Faculty of Cognitive Sciences and Human Development

THE RELATIONSHIP BETWEEN THE USE OF LIBRARY ELECTRONIC RESOURCES AND COMPUTER SELF-EFFICACY: A STUDY AMONG FACULTY OF COGNITIVE SCIENCES AND HUMAN DEVELOPMENT UNDERGRADUATES IN UNIVERSITI MALAYSIA SARAWAK.

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Statement of Originality

The work described in this Final Year Project, entitled
"The Relationship between the Use of Library Electronic Resources and Computer Self-Efficacy : A Study Among Faculty of Cognitive Sciences and Human Development Undergraduates in Universiti Malaysia Sarawak"
is to the best of the author's knowledge that of the author except where due reference is made.

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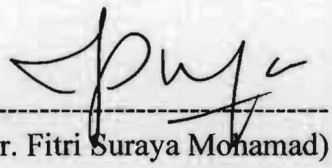

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ABSTRACT

THE RELATIONSHIP BETWEEN THE USE OF LIBRARY ELECTRONIC RESOURCES AND COMPUTER SELF-EFFICACY : A STUDY AMONG FACULTY OF COGNITIVE SCIENCES AND HUMAN DEVELOPMENT UNDERGRADUATES IN UNIVERSITI MALAYSIA SARAWAK.

Siti Mariam Muhammad Abdul Basar

Information and Communication Technology has become an increasingly important medium to the society and there is a rising dependence on computer technologies in all aspects of life. This includes students at higher learning institutions which require them to be more adaptive and open to new technologies. Higher learning institutions could help in encouraging the students to use technologies by promoting the use of library electronic resources in preparing their course works, assignments or studies. This study focused on the relationship between undergraduates' level of computer self-efficacy and their library electronic resources' usage. This study also examined the influence of ease of access on undergraduates' library electronic resources' usage. Ninety-eight undergraduates at a Malaysian university participated in this study. A set of questionnaire is used as an instrument to obtain feedback from respondents. Through statistical analysis, it is found that there is no relationship between undergraduates' level of computer self-efficacy and electronic library usage. The findings suggest that perceived ease of access has a mediating effect when predicting electronic library usage.

Keywords : Computer Self-Efficacy, Library Electronic Resources, Perceived Ease of Access

ABSTRAK

HUBUNGAN ANTARA PENGGUNAAN BAHAN SUMBER ELEKTRONIK DAN EFIKASI DIRI TERHADAP KOMPUTER : KAJIAN TEHADAP PELAJAR-PELAJAR FAKULTI SAINS KOGNITIF DAN PEMBANGUNAN MANUSIA DI UNIVERSITI MALAYSIA SARAWAK.

Siti Mariam Muhammad Abdul Basar

Informasi dan teknologi maklumat merupakan satu sumber yg penting kepada masyarakat. Pelajar-pelajar institusi pengajian tinggi juga perlu lebih peka terhadap penggunaan teknologi. Pihak institusi pengajian tinggi juga dapat menggalakkan pelajar mengaplikasikan penggunaan teknologi dengan menggunakan bahan sumber elektronik bagi tujuan akademik. Kajian ini bertujuan untuk mengenalpasti hubungan antara tahap efikasi diri pelajar terhadap komputer dan penggunaan bahan sumber elektronik. Kajian ini juga bertujuan untuk menganalisis kesan pandangan pelajar akan tahap kesukaran menggunakan bahan sumber elektronik terhadap jumlah penggunaannya. Sejumlah sembilan puluh lapan pelajar dari sebuah universiti di Malaysia terlibat dalam kajian ini. Borang kaji selidik digunakan bagi mendapatkan respon dari pelajar. Analisis kajian mendapati bahawa tahan efikasi diri pelajar terhadap komputer tidak berhubungkait dengan penggunaan bahan sumber elektronik. Keputusan kajian juga mendapati bahawa tiada hubungan antara tahap efikasi diri pelajar terhadap komputer dan penggunaan bahan sumber elektronik.

CHAPTER 1
INTRODUCTION

1.0 Introduction

The first chapter discusses the background of study, problem statement, objectives, research questions, research hypotheses, rationale of study, conceptual framework, significance of study, limitations of study and also the conceptual and operational definition of terms. The background of study discusses the importance of computer technologies in daily life, especially students in higher learning institutions. The importance of using electronic library when searching for information is also highlighted in this section. The problem of statement discusses the issues that arise in the electronic library environment. The research objectives and research questions guide the construction of research hypotheses. The rationale of study focuses on the importance of addressing the issue, meanwhile the conceptual framework presents the demographic, independent and the dependent variables used in this study. The significance of study discusses the implications of this study, meanwhile the limitations of study focuses on the restrictions that involves in this study. Finally, the conceptual and operational definition of terms highlights the important terms that will be used throughout the study

1.1 Background of Study

In recent years, Information and Communication Technology (ICT) has become an increasingly important and a powerful medium to the society and there is a rising dependence on computer technologies in all aspects of life. This includes students at various higher learning institutions which require them to be more open and adaptive to new technologies. Higher learning institutions could help in encouraging the students to use technologies by promoting the use of electronic library or e-library in preparing their course works, assignments or studies.

