THE RELATIONSHIPS BETWEEN STUDENTS' ATTITUDES TOWARDS INFORMATION TECHNOLOGY, COMPUTER SELF-EFFICACY, SELF-ESTEEM AND THEIR ACADEMIC ACHIEVEMENTS IN KOYA UNIVERSITY

by

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Abbreviations used in this study are listed below for references:

IT	Information Technology
ICT	Information and communication technology
PPP	PowerPoint presentation
CSE	Computer self-efficacy
GCSE	General computer self-efficacy
ACSE	Advanced computer self-efficacy
SE	Self-esteem
SCT	Social Cognitive Theory
AITQ	Attitudes toward Information Technology Questionnaire
APPPQ	Attitudes toward PowerPoint presentation Questionnaire
CSEQ	Computer Self-efficacy Questionnaire
SEQ	Self-esteem Questionnaire
PCA	Principle Component Analysis

HUBUNGAN DI ANTARA SIKAP PELAJAR TERHADAP TEKNOLOGI MAKLUMAT, EFIKASI KENDIRI KOMPUTER, PENGHARGAAN KENDIRI DAN PENCAPAIAN AKADEMIK PELAJAR DI UNIVERSITI KOYA

ABSTRAK

Tujuan kajian ini dijalankan adalah untuk menyiasat faktor-faktor yang mendasari sikap pelajar terhadap teknologi maklumat dan efikasi kendiri komputer dalam kalangan pelajar, serta hubungan antara sikap pelajar terhadap teknologi maklumat, penggunaan perisian *PowerPoint* oleh pensyarah dalam kelas, efikasi kendiri komputer, dan penghargaan kendiri berbanding pencapaian akademik. Kajian ini mengguna pakai kaedah kuantitatif dengan reka bentuk kajian tinjauan. Saiz sampel telah dipilih dalam kalangan pelajar tahun kedua dan keempat, yang merangkumi 800 responden yang dipilih secara rawak menggunakan persampelan rawak berstrata daripada Universiti Koya. Soal selidik ini terdiri daripada dua bahagian. Bahagian pertama mengukur sikap terhadap Teknologi Maklumat (TM), sikap terhadap penggunaan perisian *PowerPoint*, efikasi kendiri komputer, dan penghargaan kendiri. Bahagian kedua mencatatkan maklumat demografi responden. Kadar maklum balas adalah 85.1 %. Analisis Komponen Prinsipal (PCA), Korelasi Pearson, dan ujian-t telah dijalankan untuk menjawab persoalan kajian. Analisis Komponen Prinsipal (PCA), yang digunakan ke atas soal selidik yang dibangunkan sendiri telah menghasilkan tiga faktor penyelesaian bagi sikap terhadap teknologi maklumat, dan dua faktor penyelesaian bagi efikasi kendiri komputer. Hasil ujian-t pula mendedahkan bahawa terdapat perbezaan statistik yang signifikan antara pelajar aliran Seni dan aliran Sains dari segi sikap mereka terhadap teknologi maklumat

(TM), efikasi kendiri komputer yang memihak kepada pelajar aliran Sains. Manakala aspek penghargaan kendiri memihak kepada pelajar aliran Seni, dengan pengecualian sikap terhadap penggunaan perisian *PowerPoint*, di mana tiada perbezaan statistik yang signifikan ditemukan. Dapatan daripada korelasi Pearson menunjukkan hubungan positif yang signifikan di antara sikap pelajar terhadap teknologi maklumat (TM) dan efikasi kendiri komputer serta penghargaan kendiri. Keputusan korelasi Pearson terbukti tidak menemui sebarang korelasi statistik yang signifikan antara pencapaian akademik pelajar dengan sikap terhadap teknologi maklumat (TM), penggunaan perisian *PowerPoint*, efikasi kendiri komputer serta penghargaan kendiri. Ujian-t bagi sampel bebas telah dijalankan untuk membandingkan tahap memuaskan dan tahap sederhana bagi pencapaian akademik pelajar pada skala sikap, yang mana terbukti wujudnya perbezaan statistik yang signifikan antara kedua-dua tahap ini. Pelajar yang tergolong dalam skala pencapaian tahap sederhana telah menunjukkan minat yang lebih tinggi terhadap teknologi maklumat (TM). Hasil kajian ini diharapkan dapat menambah bahan bacaan secara umum dan mengisi jurang dalam bidang ini terutama di rantau Kurdistan-Iraq. Keputusan kajian ini memberikan maklumat yang berguna dalam meningkatkan pencapaian akademik pelajar dan penggunaan teknologi maklumat dalam persekitaran Universiti Koya.

