mother had travelled to the Malay Peninsula earlier and explored land in the district of Bentong in Pahang. The interview was carried out with Juna's mother on 13-11-2007 in Kampung Tangah Batu 6, Gombak.

[66]Farida Bt. Thalib. (1985). Masyarakat Minangkabau di Kuang, Selangor. *Malaysia dari Segi Sejarah 14*, 66.

[67]Since their early arrival until 1940s, there were still doubts among the tribes in this ethnic group. Clearly, the community's activities such as mingling around, friendships, marriages, gatherings, feasts, selection of potential in-laws and many more were the important factors taken into consideration. The Minangkabau Malays are well known through their devotion to Islam. Since their early settlement, *surau* was built in every village on mutual assistance. These *suraus* were rebuilt to become bigger and modern until they turned into mosques. See Farida Bt. Thalib. (1985). Masyarakat Minangkabau di Kuang, Selangor. *Malaysia dari Segi Sejarah* No.14. p. 72-73.

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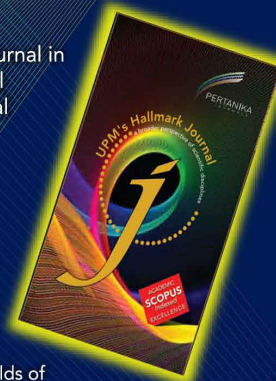
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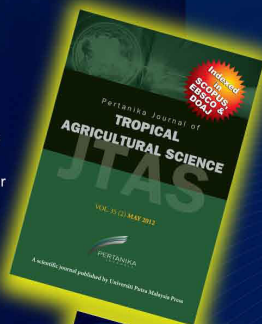
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