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THE INTERRELATIONSHIP AMONG THE INTERNET SELF-EFFICACY, KNOWLEDGE ON PERCEIVED USEFULNESS OF THE INTERNET AS AN ACADEMIC RESOURCE TOOL AMONG UNIVERSITY STUDENTS' IN KENYA

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THE INTERRELATIONSHIP AMONG THE COMPONENTS OF STUDENTS' INTERNET INSIGHT AS AN ACADEMIC RESOURCE TOOL IN KENYAN UNIVERSITIES

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Abstract

Purpose: The aim of this paper was to determine the interrelationship among the components of students' internet insight as an academic resource tool in universities based in Kenya.

Methodology: The study was conducted in Moi University and Daystar University. The study was based on the Social learning theory by Bandura focusing on internet self-efficacy and supplemented by Technology acceptance model by Davies. Quantitative research approach was undertaken. An ex post facto research survey design was adopted. The researcher used a representative sample of 435 (Moi University) and 175 (Daystar University)adding up to 610 Third year student teachers of the academic year 2015/2016 drawn from School of Education in the two universities. Stratified sampling was used to categorize students by gender from each stratum; participants were chosen randomly. Questionnaires were used as instruments of data collection. Content validity was established by use of expert judgment in the school of education. Test re-test method was applied to check if the instruments that collected data were reliable. Descriptive and inferential statistics were applied to analyze data. In descriptive statistics data frequencies, percentages and mean was used. Analysis of variance (ANOVA), Chi square and Post hoc tests were used to test the hypotheses.

Results: The findings indicated that more participants concurred with almost all accounts on internet knowledge, self-efficacy, perceived internet usefulness and perceived internet ease of use.

Unique contribution to theory, practice and policy: The results of the paper are useful in designing educational programs in Kenyan institutions of higher learning and also, present a platform to close the gap of knowledge in digital divide field which is used later in technology acceptance studies.

Keywords: Internet Insight, Academic Resource Tool, Kenyan Universities



1.0 INTRODUCTION

For a time, universities have been known as a hub for knowledge and learning. Universities are main harbors when it comes to skill resources. They are known to take part in technology advancements, data transfer, research and analysis. They are frequently the most effective performing institutions in their countries. Therefore, they need to create easy ways of accessing the updated information at a fair price. The ICT has transformed the library from the traditional slow process of oral communications or hard copy paper materials into electronic functions, such as electronic inter-library loan, sorting, electronic acquisition and so forth (Shaikh, 2014). The internet use is relatively a new way of assessing information in institutions of higher learning. The use of internet as an academic resource tool depends on many factors among them internet experience, internet knowledge, internet self-efficacy, alleged usefulness and ease of using the internet.

Self-efficacy is a person's belief in his/her ability to perform a set assignment (Bandura, 1997). Its focus is not on the ability or skills one has, but the decisions a person makes guided by those skills; that is, the perceived self-efficacy in internet which aid in acquiring knowledge and skills development (Bandura, 1986, 1997). Internet self- efficacy is where one has confidence that he can perform given an online platform. Internet self-efficacy does not focus on measuring internet knowledge but on the individuals' belief bearing in mind they possess some internet knowledge. For example, the internet skills that enables the students to retrieve file, journals or even books to get academic information. According to Potosky (2002) there is direct relationship between internet self- efficacy and knowledge: the more knowledge you possess about the internet the higher the internet self-efficacy beliefs. Potosky also showed that prior knowledge of computers boost internet post-training. The present study looked at other factors that influence the use of internet as an academic resource tool and identify the interrelationship between not only internet knowledge and selfefficacy but also find out if other factors like internet experience and alleged usefulness and ease of using the internet have any influence on the internet usage as academic resource tool in a developing country like Kenya.

Problem Statement

The role of internet as an academic resource tool in the event of internet usage and acceptance has not been received by many. Internet knowledge is what people are conversant with about internet. Potosky (2007) defined internet knowledge as a set of features that improve over time involving internet. Knowledge serves as a supplement to technology acceptance model.

All Kenyan universities have the internet as a resource tool, with the assumption that students have the search skills to utilize the internet for assignments, communicating with lecturers, complete course projects, academic group discussions to update knowledge and supplement lecture notes among others. Most Public and Private Universities in Kenya provide basic computer lessons. These basic computer lessons are provided in first and second years during their undergraduate courses. Most undergraduates cannot competently operate programs on the net thus forced to learn on the job through trial and error. On the contrary, the students have challenges such as phobias concerning using internet, management of internet files, programs and even handling on-line software among others. These challenges are critical in the Kenyan context because many have not embraced the role of knowledge in internet



acceptance. Internet self-efficacy reveals individuals believe on what they can do bearing in mind they have some internet knowledge (Potosky, 2007).