THE RELATIONSHIPS BETWEEN STUDENTS' ATTITUDES TOWARDS INFORMATION TECHNOLOGY, COMPUTER SELF-EFFICACY, SELF-ESTEEM AND THEIR ACADEMIC ACHIEVEMENT IN KOYA UNIVERSITY

ABSTRACT

The purpose of the study was to investigate factors underlying the attitude towards IT and computer self-efficacy among students, and the relationships between students' attitudes towards information technology, the use of PowerPoint by lecturers in class, computer self-efficacy, and self-esteem with their academic achievements. The study approach was carried out via a quantitative method with a survey design. The sample size was selected from the second and fourth year students, consisted of 800 respondents who were randomly selected using proportional stratified random sampling from the Koya University. The survey consists of two sections. Section one contains the respondents' demographic information. Section two discusses the attitude towards IT, attitude towards the use of PowerPoint, computer self-efficacy, and self-esteem. The response rate was 85.1 %. The Principal Component Analysis (PCA), Pearson's correlation, and t-tests were run to answer the research questions. Principal Component Analysis used for the self-developed questionnaire produced three factor solutions of attitude towards IT, and two factor solutions of computer self-efficacy. The t-test results revealed a statistically significant difference between Arts and Science students in terms of their attitude towards IT and computer self-efficacy in favor of Science students. Furthermore, self-esteem is in favor of Arts students, with the exception of attitude towards PowerPoint, where no statistically significant difference was found. The results

of Pearson's correlation showed a positive significant correlation between students' attitude towards IT and their computer self-efficacy, and self-esteem. The results of Pearson's correlation proved that there was no statistically significant correlation between students' academic achievement and their attitude towards IT, the use of PowerPoint, computer self-efficacy and self-esteem. The independent samples t-test was performed comparing the satisfactory and the medium level of students' academic achievement on the attitude scale, proving on statistically significant differences between these two levels. Students at the medium level of the achievement scale have shown higher affection towards IT. The results of this study would hopefully add to the literature in general and fill the gap in this area especially in Kurdistan region-Iraq. It provides information that can be useful in enhancing students' academic achievement and the use of IT in Koya University environment.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Students' achievement is one of the key contributing factors determining the student' success in various subjects areas (Shukakidze, 2013). As such, the academic achievement is the major aim of the field of education and the higher education systems. The educators are looking for ways of enhancing education and achieving desirable student outcomes (Eret, Gokmenoglu, & Demir, 2013). In fact, technology is pervasive, and is invading every corner of the world, albeit some areas more slowly than others. In these areas, there is an apparent disparity in the utilization of technology, primarily owing to reasons of cost or lack of services in the area (Kompf, 2005).

To illustrate, Iraq has suffered from several problems in all its aspects which increased in recent decades. The economic blockades in the nineties of the last century, looting, devastation and destruction after the former regime change in 2003, has led to a complete collapse of the country (Haidari, 2011). However, Iraq is of an underdeveloped country in the field of technology use and it might be due to the risks and high costs (Jarrah & Ashour, 2009; Muslim, 2010; Samarrai & Rais, 2006). The report on the general statistics of Internet users in the world at the Internet World State site in 2007 stated that the number of Internet users in the Middle East between 2000 to 2006 has increased by 3.3 million users. The users in United Arab Emirates was at the top rank

compared to the other Arabic countries and Iraq was at the lowest rank in internet users which was just 36000 users only, from the total population which accounted for less than 0.01% of the population (Mohammed, 2009).

On the other hand, the number of Internet users in Iraq has increased especially after the change of the former regime in April 2003, but it still represents a very low percentage, that 1.66% percent of the number of the world population, making it one of the lowest ratios in the world (Haidari, 2011; Tawel, 2005). Moreover, it is obvious that the government in the Kurdistan region has shown an interest in the use of Internet in different fields. Some of the studies and reports have indicated that the Internet users in Kurdistan region increased 15 fold between 2000 and 2006. This might be due to the better security and better environment in Kurdistan region - north of Iraq compared with the south part of Iraq (Al-Najjar, 2010; Haidari, 2011).

Lei (2010) stated that the generous investments were supported by the strongly held premise that technology can help students learn more efficiently and effectively, and as a result increases student academic achievement. The belief of connection between technology and student achievement is a theme commonly emphasized in mission statements of educational technology projects and arguments to support educational technology investment. In fact, technology becoming a more prevalent part of the education culture with each passing year (Lukow, 2005). Furthermore, the integration of technology into educational systems is obligating universities to make dramatic changes, by enhancing the quality, diversity and the availability of information (Inoue, 2007).

