

**AN ANALYSIS OF THE EFFECTS OF STUDENTS' LITERACY SELF-EFFICACY PRACTICES ON THE SCHOLARLY INFORMATION MANAGEMENT AMONG POSTGRADUATE STUDENTS**

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**ABSTRACT**

There has been a rapid growth of information and consequently the ability of students to be information literate has also become critical as it is needed for their scholarly information management. However, postgraduate students in Kiambu County universities struggle with scholarly information management and take too long to complete their thesis or scholarly works. This study investigated the effects of students' literacy self-efficacy practices on the scholarly information management. The study adopted information management theory and information literacy theory since the two theories state that information literacy practices influence scholarly information management. A mixed methodology with concurrent triangulation design was used to conduct the study. It allowed the researcher to collect and analyze qualitative and quantitative data concurrently. Generalization was made based on findings from the collected data. The target population was the public and private university personnel and postgraduate students which comprised of 2,651 individuals. The target population included 10 librarians, 11 supervisors, and 2,451 postgraduate students. The study participants were selected through purposive and simple random procedures. The sample population included 245 postgraduate students from four selected universities 10 library staff and 11 supervisors from the selected universities. Data was collected using self-administered questionnaires for students and interview schedules for the supervisors. Piloting of the instruments was done among postgraduate students in University of Nairobi to ensure certainty of instruments and the retest method helped estimate a reliability of ( $r=0.70$ ). To ensure validity of the research instruments, the researcher constantly sought guidance from the supervisors. The researcher also ensured dependability of instruments by involving different categories of respondents and credibility of research instruments through various procedures such, as administering of questionnaires and conducting interviews. In order to achieve the objective of the study, both qualitative and quantitative data were gathered and analyzed to generate descriptive, inferential and qualitative statistics. Quantitative data collected was analyzed using SPSS version 21 while thematic analysis was used to analyze qualitative data. The analyzed quantitative data was presented using Tables. Qualitative data were presented thematically using themes generated from the study objectives. The study findings indicated that postgraduate students' literacy self-efficacy practices had positive effect on the students' scholarly information management (SIM). The researcher recommends Special attention to be accorded to self-efficacy practices related to postgraduate learners SIM since most of them struggle with such issues leading to negative effects on their SIM. Of great concern is computer competence which is very instrumental in dissertation development and writing, which

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unfortunately lacks among the older generation. Basic computer research skill need to be taught if at all information literacy self-efficacy is to be improved.

**Keyword:** self-efficacy practices, postgraduate, scholarly information management

## **INTRODUCTION**

### **Background of the study**

Information literacy is a requisite for persons undertaking scholarly work. Emphasis on the users to acknowledge the sources of the information access for scholarly work is a key benchmark guiding scholarly information management (Aubry, 2013). This assures the integrity of scholarly work and capacity to have it serve its essence for posterity. It acknowledges the scholars contribution to the body of knowledge and gives impetus for greater contributions by way of carrying out further works.

In the United States of America, the electronic repositories in the institutions of higher learning have been networked. This is geared towards fostering good linkages and ensuring that the students readily access information (Savoy, 2013). Asian countries like Taiwan, Thailand and Pakistan have strived to ensure that students carrying out postgraduate programs access electronic online libraries. Emphasis is placed on the need to have academic works by the students who have graduated, published and availed to contemporaries still carrying out their studies (Vivek, 2012). This has positively impacted on the ability of the continuing students to have access to research materials and facilitate them in terms of enhancing their positions in the fields of academia.

In Africa, even after the putting in place of a platform for use by scholars to publish journals which have open access online for African countries, few countries have embraced the program (Ezema, 2013). An evaluation of the works published on the online platform shows that only twenty six countries have had their scholars participating. Presence of journals by scholars from Nigeria and South Africa on the platform is profound. This denotes low capacity in the African states as regards embracing electronic resources for scholarly information management.

Monitoring and evaluation of the electronic resources available in academic institutions in Kenya showed a deplorable state of affairs. Many universities did not have functioning electronic information resources. Instances of high student populations outstripping the supply of the availed resources were equally cited. This exposed the students to highly constrained facilities and failure to have optimum access of the required scholarly information (Ratanya, 2013). It inhibited the capacity to effectively carry out research and accomplish the essence of post graduate programs which is contributing to the body of knowledge in the disciplines students are undertaking studies.

