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THE INFLUENCE OF TYPE OF UNIVERSITY ON PERCEIVED EASE OF USING THE INTERNET AMONG EDUCATION STUDENTS IN KENYAN UNIVERSITIES

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# THE INFLUENCE OF TYPE OF UNIVERSITY ON STUDENTS' INTERNET INSIGHT AS AN ACADEMIC RESOURCE TOOL IN KENYAN UNIVERSITIES

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## **Abstract**

**Purpose:** The aim of the paper is to find out the impact of type of university on the insight students have about the internet as a learning tool in universities based in Kenya.

**Methodology:** 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 used to establish the reliability of instruments of data collection. Descriptive and inferential statistics were applied for data analysis. The inferential statistics used was mean, data frequencies and percentages. Several tests were used to test the hypothesis, that is, Post hoc, Chi square and Analysis of variance.

**Results:** The study findings indicated no significant relationship between university type and internet knowledge, perceived internet ease of use and internet self-efficacy.

Unique contribution to practice, theory, and strategy: The outcome of the study is useful in designing educational programs in Kenyan institutions of higher learning and also, creates an avenue to link the knowledge gap in digital divide research field, to be used later for technology acceptance studies.

**Keywords:** Type of University, Internet Insight, Academic Resource Tool



## 1.0 INTRODUCTION

Around the world universities are considered as sources for knowledge and learning. Universities are well known as main harbors of skilled resources. They take part in the research, analysis, facts transfer, and technological advancements. Thereby, they need to develop a system that will make information readily available at a fair price, that is, through books, journals and other online sources. In the ICT sector transformation has occurred, whereby the traditional methods (for example hard copy materials) have been replaced by electronic operations such as electronic circulation functions, sorting, electronic inter-library loan et cetera (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, perceived usefulness, internet self-efficacy, ease of using the internet and internet knowledge.

Self-efficacy is an individual belief of his/her ability to carry out tasks for efficient results (Bandura, 1997). It does not focus on the skills or abilities one has, but on the decisions made guided by the skills an individual possess; that is, the perceived internet self-efficacy which helps in acquiring knowledge and skills advancements (Bandura, 1986, 1997). Internet self-efficacy is what one belief he/she can do on the online platform. It is not a measure of how much he/she knows about the internet but the level of confidence one has in performing as far as internet is concerned. For example, the internet skills that enables the students to retrieve file, journals or even books to get academic information. According to Potosky (2002) internet self-efficacy and internet knowledge are directly related. In this area of computer efficacy, Potosky realized that individuals with prior knowledge about the computers are better placed during post internet 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 self-efficacy but also find out if other factors like internet experience and ease of using the internet and alleged usefulness have any influence on the use of internet as an academic resource tool in a developing country like Kenya.

#### **Problem Statement**

The role of internet as an academic resource tool when it comes to its acceptance and use has not been received by many. The set of features that evolve over time and generalize from one set of actions to another is termed as internet knowledge (Potosky, 2007). Internet knowledge comprises of internet terms and skills, that is, what people are conversant about internet. Knowledge is an important tool that enhance technology acceptance model.

All Kenyan universities have the internet as a learning 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 people are yet to embrace the function played by knowledge in the event of internet acceptance. Internet self-efficacy focus on the believe people have to perform on the online avenue (Potosky, 2007).



Previous studies have also shown that while university students in Kenya use the internet extensively, it is rarely used to further their academic or educational goals as expected in the information technology era. For example a study done in Kenya by Kwanya (2005) realized that most undergraduate students never used the internet to further their education. Adenuga and Ayodele (2012) found out that their participants used different ways to access the internet, such that, 3488 (87.7%) used mobile phones, 357 (9.0%) used desktop computers and 15 (0.4%) respondent used other means. Whereby, they accessed the website for social network and not for academic work. They concur with Kwanya; university students used the internet mainly for social network and not for academics. Thus it was necessary to carry out a study to find out factors that influenced the use of internet such as internet experience, internet knowledge, internet self-efficacy, ease of using the internet and perceived usefulness of the internet as a academic resource tool and also investigate if there is any disparity in the use of internet knowledge in private and public universities.