Nevertheless, the educational environment of today, particularly in higher education technology is still underutilized as a pedagogical tool and, in many cases remains for the most part untapped (Mcvay, Snyder, & Graetz, 2005). Moreover, there is a need for educator to understand students' attitudes toward the use of different types of technology as well as how these attitudes are related to their learning style (Jarrah & Ashour, 2009; Yusuf & Balogun, 2011). Furthermore, self-esteem build is recognized today to be a major factor in learning outcomes (Lawrence, 2000). Malbi and Reasoner, (2000) claimed that self-esteem can be widely defined as the general evaluation of oneself in either a positive or negative way. It indicates the extent to which an individual believes himself or herself to be competent and worthy of living. In addition, high self-esteem plays important role in academic achievement, social and personal responsibility (Redenbach, 1991). Nevertheless, recent studies have revealed that there is a statistically significant relationship between various uses of technology, self-esteem and academic achievement (Johnson, 2011; Ohannessian, 2009).

This study attempts to identify the attitudes toward information technology and the use of PowerPoint by the lecturers in class, computer self-efficacy, self-esteem and academic achievement among undergraduate students at Koya University. The results of this study will uncover the relationships between students' attitudes toward IT and the use of PowerPoint in class, computer self-efficacy, and self-esteem with their academic achievements.

1.1 Background of the study

Using computers and the Internet has rapidly spread into the different fields of the daily life in many countries while Iraq was so busy with wars, blockades and bad interior affairs (Muslim, 2010). Indeed, using computers and internet has its impact on all aspects of life in general, and on education in particular. Unfortunately, the system of higher education in Iraq at the current stage is suffering from underdevelopment, which is still working within the ancient rules that do not fit with the nowadays principles of contemporary education system and theories. There is a lack of the development curriculum and attempts to contribute to the process of student's creation and creativity at the universities in Iraq (Haidari, 2011; Muslim, 2010).

In addition, a study has done by Mustafa (2006) at Koya University in Kurdistan, on students' attitudes toward mobile usage. The researcher reported that about two thirds of the students reported insufficient internet experiences, which could be due to the unavailability or inadequacy of internet connections at Koya University. In fact, technology impacts students' daily lives and certainly plays an important part in developing students' positive and negative attitudes (Volk, Yip, & Lo, 2003). Most of the researches were focusing on the entrance of ICT into the educational field as a valuable chance for a more effective education system (Coetzee & Potgieter, 2010; Kiasari & Ahmadigatab, 2012). In other words, one of the most important metrics to evaluate an educational facility is its proficiency in using various IT tools to enhance its teaching and learning (Ali, 2012). Since Iraq had been isolated for a long time, Iraqi teachers have to bear new responsibilities to face new challenges. In spite of the recent

reform, university-level as well as all other educational levels still need to do so much more to improve and develop (Muslim, 2010).

For instance, a recent study conducted at the Mustansiriya University in Iraq discovered that the number of Internet users among the lecturers for the purpose of scientific research is very few. The reason might be due to the bad security situation and the blackouts that caused to prevent them from using the Internet. The study stated that, most of the lecturers have no any tendency to use the Internet to get references and the resources, as they prefer the traditional way of getting information (Mehdi & Ahmed, 2011). In fact, the lecturer's teaching style in most universities in Iraq, is by summarizing the curriculum which is often written on the whiteboard and they keep using the same lectures for several years. Unfortunately this teaching style is used very widely among lecturers at the universities (Haidari, 2011). Hence, the lecturers' perspective towards technology and their teaching style might affect students' attitudes towards learning and using technology in their learning process.

Acikalin & Yücel (2011) stated that, the quality of PowerPoint presentations depends mainly on the lecturers. They should have enough knowledge and ability to prepare PowerPoint presentations in terms of not only the physical structure but also the content. PowerPoint presentations could be turned in to typical teacher-centered instruction if instructors do not encourage student participation by either asking discussion questions or having students participate in activities. Consequently, the experiences and the lecturer's level of knowledge in using the technology means, might affect the students' attitudes towards the use of PowerPoint in class.

Praskeva, Bouta, and Papagianni (2008) manifested that, the development of technologies and their extension to every domain of our daily lives nowadays is indisputable evidence. The widespread use of computers renders training in these technologies is a necessity. While, in the Universities in Iraq, students are hesitant to use computers in learning, considering it a waste of time (Muslim, 2010). Moreover, based on the study conducted by Samarrai and Rais (2006), in the University of Diyala in Iraq, the researchers surveyed the students about the use of Internet in their daily lives, the study figured out that, not one of the students had their own email account. This hesitation in using internet and computers for the purpose of learning might related to the students' computer self-efficacy. Computer self-efficacy is the individuals' belief of their capability to use a computer. Bowers-Campbell (2008) stated that without belief in one's ability to succeed, there would be little chance for learning or achievement.