Cleary, past papers show that almost all university students use the internet in Kenya but only few use it for academic work. Kwanya (2005) established that majority of the students in Kenya never visited the website for studies especially the undergraduates. Adenuga and Ayodele (2012) concurred with Kwanya because in their study; participants used the internet for social network. In their study, 3488 (87.7%) participants accessed the internet through mobile phones, 357 (9.0%) used desktop computers and 15 (0.4%) used other means. Thus it was necessary to carry out a study to find out factors that influenced the internet usage such as internet experience, internet knowledge, internet self-efficacy, alleged usefulness and ease of internet usage as an academic resource tool and also investigate if there is any disparity in the use of internet knowledge in private and public universities.

There is an urgency of more research for the development of internet knowledge, to a point where it can be declared valid as a construct and can be used to evaluate the effects on internet acceptance (Potosky, 2007). Potosky was mainly interested in the influence of the internet skills and competence in accepting the internet. However, there is need to look at other determinants that affect the acceptance of the internet as an academic resource tool such as internet experience, internet knowledge, internet self-efficacy, perceived usefulness and ease of using the internet. Kenya being a developing country the level of technological development, advancements and the number of students that use the internet differ a lot with the already developed countries.

Today internet is easily accessed by almost everybody. Although, it is clear who the proficient and amateurs users are, the amateurs still face some challenges. The internet has the capacity to impact on the aspects of people's lives. However, if these people are not able to control that capacity then the impact is not felt (Cassidy & Eachus, 2002). This inability may be caused by lack of required skills/abilities or poor incentives as far as internet self-efficacy expectations are concerned. It is against this background that the current study was envisaged.

The advancements achieved in internet knowledge makes it possible to link technology and quality education, a link that has not been thoroughly exploited. The research is useful for future studies of technology in education. Therefore, there is need for scholars to empirically determine the role of internet knowledge in advancing quality education. The starting point is to investigate the university education students' internet experience, internet knowledge, internet self-efficacy and their perceived usefulness and ease of internet usage using the internet as an academic resource tool in Kenyan based universities.

To examine the students' interrelationship among the components of internet insight used as an academic resource tool in universities that are based in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

Social Learning Theory (SLT)

Bandura (1997) identified the four sources of self-confidence as follows namely: direct experience, vicarious experience, verbal persuasion and affective arousal. Direct Experience is the most important source of self-confidence is through doing a task first hand. Experience



instills a sense of high self-confidence in an individual such that the person can successfully attempt a similar activity in future. Such individuals tend to rate themselves highly on internet self-efficacy scales. For instance, a teacher who has once used a particular method of a lesson presentation will score higher than one who has never used that method when asked to indicate their level of competence at using that method. Thus, the student teachers who use the internet can get more internet knowledge and become better teachers.

Vicarious Experience is the second important source of self-confidence. It refers to the kind of learning that takes place through observing another person's performance on a given task. The observer does not directly share in the activity. This is how children learn by observing the behavior of adults. Role models are known to strengthen what is learned vicariously as they serve as the norm. Vicarious learning, as opposed to direct experience, which is active learning, involves passive learning.

Verbal Persuasion is a case in which an individual learns to do something through listening to those who have gone through the experience or through verbal encouragement from peers, friends and relatives. Mere praise when a learner attempts doing something new can build that individuals learning self-confidence than one who is not encouraged. This source serves to create interest in an activity as well as increasing ones' self-confidence through positive thinking, which is believed to increase internal motivation level. If student teachers are made to apply the internet as an academic resource tool it can improve their academic performance and increase their self-confidence in the use of internet. Consequently, they can later encourage the learners in the use of the same facility later in their career life.

Affective Arousal is an important reference of internet self-efficacy in which the emotional appeal of an individual's self-confidence is raised through emotional arousal. The use of a model for instance can make a tool to be associated with prestige, thus making potential users identify its use with high social status. Those who identify with such a person become aroused and as a result their confidence at doing similar tasks is increased.

The literature of educational change may be used for tracing potential factors. Some of the factors include the quality, clarity and innovations usefulness, content materials, motivation and leadership; staff build up; and a set avenue for assessment and report giving. The university administration determines the climate and direction of internet and stimulates encouragement or discouragement of internet users at the university.

The decision to start lecturing in depth usage of the internet can be taken by the university administration, as well as the department or individual lecturers. The role of policy makers can be crucial as a proclamation of new aims for education and encouragement from above. The decision concerning internet knowledge in educational institutions can determine a great deal whether the implementation of the internet in education was successful or not. The success is determined by the internet experience, internet knowledge, internet self-efficacy of the student teachers and their perceived usefulness and as a learning resource tool.