It is a known fact in this digital era that any student at the higher level institutions who intends to better achieve and go further in academics should have the ability to explore the digital environment (Tella, Tella, Ayeni & Omoba, 2007). Although educational institutions realize that it is important for students to use electronic resources by using e-library, they are still not able to make students utilize the e-library facilities provided by institution to its full potential (Ramayah & Aafaqi, 2004). According to Tella et al. (2007): "services currently available to academic staff and students are not being used to their full potential and some are hardly being used at all."

There are many advantages in using the electronic library for information searching compared to the Internet. Informed library users know that the libraries have resources that are more comprehensive and scholarly than most academic Web sites provide (Waldman, 2003). Libraries provide access to scholarly literatures that, as a rule, are not freely available on the Web, or may not be online at all (Waldman, 2003).

This study is aimed to investigate whether a student's computer self-efficacy influences his or her choice of seeking information in the electronic library. How the student perceives the electronic library's ease of access, whether simple or complicated, will also be investigated in order to find out whether it influences his or her electronic library usage when searching for information.

The concept of self-efficacy is a person's beliefs regarding his or her own capabilities in performing a certain task. The levels of an individual's self-efficacy are determined by a few factors, such as previous experience, observing others succeed or fail, verbal persuasion and affective state of emotional (Cassidy & Eachus, 1998). A person is said to have a high level of self-efficacy when they perceive themselves as capable of doing certain tasks successfully and are more likely to attempt these task or activities. On the other hand those who perceive themselves as less capable are more unlikely to execute the activities. They are also said to have a low level of self-efficacy. In the context of this research paper, computer self-efficacy is the students' own perception of their ability or skill to use computers effectively. Individuals with high self-efficacy used computers more, enjoyed using them more and experiences less computer related anxiety (Cassidy & Eachus, 1998). A low self-efficacy in computer competency resulted in less involvement in computing or computer-related field, which also includes using the electronic library.

This study will be conducted in Faculty of Cognitive Sciences and Human Development (FCSHD), Universiti Malaysia Sarawak (UNIMAS). The participants of this study are second and third year Human Resource Development (HRD) undergraduates. The reason second and third year undergraduates are chosen is because they are more familiar with UNIMAS and its facilities. First year HRD undergraduates are not included as they are still new to the facilities and may not be familiar to it.

The research design used to conduct this study is quantitative approach. The total number of registered undergraduates in FCSHD is 1015 students. There are 192 second year and 142 third year HRD undergraduates in FCSHD. A total of 100 questionnaires will be distributed among the second and third year HRD undergraduates as a means to solicit feedback from the sample population.

1.2 Problem Statement

Students are increasingly expected to use electronic information resources while they are in the university (Tella et al., 2007). It is often in college and higher learning institutions that users become aware of library resources, especially its electronic resources, while having to write research papers (Waldman, 2003). However, higher learning institutions are not able to make students use the library electronic resources to its full potential even though it could help them for their academic works. Some of the students are not even aware of the existence of the facility. Therefore, it is important to find out whether students' computer self-efficacy and their perceived electronic library's ease of access are two of the factors that affect them to seek information from the electronic library.

1.3 Objectives of Study

This study will be guided by two objectives, which are to investigate:

i) The relationship between FCSHD undergraduates' level of computer self-efficacy and their electronic library usage.

ii) The influence of ease of access on FCSHD undergraduates' usage of electronic library at UNIMAS.

1.4 Research Questions

The research questions that will guide this research are:

i) Would the FCSHD undergraduates' level of computer self-efficacy affect their choice of choosing electronic resources as their source of information?

ii) Do undergraduates who perceived the electronic library as easy to access would use the electronic library more than those who perceived it as difficult ?

1.5 Research Hypotheses

The null hypotheses for this research are:

H_{0_1} There is no relationship between FCSHD undergraduates' level of computer self-efficacy with their use of library's electronic resources.

H_{0_2} There is no relationship between FCSHD undergraduates' perceived ease of access with their use of library's electronic resources.