Now we live in an era of increased information flow and acceleration, which means it reviewed in the educational system so that students will be required to learn these new skills to help them adapt to these changes and reduce conflicts, frustrations and low self-esteem (Rahal, 2008). Recently, studies have been conducted on students' self-esteem and computer technology intervention. The study indicated that computer learning has positive influences on self-esteem in the following factors: intellectualism, abilities, happiness and satisfaction (Romi & Zoabi, 2003). Furthermore, applying proper techniques in class will increase learners' self-esteem (Tayebinika and Putehb, 2012).

The latest science reports based on a list of the best five hundred universities in the world, has revealed the complete absence of Arab universities (Jawad, Jassim, & MohammedAmin, 2011). This report also reveals that the academic level of Iraq

Universities is low, compared with the other universities in other countries. The factors that can impact students' success in higher education are manifold, but they are sometimes categorized as being either personal factors (age, prior experiences, and learning styles) or contextual factors (teaching and learning activities, assessment procedures) (Ilgan, 2013; Ukpong & George, 2013).

According to the previous discussion, this study brings to the attention of policy makers the importance of attitudes of the students towards information technology, and PowerPoint presentation in class, computer self-efficacy, self-esteem, and the relationship with their academic achievement.

1.2 Statement of the problem

It is obvious that the revolution of information technology has changed the face of the world and had led to the development in all fields (Ali, 2012). Recently in Iraq and the Kurdistan region there has been an increased interest in using technology in the educational field in universities and technical institutes, for the purpose of providing information to students to help them in the learning process (Hasnawi & Alsarifi, 2012). Even though the Iraq government attempts to integrate technology into the education system, still there is a lack of the convenient study environment such as, providing libraries, Internet, Computer labs and other technology means (Al-Najjar, 2010; Haidari, 2011; Hasnawi & Alsarifi, 2012; Muslim, 2010). Despite employing modern technology such as computers and Projector (LCD) in Iraq and Kurdistan Universities, it would not exceed a means to display the content of the same conventional approach, which leads to

the low level of academic achievement and in particularly in recent years (Juma & Ahmad, 2012). In addition, a preliminary study done in this current research study on 22 lecturers at Koya University, and they have been asked their perspective towards students academic achievement, 98% ninety eight percent of them believed that students' academic achievement in general is low.

Through a review of the literature, it is found that there is less attention on students' attitudes towards information technology in Kurdistan universities. This current study seeks to investigate the students' attitudes towards information technology and underlying the attitude components such, affection behavior, and cognition. The lack of computers in Iraqi classrooms has led most of the students to become unfamiliar with using them and to have low behavioral attitudes toward using computers (Muslim, 2010). Furthermore, the Ministry of Higher Education in Kurdistan region has actively encouraged lecturers to integrate technology into the curriculum especially the Microsoft PowerPoint presentation which every lecturer has required using it to improve the quality of teaching and learning process. Even though the government is trying to improve the educational program, the pedagogical and academic state of the program is not much better today than it was before. College classrooms should be provided with the Projector (LCD) as an aid for teaching the subject using PowerPoint (Fahady & Ali, 2007). As stated by Cox (2008) the challenge for educators is to utilize technology in ways that facilitate the highest level of learning outcomes.

In spite of the fact that, the lecturers in Kurdistan Universities are required to integrate the Microsoft PowerPoint Presentation in their lectures, but more improvement is still needed, because this step must be conducted based on the pre knowledge of

lecturers' attitudes towards using PowerPoint in their lecture. To illustrate further, based on the preliminary study done in this current research study many of the lecturers pointed out about a lack of experience in employing information technology in their lectures.

Hence, there is a gap found in the literature especially in using technology, in the educational field in Iraq and Kurdistan region. It shows that there is a need to look at students' attitudes towards information technology whether negatively or positively. If attitude influences the use of information technology in their daily lives or whether is it used to get information or just for entertainment. According to the previous study it was figured out that most students are using technologies just for hedonic reasons (Al-Marshood, 2009). Therefore, although many researchers around the world have studied and explored the students' attitudes' towards IT such as (Abedalaziz, Jamaluddin, & Leng, 2013; Ford, 2012; Tıngöy & Güllüoğlu, 2011; Anh, 2011; Lei, 2010; Parker, Bianchi, & Cheah, 2008), and the computer self-efficacy, such as (Uko and Ekanem, 2013; Gonzales, 2013; Hsiao, Tu, and Chung, 2012; Defreitas, 2012; İşman and Çelikli, 2009; Pantel, 2008), based on the review of previous literature there are still gaps found in conducting studies on students' attitudes towards IT and computer self-efficacy in Iraq and Kurdistan. There is a need to look at the level of students' computer self-efficacy to know their belief of their capability in using the computer tasks, which might have a relationship with their low academic achievement. As well as, it is necessary for professors during their lectures, to support and reinforce student self-esteem (Al-Tai, 2007), because the positive self-esteem is one of the building blocks of academic achievement; it provides a firm foundation for learning (Moradi Sheykhjan, Jabari, & Rajeswari, 2014).