Technology Acceptance Model (TAM)

Davis (1989) came up with TAM, which was developed from reasoned action theory (Ajzen & Fishbein, 1980). TAM is a model that relates to technology acceptance and use. The model explains user acceptance of technology based on user perception (Davis, 1989). TAM makes it possible to trace how external variables impact perception, belief and willingness to



continue using technology. The model is theoretical and useful in explaining and predicting the behaviour of the user in information technology (Legris, Ingham & Collerette, 2003).

This model shows the causal relationships take one direction, with the environment influencing perceptive beliefs and in turn alter the behavior. The Model posits that self-efficacy determines a person's willingness to use technologies. Whereas we define ease of use as the extent one goes in believing that he can use a given system without assistance, ease of use is an individual's believe that if he uses a particular system then the job output will be great (Davis, 1989). Self-efficacy measures the output expectancy while ease of use is a measure of the whole process.

Ease of use is suggested to influence the willingness of the user to use; using either a direct effect or indirect effect through self-efficacy. The model has been proven valid severally through previous studies across a wide variety of corporate information technology systems (Venkatesh, 1999; Venkatesh & Davis, 1996). Using technology acceptance model, students' internet self-efficacy determines their perceived usefulness of the internet as an academic resource tool and their internet experience in turn determines their internet knowledge, the more internet skills the university students have the more they are likely to utilize the internet for academic purposes.

Empirical Review

Self-efficacy theory is developed from psychology. Its theoretical framework explains the human behavior changes using different types of treatment (Bandura, 1977, in Kuo, 2010). Internet self-efficacy is the efficacy anticipations. These anticipations reflects on a person's persuasion towards their behavior to achieve a certain goal and the input people are willing to give and the degree to which they can forbear in case there is an obstacle. Efficacy anticipations are different from outcome expectations in which the anticipations of certain behaviors differ. Even though individuals believe a given behavior will yield a given outcome they might lack the courage to carry out the action.

In the field of education, internet self-efficacy has served as a means of investigating academic performance. It is termed as academic internet self-efficacy, which reflects on the surety an individual has when it comes to their performance in academics. Students' insights derived from internet self-efficacy in the class setting boost their results, such as assignment choice and resilience, acquirement of skills and academic performance. (Hodges,2008, in Kuo,2010). Generally, there is a possibility that students possessing higher internet self-efficacy for completing an assignment have a higher motivation, make extra efforts, and persist longer compared to those with lower internet self-efficacy. The sense of internet self-efficacy in a student is raised up every time his performance goes up. Whereby, a realization is made that the higher the internet self-efficacy the better the results. The opposite of this is also true, that is, low internet self-efficacy give rise to inferior results, and as result the sense of internet self-efficacy in a student for assignments goes down (Bandura, 1977, in Kuo, 2010).

Advancements have been made on internet self-efficacy. This has made internet self-efficacy a major reference in the field of social perceptive. It is an important psychological construct in understanding the reason why people choose to follow particular activities and the effort they allot to these. Bandura (1977) defines internet self-efficacy as informed decisions that people make guided by their abilities to perform given tasks. It should be noted that internet



self-efficacy is not about the quantity or quality of skills one possess, but, it is one's belief on what he can do with those skills.

According to Schunk, Pintrich and Meece (2008) defined internet self-efficacy as individual's abilities to learn and execute tasks in given levels. Internet self-efficacy impacts active choice, mental effort and persistence which are indices of motivation. Bandura (1986) reveals that use of triadic reciprocity brings about the best understanding of behavior. Behavior, cognition and environment exist in a mutual relationship, whereby, they are influenced and determined greatly by each other.

Internet self-efficacy is known to be one's beliefs about their potential to accurately undertake a certain task or behavior. The perceived measures of internet self-efficacy levels are past experience (success and failure), observation (observing others strengths and weaknesses), verbal influence (from colleagues, relatives) and disturbing state (emotional arousal, e.g. angry). These levels have been proved to be related to one's input, resilience, motivation level and the choice of task. Internet self-efficacy was focused on a person's perception's regarding certain behaviors. The construct should point out the particular situation or domain (Cassidy & Eachus, 2002).

A study done by Peng, Tsai and Wu (2006) on university students' internet self-efficacy and their attitudes towards the internet in the Institute of Education, National Chiao Tung University, Taiwan used questionnaires to demonstrate the relationship between university students views, attitudes and self-efficacy about the internet. The results showed positive attitudes and adequate Internet self-efficacy and that the students took the Internet more as a functional tool or functional technology. Universities are not left out as far as gender differences are concerned among university students, where the male students had more positive Internet attitudes than the female students. Students who perceived the internet as an entertainment toy showed more positive attitudes and communicative internet self-efficacy than students who use the internet as a functional technology. In addition to those mentioned, there are many other useful studies which investigated the effects of internet and electronic resources on university students' internet self-efficacy and performance that came up with contradicting findings (Wainer et al, 2008; Mohammed and Al-Karaki, 2008). This necessitates the present study which is to analyze the education students' internet selfefficacy and their perceived usefulness of the internet knowledge as an academic resource tool.

