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HUMAN SCIENCES STUDENTS' ATTITUDES TOWARDS COMPUTERS AND THEIR COMPUTER USE: AN EXPLORATORY STUDY AT THE MATRICULATION CENTRE, INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

BY

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ABSTRACT

This study investigates the attitudes towards computers among the Humans Sciences Students at the Matriculation Centre, International Islamic University Malaysia. It is also examines the level of computer use as well as computer knowledge among the students. The study involved 200 participants (100 male and 100 female students) who were randomly selected using the cluster random sampling method from the Human Sciences Department. It used questionnaires comprising a demographic background questionnaire, a computer use questionnaire, a computer knowledge questionnaire and Selwyn's Computer Attitude Scale for 16-19 Education. The findings reveal that Human Sciences students regardless of their gender and level of study, have positive attitudes towards the computer. However, despite having positive attitudes, they rated themselves as 'beginner' computer users. There are, nevertheless, differences between the levels of study on their attitudes towards computers. The research outcome shows the second year students obtained higher scores that the first year students although both groups have relatively positive attitudes. Besides, the second year students labeled themselves as 'intermediate' computer users while the first year students considered themselves as 'beginners'. Additionally, Human Sciences students, regardless of their gender and level of study, accessed the computer on a weekly basis.

ملخص البحث

تختبر الدراسة العالية اتجاهات طلاب العلوم الإنسانية في المركز الإعدادي نحو الحاسبات الآلية. وتقوم الدراسة أيضا بإختبار استخدام ومعرفة استخدام الحاسوب (الكمبيوتر) في أوساط الطلاب. وقد شارك في الدراسة المسحية 200 طالب (100 طالب و 100 طالبة) الذين تم اختيارهم عشوائياً من بين طلاب العلوم الإنسانية وباستخدام نظام العينة العنقودية. وقد استخدامت استبيانات متعددة تشتمل على استبيان خلفية المشاركين، واستبيان استخدام الحاسوب، والمعيار سلوين (SELWYN) للإتجاهات نحو الحاسوب لتربية 16-19. لقد أشارت نتائج الدراسة إلى أن طلاب العلوم الإنسانية بغض النظر عن الجنس أوالمستوى الدراسي لهم اتجاهات إيجابية نحو استخدام الحاسوب. ومع ذلك فقد صنفوا أنفسهم بأنهم مبتدؤن في استخدام الحاسوب. وبالرغم من ذلك هناك اختلافات في اتجاههم نحو الحاسبات الآلية. ومن تم فقد أظهرت النتائج أن طلاب السنة الثانية أبدوا اتجاهات آلت إيجابية من طلاب السنة الأولى، ومع ذلك فكلا المجموعتين اتجاههم إيجابية نسبيا، أصنف إلى ذلك فقد صنف طلاب السنة الثانية بأنهم متوسطون في استخدام الحاسوب. بينما أظهر طلاب السنة الأولى أنفسهم بأنهم مبتدؤن. إضافة إلى ما سبق ذكره فإن طلاب العلوم الإنسانية بصرف النظر عن الجنس أوالمستوى الدراسي يقبلون على الحاسوب بمعدل مرة في الأسبوع.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Education.

……..……..
Kamal Basha Madarsha
Supervisor

I certify that I have read this study and that in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Education.

……..……..
Nik Ahmad Hisham Ismail
Examiner

This dissertation was submitted to the Institute of Education and is accepted as partial fulfilment of the requirements for the degree of Master of Education.

…..……..
Ahmad Marzuki Zainuddin
Director,
Institute of Education

DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Name: Roslinda bt. Alias

Signature…….. Date: ……

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This thesis is dedicated to my late father Alias bin Ali who inspired me to chase rainbows and create one of my own

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INTRODUCTION

BACKGROUND OF STUDY

ICT in Malaysia

The Malaysian government has long since recognized the importance of the use of ICT among the public because it has become vital knowledge in this rapidly developing Information Age. This is well reflected in the two Malaysian Plan Policies i.e., the Seventh Malaysia Plan (7MP) from the year 1996 to 2000 and the Eighth Malaysia Plan (8MP) from the year 2001 to 2005, which stressed the broad use of ICT in Malaysia.