1.6 Rationale of Study

It is important to address this issue because there is a concern about the use of library facilities, especially its electronic resources, which are believed to be underutilized by students in higher learning institutions in the United States (Waldman, 2003). In Malaysia, a similar study was conducted by Ramayah and Aafaqi (2004) regarding the role of self-efficacy in electronic library usage among students of a public university. Therefore, a similar study will be carried out in UNIMAS, concentrating on second and third year HRD undergraduates to find out whether their computer self-efficacy and perceived electronic library's ease of access relates with electronic library usage.

This study hopes to address issues related to the use of electronic library resources from the perspectives of students in higher learning institutions, and the situation will be looked into in order to reduce, or if possible, bring this problem to an end.

1.7 Conceptual Framework

Figure 1.7 Conceptual Framework of the Study

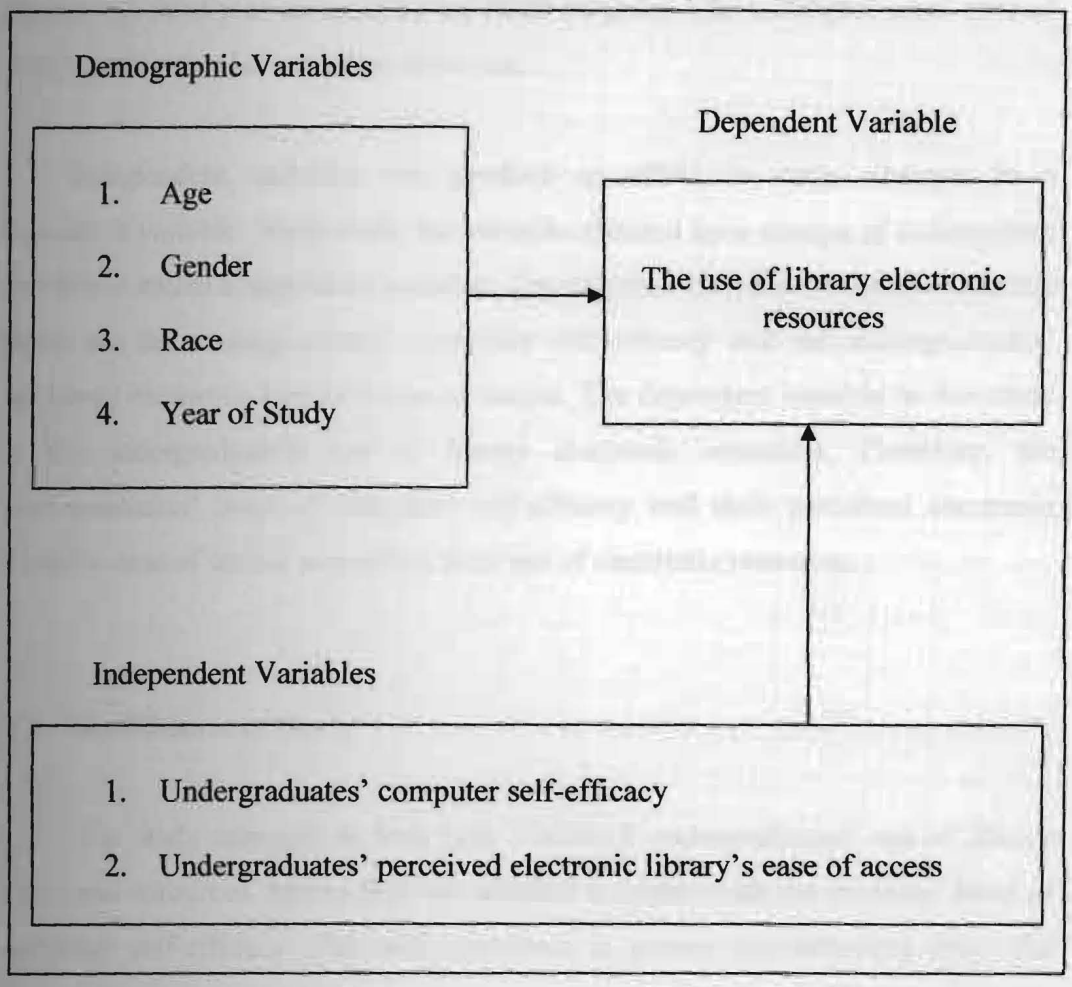

Figure 1.7 above shows the conceptual framework of the study. Students' demographic variables often yield important clues and characteristics that may contribute to undergraduates' use of electronic resources (Waldman, 2003). The demographic variables in this study are the undergraduates' age, gender, race and year of study. Age is chosen as a demographic variable because it correlates with students' comfort with computers and use of electronic resource (Waldman, 2003). The undergraduates' gender is another relevant factor in examining the use of electronic resources. Males were found to have significantly higher computer self-efficacy than females when gender differences in self-efficacy beliefs were

explored (Cassidy & Eachus, 1998). The differences in the way male and female students perceived themselves as computer competent will affect their self-efficacy, which in turn influence the use of library electronic resources. All the undergraduates are from the same faculty that is FCSHD. The undergraduates are second and third year students taking HRD program. The undergraduates' year of study could either be second or third year.