To sum up, this study seeks to investigate the students' attitudes at Koya University with regards to the information technology and the use of PowerPoint presentation by lecturers in class. The ultimate purpose of the present study is to provide a clearer picture of the students' attitudes towards information technology and the use of PowerPoint presentation by the lecturers in class, computer self-efficacy, and self-esteem, on one hand and the relationship with their academic achievement on the other hand.

1.3 Significance of the study

The literature examined in the present study has revealed that there is less literature found on examining the relationships between students' attitude toward IT, the use of PowerPoint by lecturers in class, computer self-efficacy, self-esteem and their academic achievement especially in Kurdistan Universities.

Allport, (1968), (as cited in Ryckhman, 2008) suggested that attitude is probably the most distinctive and indispensable concept in the contemporary social psychology. Furthermore, researchers (Alobiedat & Saraierh, 2010; Shunnaq & Domi, 2010) have indicated the importance of positive attitude among lecturers and students which form a basis for good understanding. Infusing technology into the curriculum can offer valuable lessons to educators as to what is appropriate in facilitating learning.

With technology advancing at an increasing rate, it is necessary to understand how it shapes or influences the learning process. As an ever-present component in higher education pedagogy, more empirical evidence is needed to demonstrate the connections

between students' preferences for learning and the use of this technology (Kompf, 2005). The issue of students' academic achievement has become an important point (Eret et al., 2013), and it has been studied by many researchers in terms of various aspects. For example, a recent study (Lei, 2010) has indicated that the different types of technology use showed different influences on specific student outcomes. In addition, student learning outcomes when using computer application software may be affected by the learning style, regardless of the training methods (Sein & Robey, 1991).

This study contributes to a better understanding of technology usage, attitude, self-efficacy, and self-esteem among students at the Universities in Kurdistan region. Additionally, to understand the students' attitude towards the use of PowerPoint presentation by lecturers in classroom, these variables might have a relationship with students' academic achievement.

In short, the findings of this study would provide the Ministry of Higher Education in Kurdistan region with current data that will aid the ministry in making better policy decisions and applying educational strategies with a greater certainty regarding employing information technology in classrooms at the Universities.

In addition, the findings would provide information about the factors which affect students' academic achievements in order to improve the educational system in the universities of Kurdistan. Moreover, the results of this study would hopefully add to the literature and fill the gap in this area in Kurdistan region. Therefore, the results of this study would provide insights into the nature of the attitude towards IT and the use of PowerPoint in class, also the level of computer self-efficacy and self-esteem of the undergraduate students and the relationship with their academic achievements which can

explain their eventual success or failure. The confirmation of this relationship highlights the need for early intervention plans geared towards ensuring positive attitudes among the students and improving their level of computer self-efficacy, self-esteem and academic achievement.

1.4 Purpose of the Study

This study concentrated on students' attitudes at Koya University regarding information technology and the use of PowerPoint in class and to provide a clearer picture of the students' computer self-efficacy, and self-esteem, and the relationship with their academic achievements. The purpose of the current study is to determine the underlying dimensions of attitude towards information technology as well as determining the underlying dimensions of computer self-efficacy. The other purpose of the study is to determine students' attitudes toward information technology and the use of PowerPoint in class, computer self-efficacy, and self-esteem concerning the field of study (Art and Science). Finally, the study also wants to determine the relationships between students' attitude toward information technology, and the use of PowerPoint in class, computer self-efficacy, and self-esteem and to examine the relationship with their academic achievements.

1.5 Research Objectives

1- To determine the underlying dimensions of attitudes towards information technology.

2- To determine the underlying dimensions of computer self-efficacy.

3- To determine the Science and Art students' attitudes towards information technology.

4- To investigate the difference between Science and Art students' attitudes towards the use of Technology (Microsoft PowerPoint) in class.

5- To investigate the difference between Science and Art students' computer self-efficacy.

6- To investigate difference between Science and Art students' self-esteem.

7- To examine the relationships between students' attitudes towards information technology and computer self-efficacy.

8- To examine the relationships between students' attitudes towards information technology and self-esteem.

9- To examine the relationships between students' attitudes towards information technology and their academic achievement.

10- To examine the relationships between students' attitudes towards the use of Technology (Microsoft PowerPoint) in class and their academic achievement.

11- To examine the relationships between student computer self-efficacy and their academic achievement.

12- To examine the relationships between students' self-esteem and their academic achievement.

1.6 Research Questions

1- What are the underlying dimensions of attitude towards information technology?