More studies should be done to develop internet knowledge, which can now be used as valid and dependable construct in evaluating its likely 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 factors that influence the acceptance of the internet as an academic resource tool such as internet experience, internet knowledge, internet self-efficacy and ease of using the internet and perceived internet usefulness. Kenya being a developing country the level of technological development, advancements and capacity of internet usage among students differ a lot with the already developed countries.

Today internet is being accessed by many all around the world. However, it is clear who the experienced and inexperienced users are, where the inexperienced users are still faced by some tough challenges. Internet has the capacity to impact on the aspects of people's lives, but this depends on the people's ability to control the internet capacity (Cassidy & Eachus, 2002). The cause of this inability may be lack of skills or abilities or wrong belief that results to incapacity and poor motivation as in the case of internet self-efficacy expectations. It is against this background that the current study was envisaged.

The process of internet knowledge development 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 as an academic resource tool in Kenyan based universities.

# 1.3 Research Objectives

To analyze the impact of type of university on the insight students have about the internet as an academic resource tool in Kenyan based universities.

# 2.0 LITERATURE REVIEW

#### 2.1 Theoretical Review

# **Social Learning Theory (SLT)**

The four sources of self-confidence as identified by Bandura (1997) are summarized as follows; 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 use 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 source 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 these factors are as follows the innovations usefulness, quality, clarity and content sources and instructional measures; motivation and leadership; team build up; experiences with creations; and the existence of analysis and report giving platform. It is 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 ease of using the internet and as a learning tool.

## **Technology Acceptance Model (TAM)**

Davis instigated TAM in 1989. It was established from reasoned action theory (Ajzen & Fishbein, 1980). The model reflects on the level of technology acceptance according to the users view. Using TAM one is able to a trace the influence external variables influence on belief, perception, and intention to continue using the technology. The model has proven to



be helpful; in predicting and explaining the behavior of the user as far as information technology is concerned (Legris, Ingham & Collerette, 2003).

This model states that the causal relationships head in one direction, where their environment affects cognitive beliefs, and in turn alter behavior. TAM posits that self-efficacy determines the willingness of an individual to use technologies. In the other hand, ease of use is the extent one believe, he can reach using a given system without being assisted. Davis (1989) defines ease of use as the extent a person believe, such that, if he/she is given a particular system his performance will improve. There is a difference between ease of use and self-efficacy, whereby one is the measure of process expectancy and the other is a measure of finished product expectancy respectively. For ease of use it impacts the willingness of the user through a direct or indirect effect through self-efficacy. From past studies it is clear that this model is valid (Venkatesh, 1999; Venkatesh & Davis, 1996). According to the 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**

Students become conversant with the internet either at the lower level or in secondary school. Internet is readily available to the students at home for some, at school or at cyber cafes. At the university, an assumption is made; that is, the students know how to search, handover assignments online, and are able to use online databases for studies.

Chen and Pen (2008, cited in Sahin, Balta and Ercan 2010) investigated the mutual relationship between the internet usage, academic performance, interactions, psychosocial adjustment and self-examination among the students. They administered questionnaires to the students, where they received 49,609 replies on the questions asked. The results showed that inactive internet users related well with the administrative staff, their learning satisfaction and grades were good as opposed to active users. In this study they posited that active users were at higher risk of depression compared to the inactive ones. This study also provoked the present study to analyze university education students' internet self-efficacy and perceived ease of internet usage over internet knowledge as academic resource tool in Moi University and Daystar University in Kenya.

A research done in Turkey by Sahin, Balta and Ercan (2010) to determine the usage of internet sources by students as they did project elicitation: a case study. This study was conducted in Yasar University, where the registered students were 143 and the study had 102 participants who were from the Tourism, Hotel management and software departments. These students took part in 2009 spring semester courses. Questionnaires were administered by Ersoy and Aktay, 2007 for data collection, with some modification. This study was a sample of the way university students came up with the necessities of a course project at the project elicitation stage, the means they use to access internet and other sources and the path they follow as they do the literature review. Interestingly, one of the result showed that students frequently used emails and chat-line forums every day for other reasons and not for studies. To add on that, many students preferred to interact with professionals for information eliciting and sharing as they did their study than their fellow students (The Turkish online Journal of Educational Technology, 2010).