Independent variables can produce an effect or cause changes in a dependent variable. Meanwhile, the variable affected by a change of independent variable is called a dependent variable. The independent variables involved in this study are the undergraduates' computer self-efficacy and the undergraduates' perceived electronic library's ease of access. The dependent variable in this study is the undergraduate's use of library electronic resources. Therefore, the undergraduates' level of computer self-efficacy and their perceived electronic library's ease of access may affect their use of electronic resources.

1.8 Significance of Study

The study attempts to look into UNIMAS undergraduates' use of library electronic resources, and to find out whether it relates with the students' level of computer self-efficacy. This will contribute to greater understanding about the factors that encourage students to use the library electronic resources and the reason it is not used to its full potential. In this study, the reasons behind this problem will be highlighted together with its solutions. This study will also look into the undergraduates' perceived electronic library's ease of access, and to find out whether this factor contributes to the research problem. Most of the students perceived the library electronic resources as complex and not being straightforward, in contrast to an Internet search engine, which in turn could affect their choice of source to seek information (Waldman, 2003). If this occurs, recommendations can be made in order to increase the factors that will encourage

the undergraduates to use the electronic library to seek information will also be highlighted.

1.9 Limitations of Study

In the literature review, it is indicated that there are two factors that may contribute to the use of electronic library resources by the undergraduates, which are computer self-efficacy and perceived electronic library's ease of access. However, the researches in related settings suggested that there are more variables that influence the use of electronic library resources (Ramayah & Aafaqi, 2004; Waldman, 2003). In this study, the number of variables is limited to two due to the small scope of study and time constraint

In previous related studies, the sample populations are heterogeneous and more diverse in terms of the students' faculty, program and year of study (Ramayah & Aafaqi, 2004). This may differ with this study, where only the undergraduates from one faculty and program, which are the HRD undergraduates from FCSHD, UNIMAS, are chosen due to the small scope of project, and also time constraint. This makes the sample size relatively small which only involves 100 undergraduates. Future research should be made to consider a more diverse population of students, for instance by conducting the research in various faculties in UNIMAS instead of only one or increase the sample size.

Next, respondents may not express their true feelings while answering the questionnaire. This could be due to shyness or the need to be equal to others in order to look good. This is called the social desirability effect which may result in biasness of the study. However, in order to overcome this phenomenon, the respondents will be ensured about their complete anonymity when answering the questionnaire.

1.10 Conceptual and Operational Definitions of Terms

Self-Efficacy

Self efficacy can be defined as one's belief in his or her own capability to execute or carry out a certain task successfully (Bandura, 1994). Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. A high level of self-efficacy indicates that the person is confident of doing certain tasks successfully and more probably to attempt these task or activities. On the other hand, those who perceive themselves as less capable and not confident of their own abilities in performing certain tasks and are said to have a low level of self-efficacy (Bandura, 1994).

In this paper, we use the term "computer self-efficacy" which refers to self-efficacy in the context of computer competency. This can be generally defined as an individual's belief and judgement of their capabilities in using the computer to access, manipulate, evaluate, use and present information effectively. The capabilities of using the computer also includes typing skills, saving or opening data, using various applications such as the internet browser and the Microsoft Office.

Electronic Library

Electronic library is a collection of digital resources selected according to certain criteria and made accessible for retrieval over computer networks. Various types of digital information may be incorporated into the collection, including both retrospectively converted printed materials and materials that exist only in digital form, as well as a broad range of material formats, including books, journals, sound recordings, pictures and video (Leiner, 1998).

In this context of study, the electronic library refers to the collections in the Centre for Academic and Information Services (CAIS) at UNIMAS that are available digitally. Currently, there are nineteen online full-text databases in CAIS that are available for students. The online databases can be accessed by students via the local area network in UNIMAS only.

1.11 Conclusion

Since computers and technologies has become a significant part of the world today, it is important for everyone to become aware of it and embrace digital technologies in all aspects of life. Students at higher learning institutions also could adapt to new technologies by using the electronic library. Therefore, through this study it is hoped that the result would help to understand the reason electronic library is not utilized to its full potential and thus find ways to increase students' electronic library usage.