Peng, Tsai and Wu's study used 1417 university students (979 undergraduate students and 438 graduate students) with deferent internet experiences. The students came from four recognized universities in Taiwan and divided into 915 male students (64.57%) and 502 female students (35.43%). On the basis of Tsai's (2004) study, a self-response questionnaire was administered to participants: perceptions of the Internet survey (PIS), to get the participant's views about the Internet. The participants showed their agreement or disagreement with these roles through on a six- point Likert scale ('strongly disagree', 'disagree', 'somewhat disagree', 'somewhat agree', 'agree' and 'strongly agree'). The four roles were *Internet as technology, Internet as tool, Internet as toy and Internet as tour* (Tsai, 2004). This study suggested further studies to be made on the analysis of leaners from various grade levels and of the leaners' Internet perceptions. This suggestion made for consideration in future research endeavors was taken up by the study done by Peng, Tsai and Wu in 2006 by researching on university students' internet self-efficacy and internet attitude where 979



undergraduates and 438 graduate students participated in the study to investigate the significant differences.

A general oversight of students' Internet perception can be provided by use of quantitative instrument. This concurs with previous suggestions by researchers; scholars in epistemological beliefs (Hofer & Pintrich, 1997; Duell & Schommer-Aikins, 2001; Schommer-Aikins, 2002; Wood & Kardash, 2002; cited in Peng, Tsai and Wu, 2006), other approaches can be used to get a clear picture of students' perceptions. They include; observation or interviews. This is evidence of scholarly work done by the three researchers Peng, Tsai and Wu (2006). For they suggested a triangulation type of research which is also known as a mixed research that includes both quantitative and qualitative type of research design that leaves no unanswered questions.

Internet self-efficacy is a belief that one has in organizing and performing actions to achieve set outcome (Eastin & LaRose, 2000, p.1). Previous internet understanding is positively related to internet self-efficacy (Eastin & LaRose, 2000, in Kuo, 2010). Males are generally found to have higher internet skills compared to females. Training should be considered to improve learners' internet self-efficacy. This training should mostly be embedded on students who have higher and low attitudes towards computers (Torkzadeh et al., 2006; Torkzadeh & Van Dyke, 2002, in Kuo, 2010).

Students may either have high or low internet self-efficacy. The students with higher self efficacy have better searching skills and learn better compared to their counterparts (Tsai & Tsai, 2003). Studies that have been done to determine the relationship between internet self-efficacy and student performance are mixed. More studies will be helpful to ascertain the correlation between internet self-efficacy and student's contentment in using the internet knowledge as academic resource tool. The internet knowledge can be used for assignments, supplement lecture notes and complete course project; therefore, there is need for students to acquire more internet skills.

3.0 RESEARCH METHODOLOGY

The study adopted quantitative research method which reflects post positivist philosophical assumptions. The study employed a causal comparative design. The target population was education students in Kenyan Universities. The accessible population consisted of 2015/2016 third year education students in Moi University in Uasin Gishu County and Daystar University in Nairobi County. Moi University has a population of 5686 education students; of this 5486 are taking education courses while 200 take education technology (Kenya National Bureau of standards, 2014). In Daystar University, 4237students are registered. Students taking education courses are 580. Moi University had a population of 1450 second year education students as per 2014/2015 academic year. This academic group was third year students in the academic year 2015/2016 from which 435 students was selected. In Daystar University, 580 students were taking education from which 175 students were selected. This made a sample size of 610 education students. The students were requested to respond to the questionnaire. Stratified random sampling was applied to choose participants of the study. Collection of data was done using questionnaires for the students. The collected data was first scored and coded appropriately for statistical analysis by the computer using Statistical Packages for Social Sciences (SPSS). Descriptive statistical techniques; namely; means, standard deviations and frequencies were employed in the analysis of data. The Pearson



Product Moment correlation and Analysis of variance (ANOVA) are the inferential statistics that were used in the analysis. Chi square test was used to test for the association between the internet experience and the internet knowledge, the perceived ease of use and perceived usefulness and internet self-efficacy. The proportion of the male and the female students with internet experience was also tested using the chi square.

4.0 RESULTS AND DISCUSSIONS

4.1.1 Response rate

The Table 1 below reflects the response rate of the study.