The main concern of this study done by Sahin, Balta and Ercan (2010) was to investigate, how internet sources are accessed by inexperienced students and their credibility. The previous results during literature review showed that, valid and helpful information can be easily accessed through secure online sources. Internet sources used for academic work should be reliable, especially the higher class levels that require literature review. Therefore, accessibility challenges need to be solved. University students should therefore be motivated to go for authentic resources as they do their projects and assignment for a successful report, easy access systems for reliable resources should be developed and availed to the students by university ICT team. The Turkish Online Journal of Educational Technology (2010) state that one way to access challenges is to allow students access the internet at their homes, by use of known software. This will help students to use e-resources (e-books, e-journals) as learning tools. (This compelled the present study to be carried out to investigate the university students' internet self-efficacy and their perceived ease of use of the internet knowledge as an academic resource tool in universities based in Kenya.

The performance level of students according to classes differed. This distribution revealed that the seniors' performance was better compared to the juniors'. This difference was attributed to the seniors' awareness of semester projects importance having had some experience in their stay at the university; especially in research methodology. Further research showed that teachers had more experience than the senior students. Based on the previous finding that the seniors are more experienced than juniors, clearly there was a strong connection between experience and searching authentic internet sources so as to achieve brilliant results for coursework and projects. The study showed that students in the upper class were more successful than students in the lower class, because of their prolonged exposure in research methodology. It is against this background that the present study chooses to select respondents who are third year education students due to their experience with the internet during their presentations, assignments and teaching practice and projects during their educational course (The Turkish Online Journal of Educational Technology, 2010).

Higher learning institutions in all nations are rapidly introducing technology (ICTs) into their curriculum, that is, in teaching and learning processes not only as way to get accreditation and being at par in the market but to enhance academic excellence. It is important to note that students' performance can either be influenced negatively or positively. If students' are not serious then their performance goes down; it can also be improved through strong internet self-efficacy and technological use (Iro-Idoro, Ayodele and Okuwoga, 2013).

According to Naeema (2012), formal education is recommended for students to gain a better understanding of the goals, purposes, and benefits behind such new communicational tools. Encouraging academic staff as well, is another important factor. This will lead directly to encouraging group academic communication in a way that will decrease students' fruitless computer usage. It will also extend their efforts to learning and problem solving rather than endless youthful social communication and achieve better utilization of the internet and available technologies rather than wasting time and money on unproductive applications, which will eventually affect even their commitment to learning.



Another study on the use of internet was conducted in China and Sweden (Wei and Zhang, 2008). The application of differences and similarities could help to find out the density and relation of various facets that relate to cultures, where these cultures are known to influence e-learning in institutions of high learning. These results are similar to the results of a relative study of Sweden and Argentina universities - *The impact of national culture on e-learning implementation* (Casanovas et al, 2008). It is therefore important, to also investigate other factors apart from culture which influence the internet use such internet experience, internet knowledge, internet self-efficacy and their perceived internet usefulness as an academic resource tool in certain universities based in Kenya.

Apart from above studies, there is some literature related to internet knowledge in the many different educational departments, namely; medical, special, engineering and college education among many. The effects of technology use on students' academic outcome and efficacy for these studies have been realized (Limpach, Bazrafshan, Turner, and Monaghan, 2008; Scott, Gilmur, and Fielden, 2008; Johnson, 2008; Lin, Ko, and Wu, 2008; Yeh, Ko, Wuand Cheng, 2008; Rochester and Pradel, 2008). Generally, the studies reveal that internet use can boost students' performance if properly used. This also elicited the need to investigate among other aspects, the use of internet knowledge by students as an academic resource tool in certain universities located in Kenya.