2- What are the underlying dimensions of computer self-efficacy?

3- What are the Science and Art students' attitudes toward information technology?

3-(A) - Is there any significant difference between Science and Art students' attitudes toward information technology?

4- Is there any significant difference between Science and Art students' attitudes toward the use of technology (Microsoft PowerPoint) in class?

5- Is there any significant difference between Science and Art students' computer self-efficacy?

6- Is there any significant difference between Science and Art students' self-esteem?

7- Is there a significant relationship between students' attitude toward information technology and computer self-efficacy?

8- Is there a significant relationship between students' attitudes toward information technology and self-esteem?

9- Is there a significant relationship between students' attitudes toward information technology and their academic achievement?

10- Is there a significant relationship between students' attitudes toward the use of technology (Microsoft PowerPoint) in class and their academic achievement?

11- Is there significant relationship between student computer self-efficacy and their academic achievement?

12- Is there any significant relationship between students' self-esteem and their academic achievement?

1.7 Research Hypothesis:

From the research questions, nine null hypotheses have been developed. The Hypotheses refer to Research Questions number: (Q3 (A), Q4, Q5, Q6, Q7, Q8, Q10, Q11, and Q12).

$H_{o}1$- There is no significant difference between Science and Art students' attitudes toward Information Technology.

$H_{o}2$- There is no significant difference between Science and Art students' attitudes toward the use of Technology (Microsoft PowerPoint) in class.

$H_{o}3$- There is no significant difference between Science and Art students' computer self-efficacy.

$H_{o}4$- There is no significant difference between Science and Art students' self-esteem.

$H_{o}5$- There is no significant relationship between students' attitudes toward IT and computer self-efficacy.

$H_{o}6$- There is no significant relationship between students' attitudes toward IT and self-esteem.

$H_{o}7$- There is no significant relationship between students' attitudes toward the use of Technology (Microsoft PowerPoint) and their academic achievements.

$H_{o}8$- There is no significant relationship between students' computer self-efficacy and their academic achievements.

$H_{o}9$: There is no significant relationship between students' self-esteem and their academic achievements.

1.8 Conceptual Framework

This research attempts to determine the relationship between students' attitudes towards IT, the use of PowerPoint presentation in class, computer self-efficacy and self-esteem with their academic achievements at Koya University. Moreover, it also tries to determine the differences among undergraduate students in terms of their field of study (Science, and Art) on their attitudes towards IT and the use of PowerPoint presentation in class, computer self-efficacy, self-esteem, and the relationship with their academic achievement.

For the purpose of the current study the researcher dependent on Tri-Componential viewpoint (Allport, 1954) which is used to determine the dimensions of the students' attitude towards IT and consisting of three components (Affection, Behavior, and Cognition). Based on the tri-componential viewpoint people have positive

attitudes toward an object when their beliefs, feelings, and behaviors express favorability toward an object, whereas people have negative attitudes toward an object when their beliefs, feelings, and behaviors express unfavorability toward the object (Millon & Lerner, 2003).

The Social Cognitive Theory (Bandura, 1986), is used for the computer self-efficacy to explain whether the undergraduate students at Koya University have the necessary belief toward their capability to use computers, and to determine the level of students' general computer self-efficacy and advanced computer self-efficacy. Furthermore, Self-esteem Scale (Rosenberg, 1979) is used to determine the level of students' self-esteem whether it is high or low. The self-efficacy, and self-esteem both are concerned with the judgments of individuals (Oliver and Shapiro, 1993), Stanley and Murphy (1997) stated that self-esteem represents an attitude about one's self-worth while self-efficacy concerns with beliefs about one's abilities.

This research conceptual framework investigated the relationship between the students' attitude toward IT with the attitude toward the use of PPP in class, computer self-efficacy, and self-esteem. This research also studied the relationship of four Independent variables (attitudes towards IT, attitudes towards the use of PowerPoint presentation in class, computer self-efficacy, and self-esteem) with one dependent variable the (overall academic achievement) of students. The assumption is that attitude toward IT, attitudes towards the use of PowerPoint, computer self-efficacy, and self-esteem related to the undergraduate students' academic achievement. The field of the study (Science, Art) has taken as demographic information to know whether there are any differences among undergraduate students in terms of their field of study (Science, and

Art) on their attitudes towards IT and the use of PowerPoint presentation in class, computer self-efficacy, self-esteem, and academic achievement. Figure (1.2) will further clarify the conceptual framework.