Table 1: Response Rate

Response	Total	Percent
Returned	478	78.3%
Unreturned	132	21.6%
Total	610	100%

The number of questionnaires that were filled and returned was 478 while the unreturned questionnaires were 132. It shows that the total number of questionnaires administered was 610. Therefore, there was a successful response rate of 78.4%. Mugenda and Mugenda (2003) state that, if the response rate is 50% or more then we term it as adequate. Babbie (2004) also posits that if the return rates are 50% then they can be analyzed and published, a response rate of 60% is good and 70% is very good.

4.1.2 Gender of the respondents

The study sought to establish the gender of the respondents. The results are as indicated in Figure 2.

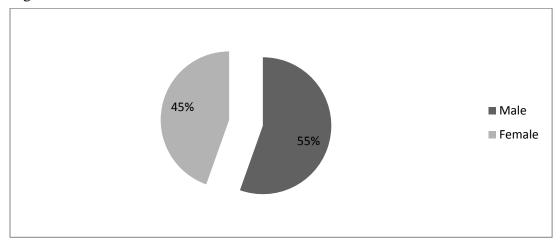


Figure 1: Gender of respondents

The study findings indicated that majority, 265 (55%), of the respondents were male while 213(45%) were female. This implies that more male students study education than female.

4.1.3 Type of University

The study showed the type of University from which the respondents were from. The results are as indicated in Figure 2.



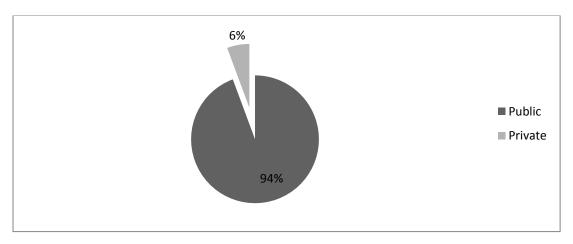


Figure 2: Type of University

The Findings indicated that majority, 451 (94%), of the respondents were from public universities while only 27(6%) were from private universities.

4.1.4 Internet experience

The study established the number of years which the participants have been using the internet for their academic work. The results are as indicated in Figure 3.

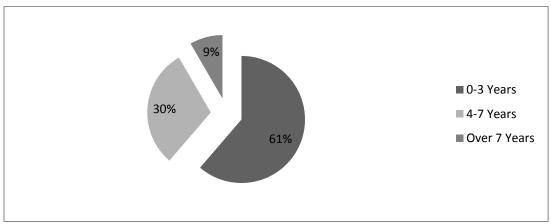


Figure 3: Internet experience

The findings indicated that majority, 293 (61%), of the respondents had less than 3 years' experience of using internet, 145 (30%) had between 4 to 7 years' experience of using internet while only 40 (9%) had over 7 years' experience of using the internet.

4.1.5 Cluster subjects

The study sought to establish the cluster subjects of the respondents. The results are as indicated in Figure 4.



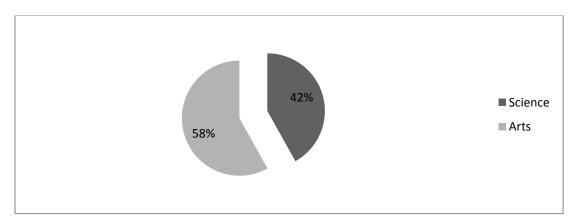


Figure 4: Cluster subjects of the respondents

The study findings indicated that majority, 276 (58%), of the respondents were arts students while 199 (42%) were science students. The implication is that more students are studying arts than sciences

4.2 Descriptive Statistics

4.2.1 Internet Knowledge

The study sought to determine the education students' internet knowledge as a learning tool in certain universities in Kenya. The respondents were requested to indicate their agreement with statements regarding internet knowledge. The results are as highlighted in Table 2.

Table 2: Descriptive analysis of Internet Knowledge

		Standard
Statement	Mean	Deviation
1. Definition of a computer virus	4.38	0.79
2. Preventing a computer virus	3.90	1.10
3. Downloading and saving of information	4.33	0.86
4. Use of search engine to locate info. On a given topic	4.01	1.06
5.Difficulties in electronic file transfer	3.18	1.38
6.Subscribing and participating in online mailing	3.74	1.15
7. Use of electronic bulletin boards	3.47	1.20
8. Definition of a client server	3.60	1.19
9. Configuration of a client server	3.33	1.18
10. Academic website subscription &download of material	3.97	1.12
11. The working of Uniform Resource Locater(URL)	3.46	1.26
12. Difficulty in file attachment to an e-mail message	3.11	1.41
13. Composing & sending an e-mail message	4.10	1.15
14. Utilizing online forum for academic purposes	3.72	1.23
15. Need for information validity from internet	3.87	1.14
16. Differentiating consumer information, scholarly and propaganda	3.65	1.20
17. Difficulty in website evaluation in terms of information validity	3.46	1.23
18. Electronic file transfer	3.22	1.36
19. Downloading and saving information from internet	4.14	0.99
20. Difficulty in Author identification of expertise in publication	3.41	1.35
Total	3.70	1.16