Today the learning environment has changed a lot as opposed to the old days where technology had not evolved. Learning institutions should prioritize the development of technology in their curriculum, so that their students will be fully equipped for jobs in this world that is technology oriented. The internet makes it easy for university students to discuss assignments with their colleagues regardless of the distance between them and interact with their tutors without limitations. Similarly, there has been a marked increase of people making use of the net, ranging from children to adults with no checks or censorship of information available. This thesis is dependent on some past studies on the internet which were carried out in various universities all over the world. The present study analyzed university students' internet experience, internet knowledge, internet self-efficacy and their perceived usefulness of the internet as an academic resource tool in certain universities found in Kenya.

# 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 used to select 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 response rate of the study is tabled below.

**Table 1: Response Rate** 

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

Mugenda and Mugenda (2003) showed termed a response rate of 50% as adequate. Another study done in 2004 by Babbie stated that, 50% of return rates are acceptable for analysis and publication, 60% of the return rates good and 70% very good. From the above table, the total number of the questionnaires administered was six hundred and ten, 478 respondents filled and returned the questionnaires, and 132 failed to return. This reveals an overall success rate of 78%.

## **4.1.2** Gender of the respondents

The aim of the paper was to inspect the sex of the respondents. The results are tabled below

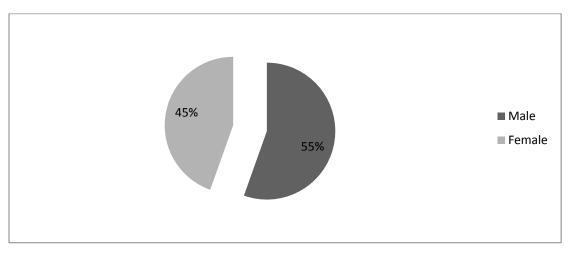


Figure 1: Gender of respondents

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 purposed to establish the type of University from which the participants were from. The results are as indicated in Figure 2.

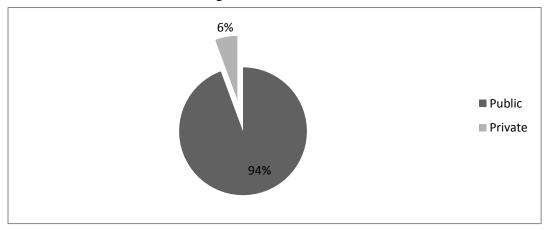


Figure 2: Type of University

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

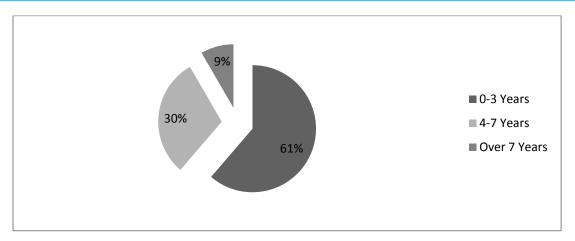


Figure 3: Internet experience

The findings showed that majority, 293 (61%), of the participants 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 aimed to get the cluster subjects of the respondents. The results are as indicated in Figure 4.

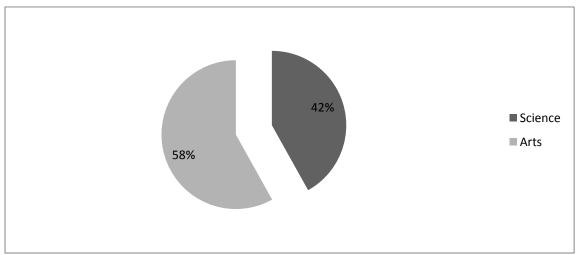


Figure 4: Cluster subjects of the respondents

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 Influence of University Type on Internet Knowledge

The relationship between university type and internet knowledge was established using chi square. The results are tabled below.