It is against this background, that the study sought to find out the effectiveness of the information literacy practices on scholarly information management among post graduate students in Kenya.

### **Statement of the problem**

In the area of study, the knowledge of how effective information literacy practices are on scholarly information management among postgraduate students is currently shallowly documented. The essence of post graduate education dissertation development is to generate and

contribute to the body of knowledge in the field of study that the student is undertaking. Another aim is to produce scholars capable of appropriately managing information gathered from other sources and used in their work without claiming such information as their own.

A myriad of factors contribute to the prevailing situation. Constraints in accessing information for research purposes have been cited by many students. This is despite the presence of enormous content online and most of it being availed freely (Kiilu, 2013).

It denotes poor information literacy practices on the part of the students as a factor impeding their faster graduating and the quality of graduates. The study sought to identify how specific aspects of IL practices were influencing plagiarism and or scholarly information management such as paraphrasing other authors' works, in-text citations and providing detailed list of references among postgraduate students in Kiambu County private and public universities. Similarly, though information literacy practices is considered important at postgraduate level of education especially for national development (Kenya National Bureau of Statistics, 2007), no study addressing IL in relations to scholarly information management among postgraduate students in Kiambu County existed prior to the current study. This therefore, begged the question as to how postgraduate students' information literacy practices in Kiambu County are affecting their scholarly information management while developing their thesis. The researcher recognized the prevailing situation and sought to conduct an empirical study on the effectiveness of the information literacy practices on scholarly information management among postgraduate students in Kiambu County.

### **Research objective**

To establish how students' literacy self-efficacy practices affect the scholarly information management among postgraduate students.

### **Research objective**

There is no relationship between students' literacy self-efficacy and scholarly information management among postgraduate students.

### **Significance of the study.**

The growth of the postgraduate education programs has been profound. The demands and requirements for undertaking research occasioned to the postgraduate students is a requisite for the programs. Undertaking research calls for adept report writing practices and retrieval of scholarly works which have to be managed prudently. This calls for concerted efforts on the part of the students and the institutions offering the academic programs to ensure management of scholarly information for the integrity of the academic programs. The study may thus be of great value to the students undertaking postgraduate programs and the institutions offering them. Different shades of policy guide and govern the administration of the higher education sector. The need to have a policy framework in place regulating the management and exploitation of scholarly works cannot be underscored. The study may thus play a significant role in influencing policy formulation as regards the management and administration of postgraduate academic programs with a bias for scholarly works management.

The evolving patterns of electronic repositories, online libraries, blogs and allied virtual resources are the in-thing as regards scholarly information management. The study may shed

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light on the prevailing patterns of exploiting the electronic information repositories and the challenges associated with them. It may thus be of great benefit to the electronic information management sector with regard to provision of information on evolving trends and current best practices. Scholarly information management.

## **LITERATURE REVIEW**

### **Information Literacy Practices**

Information literacy practices among learners entails information seeking behaviours, information referencing practices, information self-efficacy practices, and academic information uses as well as information retrieval practices. The work of Kuhlthau (2004) on information literacy within school context has been the most influential. This study outlined a number of research projects carried out from the 1980s onwards. Kuhlthau's studies broke new ground in information literacy research in the school assignment, with a focus on the task the students faced, but also on thoughts, feelings, actions, strategies and mood. Alexandersson and Limberg (2003) found out that students' information seeking practices often focused on gathering facts rather than on deep learning. Limberg et al. (2008) argued for focusing more on learning goals and meaningful learning for students rather than the more common information-skills approach.

### **Scholarly Information Management**

Information literacy is arguably an important practice required by students to have a solid grounding in information problem solving which is the application of information literacy practice (Partnership for 21<sup>st</sup> century skills, 2009)

### **Students' Literacy Self-efficacy practices and Scholarly Information Management**

Self-efficacy is a concept that has been widely studied by academicians in relation to students' academic achievement. It has been said that self-efficacy and use of electronic information, jointly predict and contribute significantly to the academic performance of students (Adeyinka Tella, Ayeni, & Omoba, 2007). Through various information literacy standards such as ALA, 1989; SCONUL, 1999; ACRL, 2000 individuals who have completed certain levels of education are expected to have a high level of information literacy skills. In other words, individuals with higher education levels are expected to have better information literacy practice levels. Students' information literacy self-efficacy practices involve IT competence, information presentation analysis and interpretation competence.