The Seventh Malaysia Plan (7MP)

The concern of the Malaysian government about the use of ICT could be seen in the Seventh Malaysia Plan (7MP) from 1996 to 2000. One of the important items on the agenda was to strengthen the role of IT as the foundation for building a knowledge-based society (Economic Plan Unit, 1995). Among the government initiatives was the

establishment of the National Information Technology Council (NITC) in the year 1994. The aim of the NITC is to improve the development and the utilization of ICT in line with the aspiration of Vision 2020 to provide the foundation and framework for the use of ICT to transform Malaysia into a developed country (INFOSOC Malaysia 2000: Access and equity: Benchmarking for progress, 2000).

In accordance with that, the National IT Agenda (NITA) was launched by the National Information Technology Council (NITC) in December 1996. The vision of this agenda is to transform Malaysia from an information-based society to a knowledge-based society which will later turn into a value-based knowledge society.

In conjunction with the National IT Agenda (NITA), the Ministry of Information launched the National IT campaign in the following year i.e., 1997. The main purpose of this campaign was to educate the public at large about IT and its benefits (Norsaidatul Akmar, Harnevie and Valida, 1999).

Apart from that, according to the report by the Economic Plan Unit (2000), the Seventh Malaysia Plan saw a widening growth in the ICT use. There was a proliferation of the ICT utilization among both the private and the government sectors such as in manufacturing, banking and finance, telecommunications, utilities, healthcare, education and others.

The positive impact of the Seventh Malaysia Plan could also be seen in the extent of ICT use in Malaysia. According to the data gathered by the ITU and WITSA, there was a proliferation in the ownership of personal computers in Malaysia from the year 1995 to 2001 (Multimedia Development Corporation, 2004). There was an increment in the ratio of the ownership of personal computers from 37.3 for 1000 people in 1995, to 126.1 for 1000 people in 2001. This situation shows that the awareness among Malaysians (in the importance of the use of ICT) had increased positively.

The Eighth Malaysia Plan (8MP)

The Eighth Malaysian Plan (from year 2001 to 2005) focuses on enhancing development and positioning Malaysia as a major global IT and multimedia hub (Economic Plan Unit, 2000). One of the Malaysian government's major efforts in achieving these aims is the establishment of the broadband services, which is known as TMNET Streamyx offered by Telekom Malaysia Berhad in early 2002. This application has had a great impact on ICT use in Malaysia where through broadband, advanced local access network (LAN) facilities have been established such as Fixed Wireless Access and others.

In addition, the Malaysian Government also adopted the latest technology in ICT which saw in 2002 the development of the third-generation (3G) systems. Subsequently, in the year 2003, two major telecommunications companies, namely, MAXIS Communications and CELCOM were selected to implement the 3G systems in Malaysia.

Up until the end of August 2003, there were about 16 “Internet Desa” and 15 “InfoDesa” centres established throughout Malaysia to promote and educate the rural community in ICT use. These centres not only provide ICT training to the community but also encourage people to participate in the government’s social activities.

Accordingly, it can be inferred that the above mentioned developments can be considered as important catalysts in the rapidly widening use of information and communication technology (ICT), particularly of computers in Malaysia.

Multimedia Super Corridor (MSC)

Malaysia is now in the process of transforming its economic status from that of a developing country to an industrialized country as highlighted in Vision 2020. To achieve this status, the Malaysian government, among other things, established the Multimedia Super Corridor (MSC) in 1996 to prepare herself to be in step with

the developed nations (Norsaidatul Akmar et al., 1999). The objective of the establishment of the MSC is to transform Malaysia into a regional and global leader in IT development and applications (Norsaidatul Akmar et. al., 1999).