The study findings indicated that a mean score of 4.38 indicate that the respondents agreed that they know what a computer virus is, a mean score of 3.90 implies that the respondents agreed that they know how to prevent a computer virus, a mean score of 4.33 implies that the



respondents agreed that they know how to download and save information, a mean score of 4.01 implies that the respondents agreed that they can use search engines to locate information on a given topic and a mean score of 3.74 indicated that they know how to subscribe and participate in online mailing lists and a mean score of 3.60 revealed that respondents know what a client server is. Furthermore, a mean score of 3.97 indicated that respondents know how to configure a client server while a mean score of 4.10 indicated that majority of the respondents have difficulty attaching a file to an e-mail message.

On whether the respondents could compose and send an e-mail message, a mean score of 3.72 indicated that they could. A mean score of 3.87 indicated that the respondents know how to utilize the online forum for academic purposes and they also understand the need to validate all information they locate on the internet as indicated by a mean score of 3.65. The respondents also indicated that they know how to download and save information for academic use on the internet as indicated by a mean score of 4.14.

The overall mean score of 3.70 implies that participants agreed on most statements given about internet knowledge. The standard deviation of 1.16 indicates that the variation in the responses on internet knowledge was small among the respondents.

4.2.2 Internet Self efficacy

The study sought to determine the education students' internet self-efficacy as an academic resource tool in Kenyan based universities. The respondents were requested to indicate their agreement with statements regarding internet self-efficacy. The results are as indicated in Table 3.

Table 3: Descriptive analysis of Internet self-efficacy

		Standard
Statement	Mean	Deviation
1. Finding information on internet	4.20	0.96
2. Solving practical problems on internet	3.96	1.03
3. Academic e-conference with other students	3.78	1.20
4. Doing assignment using internet	4.20	0.96
5. Using network equipment	4.04	0.95
6. Doing work without consultation	3.54	1.27
7. Doing academic assignment not being a challenge	3.84	1.10
8. Understanding of scholarly information	3.78	1.09
9. Flexibility of internet with scholarly work	4.05	1.02
10. Worthiness of internet for academic search	4.10	0.94
11. Management of difficult problems	3.87	1.01
12. Internet is the way for a solution	3.95	1.05
13.Ease to stick to aims an achievement of goals	3.75	1.13
14. Dealing with unexpected events	3.66	1.10
15. Handling unforeseen situations with net availability	3.65	1.10
16. Solving problems with the investment of effort in use of internet	3.91	0.98
17. Finding solutions on net when confronted with an		
academic problem	4.12	0.86
18. Ease to turn to internet for a solution	3.96	1.04
19. Handling unexpected with internet	3.77	1.15
20. Preparation of lessons with internet	3.71	1.22
Total	3.89	1.06



From the study findings, a mean score of 4.20 indicated that the respondents feel confident in using the internet to find needed information for their studies while on the other hand, a mean score of 3.96 reveals that respondents feel confident in using the internet to solve practical problems in my course work. The study findings also indicated that respondents feel confident in using the internet to have academic e-conference with other students in different learning institutions, feel confident in using the internet to do their course work assignment, feel confident in using network equipment, can complete their studies using the internet without contact with their lecturers and feel with the internet, doing academic assignments is not a challenge as indicated by mean scores of 3.78, 4.20, 4.04, 3.54 and 3.84. The findings also revealed that the respondents feel the scholarly information they get on the net is clear and understandable, the internet is flexible to interact with for scholarly work, it is worthwhile to use the internet for academic search, they can always manage to solve difficult problems if a try using the internet, if someone opposes them, they can find means and ways to get what they want using the internet, it is easy for me to stick to my aims and accomplish my goals with the internet and they are sure to efficiently solve any unseemly events on the internet. This is indicated by mean scores of 3.78, 4.05, 4.10, 3.87, 3.95 and 3.75 respectively.

The respondents also agreed that thanks to their inventiveness, they know how to handle unanticipated events with availability of the internet, they can handle most challenges if they invest the necessary effort in the use of internet, if confronted with an academic problem, they usually find several solutions with the use of internet and that they have confidence to use internet while preparing for their lessons as indicated by mean scores above 3.50.

The overall mean score of 3.89 implies that majority of the respondents were agreeing on most of the statements concerning internet self-efficacy. Furthermore, a standard deviation of 1.06 indicates that there was a small variation in the responses on internet self-efficacy.