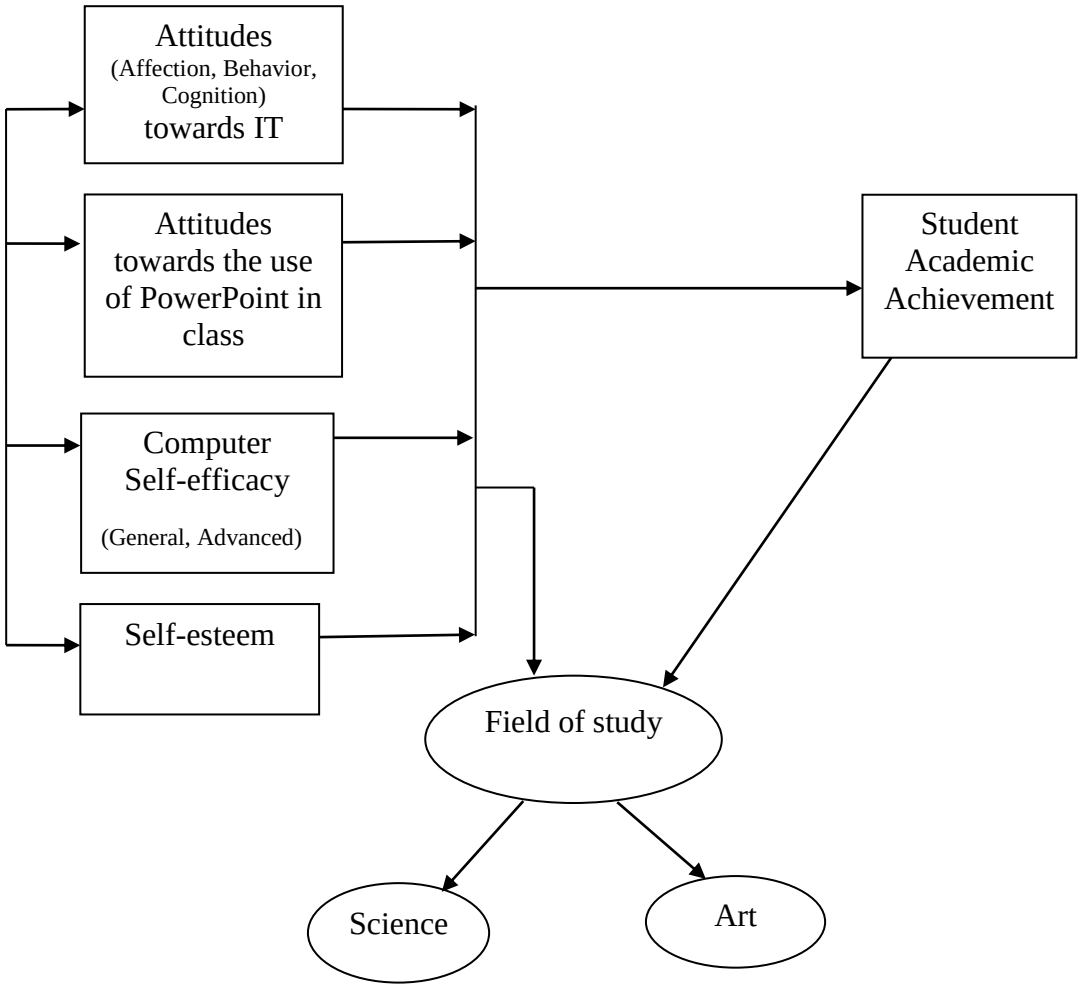

Figure 1.1 Conceptual framework

1.9 Definition of terms & Operational

The purpose of this section is to define and clarify terms used in this study and the operational definitions shown here are the meanings specific to this research.

Attitude:

Allport (1954) defined attitudes as a learned predisposition to think, feel and behave toward a person (or object) in a particular way.

Attitude in this study refers to the students' feelings, beliefs, and behaviors towards any computer technology, Internet, web-based resources that can be used by students.

Information technology (IT) refers to the use of computer (hardware and/or software) to process, store, transmit, and retrieve information (Cox, 2013).

Information Technology in the context of this study is used as a general term referring to any computer technology, Internet, web-based resources that can be used by undergraduate students at Koya University in the school year 2013-2014.

Attitudes towards Information technology (IT): Defined as the degree of evaluative affect that an individual associates with using the target system in his or her job (Davis, 1993).

Attitudes towards Information technology (IT): in the context of this study refers to students' attitudes (Affection, Behavior, and Cognition) towards information technology, which is going to be measured through a questionnaire at Koya University in the school year 2013-2014.

PowerPoint presentation is a software program used to present slides from a computer projected onto a larger screen and talk about each slide (Mayer, 2001).

PowerPoint presentation in this study is a software program that the lecturers use to present their lectures in a classroom at Koya University in Kurdistan-Iraq in the school year 2013-2014.