According to the criteria from the Southern Association of Colleges and Schools (SACS) (2000), libraries and learning resource centers should provide point-of-use instruction, personal assistance in conducting library research, and traditional reference services. This should be consistent with the goal of helping students (information users) to develop information literacy practices which, by itself improves their self-efficacy (Ureigho, Oroke & Ekruyota 2006; Osunade, Phillips & Ojo, 2007 and Popoola, 2008). There is evidence that frequent e-resource use for information retrieval is associated with increased publication production by academics with respect to both quality and quantity (Brown, Found, & McConnell, 2007; Research Information Network, 2009, 2011).

According to Idiodi (2005), information literacy practice acquisition is an aspect of information

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literacy and may be seen as the process of gaining the skills that assist the development of information literacy in an individual such as computer competence. Information literacy implies the intellectual capabilities involved in using information as distinct from the technical know-how required for using information technologies that hold or deliver data. Hargittai (2002), in his study of online skills, defines skill as the ability to complete a task and the amount of time spent in achieving it. Students with low information literacy practices can use a lot of time retrieving information due to obstacles they may encounter when seeking information. Gui, (2007) observed that to retrieve information in the open web, not only formal information practices are needed, but also, substantial information practices. Therefore, only a student who is self-efficacious is capable of accessing and using information appropriately.

According to Pezeshki-Rad and Zamani, (2005), the real challenge of our time is not producing information or storing information, but getting people to gain and use information resources. To gain access and use these vast resources effectively, information users must learn to overcome information anxiety in order to explore the available information for them to interpret and utilize the information for rational decision-making. The authors further argue that analyzing, interpreting and presenting information for use in any environment is an essential skill users of information resources should possess if they are to be relevant. On the other hand, Pavey (2003) found that while both university academic staff and their students have good levels of communication and IT practices, workers are more confident than the students in this area.

Research by Oliver and Towers, (2000) also found a disparity between university and students' access to and level of practices in using ICTs. According to Stern, (2003) a large number of students never consider the quality or the reliability of information gathered due to their lack of or possession of poor ideas. Embi, (2007) observes that the development of computer self-efficacy can be related to anxiety, where by the lack of knowledge about computers can create a psychological fear, hence dampening the development of confidence. Davis (1989) cited by Embi, (2007) studied 152 computer users and found that perceived technology usefulness was positively associated with use and intention to use technology.

Compeau and Higgins, (1995) in Embi, (2007) revealed a relationship between self-efficacy and learning to use computers and software. The study showed that the beliefs about capabilities to use technology successfully were strongly related to decisions about whether and how much to use technology. A survey of 406 microcomputer users in Finland according to Igarria and Iivari (1995) also cited by Embi, (2007) revealed that self-efficacy was positively correlated with perceived ease of use, perceived usefulness, and usage, but negatively correlated with computer anxiety.

The researchers argued that individuals with a high self-efficacy would interact with computers and be less anxious than a person with a low self-efficacy. They further note that if individuals believe they will have problems using a computer then they will avoid them due to this fear. Zhang and Espinoza, (1998) also in Embi, (2007) stated that computer-related self-efficacy influences a person's attitudes, perceptions, and beliefs about technology.

In educational settings, researchers reveal that self-efficacy has repeatedly been used to show its influence on students' academic success (Edman & Brazil, 2007; Carroll, et al., 2009. Ferla, Valcke & Cai, 2009). Bandura (1995) indicated that there are three aspects of self-efficacy that contribute to academic development were Students' self-efficacy about self-regulation learning and master academic subjects, Teachers' self-efficacy about their ability to motivate and promote

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students' learning and Faculty's collective efficacy about that their school can promote significant academic progress. Other studies have also focused on the influence of self-efficacy on academic success.