In order to achieve the objective, the Malaysian government has identified seven flagship applications for implementation (MDC, 2004). These flagships include *Electronic Government (EG)*, wherein services provided by the government agencies will be made more efficient through the utilization of information and communication technology. In addition, *Telehealth* was also established to provide the Malaysian community with health information as well as virtual health services via the advancement of information technology. The *Multipurpose Card (MPC)*, which was also initiated by the MSC, combines the applications of the government and private sectors in a single card (named MyKad) so that it could provide smooth and efficient services for the public when dealing with both sectors. Besides that, the *Research and Development Cluster (R&D)* was established to give emphasis to research and development for future multimedia technologies by encouraging collaborative R&D efforts among the private sector, universities and others. Meanwhile, the *E-Business* which was established under the MSC flagship aims to provide an efficient and competitive economic environment. The MSC, in fact, was also concerned about the

development and enhancement of the *Small and Medium Enterprises (SMEs)* in ICT, as well as in the field of science and technology; consequently the *Technopreneur Development* was developed as one of its flagships.

However, the enhancement and advancement of the educational sector is not forgotten as the *Smart Schools* were made one of the MSC flagship applications. In Smart Schools, the use of ICT is given emphasis so that our new generation is able to face the numerous challenges of the Information Age, with the widened use of information and communication technology (ICT) emphasized.

In addition, the use of information and communication technology (ICT) also has been stressed on the students of institution of higher learning (IHL).When students are well-versed in ICT, an IT literate community will be produced which will, in turn, transform Malaysia from an industrial to information-based economy.

Matriculation Centre

The Matriculation Centre, International Islamic University Malaysia was established in July, 1985. Like other pre-university institutions in Malaysia, the centre is for preparing students to further their studies in universities particularly in the

International Islamic University Malaysia. It consists of first year and second year students with an age range of 17 to 20 years with Malays as the majority.

There are two main programmes offered by this centre, namely, the Science programmes and the Art programmes.

Under the Science programmes, there are three departments, namely, the Department of Science, the Department of Information and Communication Technology as well as the Department of Architecture and Enviromental Design. There are four programmes offered under the Department of Science that include the Engineering programme, the Pre-medical and Pharmacy programme, the Biological Science programme and the Physical Science programme.

There are three departments under the Art programmes, namely, the Department of Laws, the Department of Economics and Management Sciences, and the Department of Islamic Revealed Knowledge and Human Sciences. The Department of Islamic Revealed Knowledge and Human Sciences offers four programmes i.e. the Islamic Revealed Knowledge and Heritage programme, the Human Sciences programme, the English programme, and the Arabic programme. A summary of the departments and programmes offered in the Matriculation Centre, International Islamic University is to be found in Figure 1.1.

Figure 1.1
Summary of the Departments and Programmes Offered by the Matriculation Centre

Departments	Programmes offered
Science Programmes	
1) Department of Science	a) Engineering b) Pre-medical and Pharmacy c) Biological Science d) Physical Science
2) Department of Information and Communication Technology	a) Information and Communication Technology
3) Department of Architecture and Enviromental Design	a) Architecture and Enviromental Design
Art Programmes	
1) Department of Laws	a) Laws
2) Department of Economic and Management Sciences	b) Economic and Management Sciences
3) Department of Islamic Revealed Knowledge and Human Sciences	a) Islamic Revealed Knowledge and Heritage b) Human Sciences c) English Language d) Arabic Language

OBJECTIVES OF THE STUDY

The objective of this study is to investigate the attitudes towards computers and its use among the Human Sciences students at the Matriculation Centre, International Islamic University Malaysia. The study also investigates the level of computer use as well as the level of computer knowledge among the students.

STATEMENT OF THE PROBLEM

The local universities have been directed by the Ministry of Education to ensure that future graduates should be computer literate and competent in IT irrespective of their specialization (Norsaidatul Akmar et al., 1999).

However, to function effectively, graduate students in particular, should equip themselves with the knowledge of basic computer applications. Hence, the negative attitudes towards computers such as anxiety, phobia, dislikes, and so on should not exist among students because they may impede their progress in acquiring this vital knowledge which will later on become an obstruction in the use of ICT.

Although there are numerous studies conducted to investigate students' attitudes towards computers and computer use in Malaysia, studies on pre-university students as well as matriculation centre students in Malaysia are still lacking as the