Table 2: Influence of University Type on Internet Knowledge

Internet	Chi	Contingency	Frequency
knowledge	Square	Coefficient	Distribution (%)



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		Lo w	Ambiv alent	Hi gh	Tot al			
University Type	ic	11	107	33 3	45 1	0.710(0. 701)	0.039(0.701)	73.8
	Priv ate	0	7	20	27			74.7
Total		11	114	35 3	47 8			

The Chi square tests results in the table above shows a weak relationship between university type and internet knowledge. This is supported by a chi-square of 0.710 (P value = 0.701). The null hypothesis is not rejected because the p-value is greater than the significance level, which is 0.05, (i.e. p > 0.05). This implies that there is no statistically significant relationship between university type and internet knowledge. The finding is also supported by a contingency coefficient of 0.039 (P value=0.701) which indicate that there is no significant relationship between university type and internet knowledge. Further, the findings indicate that majority (73.8%) of the respondents from public universities had high internet knowledge while 26.2% had ambivalent and low internet knowledge. Majority (74.7%) of the respondents from private universities had high internet knowledge while 25.3% had ambivalent and low internet knowledge.

# 4.2.2 Influence of university type on internet self-efficacy

Furthermore, the relationship between university type and internet self-efficacy was established using chi square. The results are tabled below.

Table 3: Influence of university type on internet self-efficacy

		Internet efficacy		self				
		Lo w	Ambiv alent	Hi gh	Tot al	Chi square	Contingency Coefficient	Frequency Distribution (%)
University Type	Publ ic	13	78	36 0	45 1			79.8
	Priv ate	0	5	22	27	0.809(0. 667)	0.041(0.667)	81.5
Total		13	83	38 2	47 8			

The Chi square analysis results presented in Table 3 indicate that that there is no significant relationship between university type and internet self-efficacy. This is supported by a chi-square of 0.809 (P value = 0.667).

Since a p-value of 0.667 is greater than the conventionally accepted significance level of 0.05 (i.e. p > 0.05) we do not reject the null hypothesis. This implies that there is no statistically significant relationship between university type and internet self-efficacy. The finding is also supported by a contingency coefficient of 0.041(P value=0.0.667) which shows that there is no significant relationship between university type and internet knowledge. Further, the findings indicate that majority (79.8%) of the respondents from public universities had high internet self-efficacy while 20.2% had ambivalent and low internet self-efficacy. Majority



(81.5%) of the respondents from private universities had high internet self-efficacy while 18.5% had ambivalent and low internet self-efficacy.

# 4.2.3 Influence of university type on perceived internet usefulness

The paper also purposed to find out the relationship between university type and perceived internet usefulness using chi square and the results are presented in Table 4.

Table 4: Influence of university type on perceived internet usefulness

		usef	Perce Fulness	ived		internet		
		Lo w	Ambiv alent	Hi gh	Tot al	Chi square	Contingency Coefficient	Frequency Distribution (%)
University Type	Publ ic Priv	5	39	40 4	44 8	1 422(0		90.2
	ate	0	7	23	30	1.422(0. 491)	0.055(0.491)	76.7
Total		5	43	42 7	47 8			

The results above indicate that there is a weak relationship between university type and perceived internet usefulness as supported by a chi-square of 1.422 (P value = 0.491). The p-value being 0.491 is greater than the level of significance 0.05 (i.e. p > 0.05), this leads us not to reject the hypothesis. This implies that there is a weak relationship between university type and perceived internet usefulness. The finding is also supported by a contingency coefficient of 0.055(P value=0.491) which indicate that there is no significant relationship between university type and perceived internet usefulness. Further, the findings indicate that majority (90.2%) of the respondents from public universities had high perceived internet usefulness while 9.8% had ambivalent and low perceived internet usefulness. Majority (76.7%) of the respondents from private universities had high perceived internet usefulness while 23.3% had ambivalent and low perceived internet usefulness.

# 4.2.4 Influence of university type on perceived internet ease of use

The association between university type and perceived internet ease of use was realized. The results are tabled below.