Self-regulatory efficacy refers to one's belief in his/her capability of managing academic demands. Low self-regulatory efficacy may produce academic anxiety and, as a consequence lead to low learning motivation. Many studies proved the decisive influence of self-regulatory efficacy on academic achievement in various educational levels (Caprara et al., 2008; Klassen, Krawchuk, & Rajani, 2008; Yusuf, 2011). For instance, Caprara et al. (2008) in Italy showed that the lower the decline in self-regulatory efficacy, the higher were students' high school grades, the greater was the likelihood of their retention in high school. Carroll et al. (2009) also found similar results among Australian high school students. Klassen, Krawchuk, and Rajani, (2008) colleagues reached a similar conclusion among college students as their study showed that self-regulatory efficacy was the most predictive variable of lower procrastination tendencies among other self-variables.

Chen and Lin (2002), on the other hand, observed that within e-learning environments individual characteristics of students become even more prominent and may affect their success directly. Sacchanand (2002), however, notes that e-students should be self-directed, have a background of independent studying and having control over their learning. To be successful with e-learning processes, students should learn how to learn, be an information literate person, use appropriate learning strategies and keep their motivation high in learning processes (Kelly, Coburn, Hegarty, Jeffrey & Penman, 2009).

Linnenbrink and Pintrich (2002) pointed out that adaptive self-efficacy beliefs can function as enablers of academic success because they enable students to plan and carry out the necessary behaviors to achieve specific learning goals. Students with high self-efficacy are likely to employ adaptive self-regulatory learning strategies and study skills (Downing, 2009). Learner perceptions of personal efficacy, therefore, have a reciprocal relationship with the self-regulatory processes that affect motivation and performance. A high sense of self-regulatory efficacy enhances task performance efficacy, which in turn motivates further self-regulation in pursuit of further academic attainment. Other authors argue that if students have confidence in their ability to successfully engage in particular autonomous learning activities that will result in outcomes which they value then, it is probable that self-efficacy in independent learning will precede such learning (Ponton, Derrick, Carr, & Hall, 2004; Hoskins, & Fredriksson, 2008; Shuy, 2010; Zumbunn, Tadlock, & Roberts, 2011).

## **RESEARCH METHODOLOGY**

The study utilized the mixed methodology that involved both qualitative and quantitative data collection and analysis. For this study, quantitative research design was useful in seeking empirical support for research questions while qualitative research design helped in emphasizing the importance of looking at variables in the natural setting in which they were found. Through this approach, researcher collected and analyzed not only numerical data, which is customary for quantitative research, but also narrative data, which is the norm for qualitative research in order to address the stated research objective (Creswell, 2003).

### **Research Design**

Concurrent triangulation research design was used to conduct this study. This was because this design allowed the researcher to use more than one design to confirm, cross-validate, or corroborate findings within the study. Therefore both survey and case study designs were used. Surveys were used to collect quantitative data while case studies were used to collect qualitative data. Concurrent triangulation also allowed the researcher to collect both qualitative and quantitative data concurrently (Creswell, 2003)

## Research findings

### Literacy Self-Efficacy Practices

Data from the postgraduate students on their literacy self-efficacy practices are as presented in Table 1 below.

**Table 1: Postgraduate students' self-efficacy practices that affect scholarly information management**

|   | <b>f</b>   | <b>%</b>     |
|---|------------|--------------|
| Information anxiety                                     | 78         | 31.8         |
| Access to scholarly information management facilitators | 45         | 18.4         |
| Ability to use information and technology               | 92         | <b>37.6</b>  |
| Knowledge of scholarly information management           | 30         | 12.2         |
| <b>Total</b>  | <b>245</b> | <b>100.0</b> |

Data from the students presented in Table 1 above indicates that ability to use information technology was the biggest self-efficacy practice affecting postgraduate students' scholarly information management as a majority of 37.6% f=92 indicated. This was followed by 31.8% f=78 who mentioned information anxiety, 18.4% f=45 mentioned access to scholarly information management facilitators while 12.2% f=30 mentioned knowledge of scholarly information management (Table 1). Therefore, in Kiambu County universities, self-efficacy practices with the most influence on scholarly information management are computer use competence and information anxiety while information search and use have the least effect. Gui, (2007) observed that to retrieve information in the open web, not only formal information practices are needed but substantial information practices. Therefore, only a student who is self-efficacious is capable of accessing and using information appropriately.