Attitude toward the use of PowerPoint presentation in class: refers to the students' attitudes towards the use of PowerPoint presentation by lecturers in a classroom, which is going to be measured through a questionnaire at Koya University in the school year 2013-2014.

Self-efficacy: People's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance (Bandura, 1986).

Computer self-efficacy commonly refers to individuals' judgment of their knowledge and capabilities to use computers in diverse situations (Bandura, 1986; Compeau & Higgins, 1995). People having a high level of computer self-efficacy are more likely to use computers where people with lower level of computer self-efficacy are less likely to use computers (Compeau & Higgins, 1995).

Computer self-efficacy refers to the students' level of general, and advanced computer self-efficacy skills, which are going to be measured through a questionnaire at Koya University in the school year 2013-2014.

Self-Esteem: Morris Rosenberg (1965) defined it as "a positive or negative orientation toward oneself; an overall evaluation of one's worth or value."

Self-esteem in this study refers to the student's high or low self-esteem which are going to be measured through a Rosenberg's self-esteem scale, at Koya University in the school year 2013-2014.

Academic achievement in this study refers to the overall academic achievement (Grades and levels) of students' in second and fourth stages, which includes (40-49, Fail; ; 50-59, Satisfactory; 60-69, Medium; 70-79, Good; 80-89, Very Good; and 90-99, Excellent) that students got from the all materials in the last year of their study exams at Koya University.

1.10 Conclusion

This study is conducting to uncover whether there is a relationship between the students' attitudes toward IT, the use of PowerPoint by the lecturers in class, computer self-efficacy, and self-esteem with their academic achievement. There are gaps found in the literature especially in using technology, in the educational field in Iraq and Kurdistan region. It shows that there is a need to look at students' attitudes toward information technology whether negatively or positively. If attitude influences the use of information technology in their daily lives or whether is it used to get information or just for entertainment.

In addition, there is a need to look at the level of students' computer self-efficacy to know their belief of their capabilities in using the computer tasks, as well as students' self-esteem which might have a relationship with their academic achievement. As it was obvious based on the preliminary study 98% ninety eight of the lecturers state at Koya University, revealed that d students' academic achievement in general, is very low.

However, the results of this study would provide insights into the nature of the attitude towards IT and the use of PowerPoint in class, also the level of computer self-efficacy and self-esteem of the undergraduate students and the relationship with their academic achievements which can explain their eventual success or failure.

1.11 Summary

This chapter provided an overview of the issues related to students' attitudes toward information technology and the use of PowerPoint in class computer self-efficacy, self-esteem and the relationships with their academic achievement. The study purpose and the research questions were derived from the problem of the study. The chapter also provided the significance of the study which related to the current situation in Iraq and Kurdistan region as well as the conceptual framework. Finally, the definitions of terms are written based on the literature.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter examined the literature concerned. The first section discussed the importance of information technology in general, and the integration of IT in education, as well as the students' attitudes towards IT and their academic achievements. The second section discussed using PowerPoint presentation in class, students' attitudes toward PowerPoint presentation and the relationship with their academic achievements. The third section dealt with the computer self-efficacy in general, and students' computer self-efficacy and attitude towards IT, as well as students' computer self-efficacy and their academic achievement. The fourth section gave information on students' self-esteem and attitudes toward IT and the relationship with their academic achievements. The last section consisted of theoretical framework regarding (a) attitude (b) self-efficacy, and(c) self-esteem.

2.1 Information Technology (IT)

Information technologies, more specifically computers, entered our lives just a few decades ago. However, they quickly become necessary components of our daily activities, from personal communications and entertainment to shopping and studying

(Gümüş, 2013). Information technology (IT) refers to the hardware and software used in computerized information systems and has been a major force in shaping the current society (Bawaneh, 2011; Safdar et al., 2012). Moreover, information technology refers to personal electronic devices such as laptops and handheld computers, smart phones, and associated devices including the Internet and web-based applications (Alfahad, 2012).

Besides, Tıngöy and Güllüoğlu (2011) claimed that IT is a combination of all technologies that include accumulation, storage and processing of data and the connection of data through cables which makes communication possible for a user. Information technology is a concept used for communication and computer systems connected to all information services.

Ford (2012) stated that, early technology applications focused on procedural knowledge or basic skills, such as understanding rules and symbols of IT, while, the new conceptually focused programs enabled students to examine data patterns and control variables, and thus, perhaps coincidentally, enabled students to handle ambiguity in Science questioning. Nowadays, Information and Communication Technology provides many facilities for change, prediction and also new perspectives for developments. There are other opportunities that are developed by Information and Communication Technology (Kiasari & Ahmadigatab, 2012).

In context, IT has a vast impact on almost every niche in higher education institutions, including research productivity, student experience, educational performance, campus-wide learning systems, and faculty experience (Mohseni, 2012).