Table 5: Influence of university type on perceived internet ease of use

		Pero	Perceived ease of										
_		use	use										
		Lo	Ambiv	Hi	Tot	Chi	Contingency	Frequency					
		W	alent	gh	al	square	Coefficient	Distribution (%)					
University Type	Publ ic	4	56	39 0	45 0	-		86.7					
V -	Priv ate	0	5	23	28	0.360(0. 835)	0.027(0.835)	82.1					
Total		4	<i>c</i> 0	41	47		-						
	4	60	3	8									



The results above implies a weak relationship between university type and perceived internet ease of use as supported by a chi-square of 0.366 (P value = 0.835). The null hypothesis is not rejected because a p-value of 0.835 is greater than the level of significance which is 0.05 (i.e. p > 0.05). This shows that there is a weak relationship between university type and perceived internet ease of use. The finding is also supported by a contingency coefficient of 0.027(P value=0.835) which indicate that there is no significant relationship between university type and perceived internet ease of use. Further, the findings indicate that majority (86.7%) of the respondents from public universities had high perceived internet ease of use while 13.3% had ambivalent and low perceived internet ease of use. Majority (82.1%) of the respondents from private universities had high perceived internet ease of use while 17.9% had ambivalent and low perceived internet ease of use.

# 5.0 DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### **Discussions**

The use of internet has become a necessity among students. Use of internet in school campus and society has been increased and it becomes an important part of student life (Chou & Hsiao 2000). Internet is also used by the teachers to lay down their learning materials (Jones and Madden 2002). In this current study the Chi square analysis results revealed that type of university has no significant influence on internet knowledge. Students in both public and private universities in Kenya highly rated their internet knowledge. The implication of this finding is that all universities in Kenya whether public or private have embraced the use of internet for academic research. Learning is being digitalized over time, although the correct use of internet is a major factor that determines the academic success of university students (Cheung & Hauang, 2005).

It was also revealed that university type has no significant influence on internet self-efficacy. Students in Kenyan universities have a positive perception of internet self-efficacy. In Kenyan universities, students have a positive internet self-efficacy because they rely more on the internet for academic research compared to the use of libraries. This is in agreement with Hodges, 2008, in Kuo, (2010) who found out that if students had higher internet self-efficacy for completing an assignment then their motivation was likely to be higher, they would also make extra inputs and persist longer as opposed to students with lower internet self-efficacy. This cuts across all the universities.

The positive internet self-efficacy has improved students' learning skills and has led to better academic results. As a result, the students' sense of internet self-efficacy has been raised (Bandura, 1977, in Kuo, 2010). The finding of this Bandura's study concur with the findings of Peng, Tsai and Wu (2006) paper whose results revealed that students viewed the internet either as a tool or for technology and their attitude towards internet was positive. A similar finding was revealed between type of university and perceived internet usefulness. University type has no statistical influence on perceived internet usefulness as supported by a chi-square of 1.422 (P value = 0.491).

About perceived ease of use the analysis revealed that there was no significant relationship between university type and perceived internet ease of use as supported by a chi-square of 0.366 (P value = 0.835). The implication of this finding is that internet has been increasingly integrated into university education around the world whether in public or private universities. Lecturers are urged to avail course sources online and students are also motivated to actively engage both their lectures and colleagues online (Cheung and Huang,



2005). This means that regardless of the type of university, university students find positive contribution of internet towards academic performance. This result march with Livingstone and Bober (2005) results who reported that 90% of the participants used the Internet for coursework. Jones and Madden (2002) revealed that 73% of the college students used Internet for retrieving their research material. They showed that Internet was an effective platform for communicating with teachers, conduct research and access library. Similarly, a study by Kumar and Kaur (2006) revealed that 72.2% respondents accessed the Internet for academics while 50.8% for research. Survey conducted in Australian University indicated that 885 students used Internet for course related research (Foster, 2000). A study in Malaysia by Lauran et al (2013) has showed that 98.3% students' can access the website to get facts and do course work because it is efficient. This explains the positive perceived ease of use among university students.

## Conclusion

This study concludes that high internet experience brings positive internet self-efficacy, perceived ease of use and perceived usefulness. As a result university students get the opportunity to enter to the information world. Internet self-efficacy and ease of use have a strong positive correlation with the use of internet as an academic tool. In order to improve ethical and professional morals in the students, self-evaluation, motivation and self-control should be followed up.

## 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, perceived usefulness and ease of use 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.

#### **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 to use 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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