Interviews carried out on the extent to which information self-efficacy practices had affected postgraduate students' scholarly information management indicated that most of the supervisors stated that;

*"I believe that information anxiety among postgraduate learners in this school has greatly had*

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*negative effect on scholarly information management among the students' while writing their thesis" (Supervisors, 2017)*

According to Pezeshki-Rad and Zamani, (2005), the real challenge of our time is not producing information or storing information, but getting people to gain and use information resources. To gain access and use these vast resources effectively, information users must learn to overcome information anxiety in order to explore the available information to enable them to interpret and utilize the information for rational decision-making. The authors further argue that analyzing, interpreting and presenting information for use in any environment is an essential skill users of information resources should possess if they are to be relevant.

### **Postgraduate perception of how self-efficacy practices affect scholarly information management**

Data was collected on the extent to which postgraduate learners perceive self-efficacy practices influence their scholarly information management. Report from the postgraduate learners is presented in Table 2.

**Table 2: Extent to which postgraduate students' self-efficacy issues affect scholarly information management**

|                             | <b>F</b>   | <b>%</b>     |
|-----------------------------|------------|--------------|
| To a very high extent       | 99         | 40.4         |
| To a high extent            | 118        | <b>48.2</b>  |
| To a moderate extent        | 20         | 8.2          |
| They do not have any effect | 8          | 3.3          |
| <b>Total</b>                | <b>245</b> | <b>100.0</b> |

Information from postgraduate students as presented in Table 2 show that their self-efficacy practices, normally affect scholarly information management to a high extent as a majority of 48.2%, f=118 indicated, 40.4%, f=99 indicated that it affected scholarly information management to a very high extent, 8.2% f=20 mentioned that it affected to a moderate extent while 3.3% f=8 observed that it had no effect on scholarly information management among them. From the study results, it is generally clear that student' self-efficacy practices mainly influence scholarly information management to a great extent. Data obtained therefore reveal that literacy self-efficacy practices among postgraduate learners could affect scholarly information management among the learners to a high extent during the process of dissertation and or thesis development in Kiambu County universities.

Most of the responses from the interviews were similar in that most of the supervisors echoed the same sentiments that;

*"I believe that information anxiety among postgraduate learners in this school has greatly had negative effect on scholarly information management among the students' while writing their thesis" (Supervisors, 2017).*

Compeau and Higgins, (1995) in Embi, (2007) discovered a relationship between self-efficacy



and learning to use computers and software. The study showed that the beliefs about capabilities to use technology successfully were strongly related to decisions about whether and how much to use technology. Though similar to the current study findings to some extent, the result of the current research differs significantly from those of the stated studies as even though they acknowledge the influence of anxiety on computer use, they did not go further to relate anxiety with scholarly information management among the studied participants.

**Aspects of scholarly information management greatly affected by postgraduate students’ self-efficacy**

Table 3: Aspects of scholarly information management greatly affected by postgraduate students’ self-efficacy

|                    | <b>f</b>   | <b>%</b>     |
|--------------------|------------|--------------|
| In-text citations  | 88         | 35.9         |
| Referencing        | 111        | <b>45.3</b>  |
| Referencing styles | 24         | 9.8          |
| Paraphrasing       | 16         | 6.5          |
| Editing            | 6          | 2.4          |
| <b>Total</b>       | <b>245</b> | <b>100.0</b> |

The results show that referencing was the main aspect of scholarly information management normally affected by students’ self-efficacy as a majority of 45.3% f=111 indicated, 35.9% f=88 indicated that in-text citations was affected, 9.8% f=24 mentioned referencing styles, 6.5% f=16 mentioned paraphrasing while 2.4% f=6 mentioned that editing was the main aspect of scholarly information management normally affected by learners self-efficacy. Therefore, literacy self-efficacy among postgraduate learners in Kiambu County mainly affect in-text citations and referencing while editing is the least affected by the practices.