4.2.3 Internet perceived usefulness

The study further sought to determine the education students' internet perceived usefulness as an academic resource tool in selected universities in Kenya. The respondents were requested to indicate their agreement with statements regarding internet perceived usefulness. The results are as indicated in Table 4.



Table 4: Descriptive analysis of Internet perceived usefulness

Statement	Mean	Standard Deviation
	4.20	0.85
1.Accomplishment of academic resource		
2.Improvement of academic performance	4.32	3.04
3.Improvement in competence for job satisfaction	4.03	0.96
4.Effectiveness of internet in my future job	3.94	0.97
5.Ease to work on assignment	4.16	0.78
6.Career training	4.10	2.47
7.Making learning more interesting	4.04	0.92
8.Dissemination of information	3.98	0.99
9.Making career training more enjoyable	3.86	0.96
10. Worthiness of internet in learning institutions	4.12	0.88
11.Reference for research as advised by lecturer	3.88	1.10
12.Improving the quality of education	4.16	0.82
13. Obtaining academic information	4.16	0.90
14.Making academic e-conferences	3.89	1.12
15.Browsing for academic materials any time	4.22	0.86
16.Browsing for learning resource relevant to my		
course	3.97	0.96
17.Research to complete project work	3.99	0.94
18.Ease of phone to access academic websites	4.20	0.97
19. Subscription to academic websites for materials	4.01	0.99
20.Relevance of information to course in short time	4.04	1.05
Total	4.06	1.13

The study findings indicated that a mean score of 4.20 revealed that the respondents agreed that using internet would enable them to accomplish academic resource more quickly while a mean score of 4.32, 4.03, 3.94, 4.16, 4.10, 4.04 and 3.98 indicate that respondents agreed that using the internet would improve their academic performance, improve their competence for job satisfaction after their study, enhance their effectiveness in their future job, make it easier to work on their assignment, they find the internet useful in career training, internet makes learning more interesting and they use internet to disseminate information to others.

Furthermore, the respondents agreed that they find use of internet for career training enjoyable, the use of internet in learning institutions is worthwhile, their lecturers advise them to refer to the internet for their research, believe that the internet can improve the quality of education, they can make use of the internet to obtain academic information, they make use of the internet for academic conferences and they can browse for academic materials at any time of the day or night. This is as indicated by mean scores of 3.86, 4.12, 3.88, 4.16, 4.16 and 3.89.



4.4.4 Perceived ease of internet use

The study further sought to determine the education students' internet perceived ease of use usefulness as an academic resource tool in selected universities in Kenya. The respondents were requested to indicate their agreement with statements regarding perceived internet ease of use. The results are as indicated in Table 5.

Table 5: Descriptive analysis of perceived ease of internet use

Statement	Mean	Standard Deviation
1.Enjoying internet browsing	4.49	2.39
2.Pride in accessing internet services	4.18	0.85
3.Time saving	3.72	1.16
4.Satifaction in handling term papers	3.77	1.16
5.Confidence in browsing for academic materials	4.07	0.97
6.Greater chance for getting relevant information	4.07	0.95
7.Reliability of internet services in Campus	3.94	1.03
8. Appreciation of downloads for academic projects	3.92	0.93
9.Blocking of my efforts to browse due to		
insufficient computers	3.67	1.21
10. Academic performance reveals your use of net	3.79	1.07
11.Main function is for social communication	3.43	1.34
12. Source of evil in the society	3.88	1.07
13.Ease of assignment with the availability of net	3.98	0.94
14. Chances of gaining new skills & knowledge	4.09	0.92
15.Mastery of necessary skills for browsing	4.02	0.96
16.Knowledge acquisition from internet	3.70	1.16
17.Recognition of ability to download materials	3.95	1.04
18.Meeting academic needs/requirements	4.16	0.78
19. Sharing ideas through academic e-conferences	3.79	1.10
20.Browsing is very easy	3.86	1.18
Total	3.92	1.11

The study findings indicate that respondents agreed that browsing on the internet is enjoyable; they feel a sense of pride in accessing internet services, they do not spend much time to browse, they feel satisfied with the use of the internet in handling their term papers and that they feel they are quite competent in browsing for academic materials as indicated by mean scores of 4.49, 4.18, 3.72, 3.77 and 4.07. Furthermore the mean scores of 4.07, 3.94, 3.92, 3.67, 3.79, 3.43, 3.88, 3.98 and 4.09 indicate that respondents agreed that there is really too much chance for getting relevant information on the internet, internet services within the campus are reliable, they do feel that the downloads they get from the internet for my research projects are appreciated, their efforts to browse are seldom blocked by lack of enough computers, those who utilize internet for academic work stand a fair chance for performing academically well, the main function of internet is for social communication by emails, twitter, Facebook and WhatsApp, they sometimes feel that the Internet is a source of



evil in the society, their course work assignments are done with little difficulty with availability of internet services and that there are chances to gain new skills and knowledge on the Internet respectively.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Discussion