According to the supervisors statements on aspects of scholarly information management greatly affected by students’ information self-efficacy practices;

Six stated that;

*“Referencing and in-text citations are the major scholarly information practices among postgraduate students in this university affected by their self-efficacy issues” (Supervisors, 2017)*

**Postgraduate students’ attitudes on the effects of self-efficacy practices on scholarly information management**

Table 4: Postgraduate students’ attitudes on the effects of self-efficacy practices on scholarly information management

| <b>Statement</b>   | <b>SA</b>   | <b>A</b>    | <b>N</b>  | <b>D</b> | <b>SD</b> | <b>Mean</b> |
|--|-------------|-------------|-----------|----------|-----------|-------------|
| Postgraduate students’ knowledge of how to browse for relevant materials influences scholarly information management in their work | 177 (72.2%) | 54 (22.0%)  | 12 (4.9%) | 2 (0.8%) | -         | 1.34        |
| Postgraduate students’ knowledge of the best information search engines  | 102 (41.6%) | 133 (54.3%) | 8 (3.3%)  | 2 (0.8%) | -         | 1.63        |

|  |                |                |               |               |               |      |
|--|----------------|----------------|---------------|---------------|---------------|------|
| influences scholarly information management in their work  |                |                |               |               |               |      |
| Postgraduate students' higher levels of computer literacy influences scholarly information management in their work                            | 141<br>(57.6%) | 70<br>(28.6%)  | 34<br>(13.9%) | -             | -             | 1.56 |
| Postgraduate students' efficiency in using computer packages influences scholarly information management in their work                         | 93<br>(38.0%)  | 132<br>(53.9%) | 20<br>(8.2%)  | -             | -             | 1.70 |
| Postgraduate students' level of training in computer use influences scholarly information management in their work                             | 93<br>(38.0%)  | 114<br>(46.5%) | 32<br>(13.1%) | 6<br>(2.4%)   | -             | 1.80 |
| Postgraduate students' frequency of library catalogue use influences scholarly information management in their work                            | 57<br>(23.3%)  | 80<br>(32.7%)  | 45<br>(18.4%) | 23<br>(9.4%)  | 40<br>(16.3%) | 2.63 |
| Postgraduate students' ability to identify relevant materials from the internet influences scholarly information management in their work      | 130<br>(53.1%) | 87<br>(35.5%)  | 24<br>(9.8%)  | 4<br>(1.6%)   | -             | 1.60 |
| Knowledge of how to handle accessed information influences scholarly information management in their work                                      | 117<br>(47.8%) | 120<br>(49.0%) | 2<br>(0.8%)   | 6<br>(2.4%)   | -             | 1.58 |
| Postgraduate students' belief in their competence in accessing and using information influences scholarly information management in their work | 84<br>(34.3%)  | 105<br>(42.9%) | 44<br>(18.0%) | 12<br>(4.9%)  | -             | 1.93 |
| Postgraduate students' belief in their competence in accessing and using information influences scholarly information management in their work | 84<br>(34.3%)  | 105<br>(42.9%) | 44<br>(18.0%) | 12<br>(4.9%)  | -             | 1.93 |
| Postgraduate students' ability to manually search for information influences scholarly information management in their work                    | 72<br>(29.4%)  | 153<br>(62.4%) | 14<br>(5.7%)  | 6<br>(2.4%)   | -             | 1.81 |
| Postgraduate students' ability to organize information gathered through search engines influences  | 87<br>(35.5%)  | 108<br>(44.1%) | 16<br>(6.5%)  | 32<br>(13.1%) | 2<br>(0.8%)   | 2.00 |

|   |                |                |               |              |             |      |
|---|----------------|----------------|---------------|--------------|-------------|------|
| scholarly information management in their work  |                |                |               |              |             |      |
| Postgraduate students' ability to retrieve scholarly articles influences scholarly information management in their work           | 78<br>(31.8%)  | 135<br>(55.1%) | 28<br>(11.4%) | 2<br>(0.8%)  | 2<br>(0.8%) | 1.84 |
| Postgraduate students' ability to use retrieved articles professionally influences scholarly information management in their work | 75<br>(30.6%)  | 140<br>(57.1%) | 24<br>(9.8%)  | 6<br>(2.4%)  | -           | 1.84 |
| Postgraduate students' years of academic writing influences scholarly information management in their work                        | 147<br>(60.0%) | 54<br>(22.0%)  | 30<br>(12.2%) | 14<br>(5.7%) | -           | 1.64 |
| Postgraduate students' course taken influences scholarly information management in their work                                     | 53<br>(21.6%)  | 162<br>(66.1%) | 16<br>(6.5%)  | 14<br>(5.7%) | -           | 1.96 |
| Knowledge of how to handle accessed information influences scholarly information management in their work                         | 96<br>(39.2%)  | 125<br>(51.0%) | 10<br>(4.1%)  | 12<br>(4.9%) | 2<br>(0.8%) | 1.77 |

**KEY**

1= Strongly Agree, 2= Agree, 3= Neither Agree nor Disagree, 4= Disagree, 5= Strongly Disagree

Results presented in Table 4 above reveals that a majority of 72.2% n=177 with a mean of 1.34 strongly agreed that postgraduate students' knowledge of how to browse for relevant materials influences scholarly information management in their work, a majority of 54.3% n=133 and a mean of 1.63 agreed that postgraduate students' knowledge of the best information search engines influences scholarly information management in their work. Majority of 57.6% n=141 with a mean of 1.56 strongly agreed that postgraduate students' higher levels of computer literacy influences scholarly information management in their work, a majority of 53.9% n=132 and a mean of 1.70 agreed that postgraduate students' efficiency in using computer packages influences scholarly information management in their work, a majority of 46.5% n=114 with a mean of 1.80 agreed that postgraduate students' level of training in computer use influences scholarly information management in their work.

A majority 32.7% n=80 and with a mean of 2.63 agreed that postgraduate students' frequency of library catalogue use influences scholarly information management in their work, 53.1% n=130 and a mean of 1.60 strongly agreed that postgraduate students' ability to identify relevant materials from the internet influences scholarly information management in their work, 49% n=120 and a mean of 1.58 agreed that knowledge of how to handle accessed information influences scholarly information management in their work, 42.9% n=105 with a mean of 1.93 agreed with the statement that postgraduate students' belief in their competence in accessing and using information influences scholarly information management in their work, 62.4% n=153

with a mean of 1.81 agreed that postgraduate students’ ability to manually search for information influences scholarly information management in their work,

The report further shows that, 44.1% n=108 had a mean of 2.00 agreeing that postgraduate students’ ability to organize information gathered through search engines influences scholarly information management in their work, 55.1% n=135 with a mean of 1.84, agreed that postgraduate students’ ability to retrieve scholarly articles influences scholarly information management in their work, 57.1% n=140 and a mean of 1.84 agreed that postgraduate students’ ability to use retrieved articles professionally influences scholarly information management in their work, 60% n=147 with a mean of 1.64 strongly agreed that postgraduate students’ years of academic writing influences scholarly information management in their work, 66.1% n=162 and a mean of 1.96 agreed that postgraduate students course taken influences scholarly information management in their work and lastly a majority of postgraduate students 51% n=125 and a mean of 1.77 agreed that knowledge of how to handle accessed information influences scholarly information management in their work.

In a separate study, it was established that self-efficacy and use of electronic information jointly predict and contribute significantly to the academic performance of students (Adeyinka et al., 2007).

**ANOVA test on postgraduate students’ Self-efficacy attitude based on SIM**

**Table 5: ANOVA test on postgraduate students’ Self-efficacy attitude based on SIM**

|                | <b>Sum of Squares</b> | <b>df</b>  | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b> |
|----------------|-----------------------|------------|--------------------|----------|-------------|
| Between Groups | 2352.106              | 3          | 784.035            | 150.309  | .000        |
| Within Groups  | 1257.094              | 241        | 5.216              |          |             |
| <b>Total</b>   | <b>3609.200</b>       | <b>244</b> |                    |          |             |

The study revealed significant differences on the mean attitude based on the different scholarly information management practices ( $p < 0.001$ ;  $df = 3$ ;  $F = 784.035$ ). This indicates that self-efficacy attitude is also a significant predictor of scholarly information management practices in support; Caprara et al. (2008) in Italy showed that students’ information self-efficacy influences scholarly information management hence supporting the current study results.