The four elements of students' insight were identified as; internet knowledge, internet self-efficacy, perceived internet usefulness and perceived ease of use. The influence of internet experience on these elements was investigated. The study showed a weak relationship between experience and internet knowledge. This is supported by a chi-square of 2.624(P value = 0.623, df=4). On internet self-efficacy, a significant relationship between experience and self-efficacy was evident. The finding is in agreement with a study with Tsai & Tsai (2003) who found out that students had either high or low internet self-efficacy, those with high were better placed in terms of the searching skills and learning. This explains the significant relationship between internet experience and self-efficacy.

The paper showed that most of the students' (90%, n=478) had a positive perception of internet usefulness and there is a significant relationship between experience and perceived internet usefulness. This is supported by a chi-square of 16.121(P value = 0.003). This is because university students have known that there is either positive or negative correlation between internet as an academic tool and academic performance. This is supported by Jacobsen and Forste (2011) study, which revealed how social media effectively affected the academics of college students. Jacobsen and Forste determined the total time spent online and how much time deterred students' academics. A conclusion was made that, the average GPA decreased by 0.05 to 0.07 points per hour spent on social media; offline interactions had a negative association to GPA with a decrease of 0.02 grade points per hour spent using social media. However, Jacobsen and Forste realized that students who spent an hour on the internet for academic work, their GPA had a slight positive correlation with grade point average. The introduction of internet as a communication and information technology brought a remarkable change in the information. Students can easily access information and communicate with their colleagues through the internet. As a result, they are able to do research and assignments efficiently. This has made the students embrace the use of internet for academic purposes. It has also made them develop a positive perceived usefulness of the internet as an academic tool.

Most of the students (61.1%, n=478) had little exposure and positive perceived ease of use (86.4%, n=478). The Chi square analysis results revealed that experience has a significant influence on perceived internet ease of use. According to the findings, stakeholders in the higher education should note that students have embraced internet in their daily undertakings to gather both social and academic information. Use of the Internet will increase over time as more applications attend to the interest of the students. In an article on Internet use and academic performance (2001), Kubey et al. stated that, 69% of students, and 69% of teachers, testified of performance improvement through internet usage. This explains the significant association between internet experience and perceived ease of use of internet as an academic tool.



5.2 Conclusion

This study concludes that high internet experience brings positive internet self-efficacy, perceived usefulness and perceived ease of use.

5.2 Recommendations

The internet knowledge among education students is still below par, as some students indicated that they don't know some basic computer knowledge like computer virus prevention, downloading and saving information and client server. The implication is that more is required to raise the awareness among the students. Institutions of higher learning in Kenya should set up and implement strategies which aim towards raising the awareness on internet use. The same can be achieved through workshops, inclusion of computer studies among the common units regardless of the discipline, availing IT resources readily for instance purchase of more computers to reduce the students to computer ratio, hiring more IT lecturers as well as building more computer laboratories can make computer accessibility easy. Furthermore, institutions can positively change the student's attitude towards computer use by encouraging assessments to be submitted online and also setting up of WIFI hotspots around the school. All this measures will not only create an urge to expand the computer knowledge, but also improve the attitudes towards internet use.

Furthermore, the ease of use and perceived usefulness is a concept which can be improved through collective efforts of the government, society, institutions and students. The government can encourage inclusion of computer studies in the curriculum of primary and secondary level schools. The society can positively encourage internet knowledge by embracing the use of social platforms even for job adverts instead of paper work. The students can willingly change their attitudes towards internet use by taking it a resource and not a burden.

5.3 Areas for Further Research

Further studies can be done to establish the influence of internet insights namely; education students' internet experience, internet knowledge, internet self-efficacy, ease of using the internet and perceived usefulness on the performance of the students. The current study investigated the status of the internet insights only. Furthermore, other studies can be conducted to include other demographic characteristics of students apart from gender, teaching subject cluster, experience of internet use and type of University. For instance, a study can include other demographics like the current level of education of the students and duration at the University and investigate their relationship with internet insights investigated in the current study. Further studies can add more internet insights other than the four investigated in the current study for instance internet acceptability, attitude towards internet use, affordability of the internet and intentions to use. This will enable a wide comparison and generalizations. Lastly, other studies can widen the scope and include more students from different departments other than those studying education only so that a comparison of different internet insights can be made across the different clusters.

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