**Chi-Square Tests on the relationship between postgraduate students’ self-efficacy and their scholarly information management.**

**Table 5: Chi-Square Tests on the relationship between postgraduate students’ self-efficacy and their scholarly information management.**

|                    | <b>Value</b>         | <b>df</b> | <b>Asymp. Sig. (2-sided)</b> |
|--------------------|----------------------|-----------|------------------------------|
| Pearson Chi-Square | 152.613 <sup>a</sup> | 9         | .000                         |
| Likelihood Ratio   | 131.076              | 9         | .000                         |

|                              |            |   |      |
|------------------------------|------------|---|------|
| Linear-by-Linear Association | 43.658     | 1 | .000 |
| <b>N</b>                     | <b>245</b> |   |      |

The presented data above, reveals that there exists a statistically significant association between the students information literacy self-efficacy and their scholarly information management ( $\chi^2=131.076$ ;  $df=9$ ;  $p<0.001$ ). Therefore, since significant association have been found between students' literacy self-efficacy practices such as reading understanding then paraphrasing other authors' words, providing used references, using appropriate search engines and methods to gather secondary data and scholarly information management such as providing a detailed reference list, in-text referencing and paraphrasing the null hypothesis that stated that there is no relationship between postgraduate students' information literacy self-efficacy and scholarly information management was therefore rejected.

### **CONCLUSIONS AND RECOMMENDATIONS**

The findings of the study revealed that ability to use information technology was the biggest self-efficacy practice affecting postgraduate students' scholarly information management. This was followed by information anxiety, then access to scholarly information management facilitators and lastly knowledge of scholarly information management.

Data gathered on the extent to which postgraduate students' information self-efficacy practices affect their scholarly information management revealed that these practices affected scholarly information to a high extent as the students mentioned. Their results were supported by those from the librarians and supervisors. The main aspect of postgraduate learners' scholarly information management that was found to be affected by the students' information self-efficacy was referencing, followed by in-text citation, referencing style, paraphrasing and editing.

The researcher recommends Special attention need to be given to self-efficacy practices related to postgraduate learners SIM as some of them struggle with these matters leading to negative effects on their SIM within the universities. For instance computer competence is very important in dissertation writing, but the older generations lack this competency or have lower levels of computer use competence hence supplementary training on such issues is necessary if information literacy self-efficacy is to be improved.

### **REFERENCES**

- Chen, N. and Lin, K. (2002). *Factors affecting e-learning for achievement. IEEE International Conference on Advanced Learning Technologies*, September 9-12. [Verified 24 Mar 2015]. <http://lutf.ieee.org.pdf>
- Creswell, J., (2009). *Research Design; Qualitative and Quantitative and Mixed Methods Approaches*. London: Sage.

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- Dadzie P. (2005). *Electronic Resources: access and usage at Ashesi University College*. Campuswide Information Systems 22(5) Available at: <http://www.emeraldinsight.com>. Accessed on 3/3/2015
- Embi R. (2007). *Computer anxiety and computer self-efficacy among accounting educators at Universiti Teknologi Mara (UiTM), Malaysia*. Dissertation submitted to the Faculty of the Virginia Polytechnic Institute and State University. Blacksburg, Virginia
- Idiodi, E. (2005). *Approaches to information literacy acquisition in Nigeria*. Library Review 4:223-230
- Kumar, G., and Kumar, B. (2008). *Use of electronic information sources by the academic community: A comparative study, 6th International CALIBER-2008, University of Allahabad, Allahabad*. 684-692.
- Okello-Obura, C. and Magara, E. (2008). *Electronic information access and utilization by Makerere University in Uganda* [online]. Available at: <http://creativecommons.org>.
- Omotayo, B. (2010). *Access, use, and attitudes of academics toward electronic journals: A case study of Obafemi Awolowo University, Ile Ife*. Library Philosophy and Practice.
- Ozoemem, A. (2009). *Use of Electronic Resources by Postgraduate Students of the Department of Library and Information Science of Delta State University, Abraka, Nigeria*. Library Philosophy and Practice, 11(2), 1-23.
- Rehman, S., and Ramzy, V. (2004). *Awareness and use of electronic information resources at the Health Science Center of Kuwait University*. Library Review, 53(3)