

Availability and Awareness of E-resources Utilization in Supporting Teaching and Learning in Kampala International University Western Campus

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ABSTRACT

The purpose of this study was to assess the level of e-resources utilization in supporting teaching and learning in KIU Western Campus. The first objective was to identify availability and awareness of e-resources utilization in supporting teaching and learning in KIU western campus, objective two was to find out ICT skills of staff and students in e-resource utilization in supporting teaching and learning in KIU western campus and objective three was to identify the effects of e-resource use by staff and students for teaching and learning. A descriptive survey research design was adopted. The target population included Academic Staff and Students from three selected faculties, Faculty of Education, Faculty of Business and Management and Faculty of Biomedical sciences, and library administrators of KIU western campus, totaling 5223. The data obtained from the field were analyzed using descriptive statistics (mean) and presented in frequency tables and inferential statistics. It was found out that staff and students were aware of e-resources, these e-resources were partially available for teaching and learning. In conclusion, awareness and availability are paramount and because of the positive usefulness of e-resources when applied in teaching and learning by staff and students, it is therefore necessary that the school administration should provide these e-resources to be readily available for use, in large volumes and in all discipline.

Keywords: E-resources, awareness, teaching and learning.

INTRODUCTION

The advent of information and communication technology (ICT) and electronic information resources has brought about the shift of information from print to electronic format, information that can be accessed with the use of a computer is referred to as an electronic resource [1,2,3,4,5]. Advancement in technology has led to the development of computer networks that allow access to numerous amounts of e-resources such as e-books, e-journals, online databases, multimedia, OPAC (online public access catalogue), which effectively and efficiently support teaching and learning in universities [2,6,7,8,9]. The emergence of e-resources has in so many ways transform information handling and management in universities [10,11,12,13].

This dramatic change includes the way information is being provided to students

through teaching and learning. Computers and related e-resources have come to play a vital role in teaching and learning. Dadzie [3] writes that electronic resources are resources of great value and are replacing the print resources in a traditional library setting. These e-resources have complemented the traditional means of teaching and learning. Stone and Emery, [4] defines e-resource as being resources in electronic form and library's electronic resource. This study is to assess the level of e-resource utilization in supporting and learning in Kampala international university western campus. The study was done to assess awareness and availability of e-resources utilization in supporting teaching and learning in Kampala international University Western Campus.

METHODOLOGY

Study Design

A descriptive research design was used because it required gathering, analyzing and presenting collected data from a large number of respondents.

Study Area

This study was carried out in Kampala International University Western Campus Ishaka, where developments in the use of e-resource and ICTs has been a major concern.

Target Population

The population consisted of all academic staff and all students of three faculties' that is Faculty of Education, Faculty of Business and Management and Faculty of Biomedical Sciences and library administrators (library admins) of KIU western campus. A total number of 5223 academic staff, students and library admins was the population for the study. The number of Academic staff in the faculty of education is 66, total number of academic staff in the faculty of business and management is 47 and total number of academic staff in faculty of biomedical is 93 and total number of library admins is 5, making a total of 211 academic staff from the three faculties and library administrators. Total number of students in the faculty of education is 2260, total number of students in the faculty of business and management is 689 and total number of students in faculty of biomedical is 2063, making a total of 5012 students from the three faculties. See table 3.1 below for distribution of Population for the study as at May 2018). KIU western campus had close to 8 faculties but due to limited resources, the researcher could not cover all the faculties and thus selected only three faculties for the study.

Sampling Method

Sample size was arrived at using a multi-stage sampling technique. Multi stage sampling technique entails the process of applying two or more sampling technique for the purpose of selecting an adequate representative sample size. The researcher for the purpose of this study applied the purposive, and probability sampling technique in selecting the sample for the study. Purposive sampling allows for a selection of sample from an entire population using pre-determined criteria

relevant or of interest to the study. Purposive sampling was used to select library administrators because they are directly involved with e-resource utilization. Faculty of biomedical sciences was purposely selected because they are to some extent science oriented and most of their course units are taught using e-resources. Again, faculties of business and management and education were purposely selected because they may to some extent have little knowledge about e-resource utilization and so the researcher was interested in finding out why. Probability sampling was also used and was based on the fact that every member of the population (staff and students) had a known and equal chance of being selected. This method of sampling gave the probability that our sample was representative of the population.

Sample Size and Sampling Technique

The total number of academic staff from the three faculties was 206 and that gave us a sample size of 136 for the study. The number of library administrators purposely selected was 5 and thus no sample size. The total number of students from the three faculties was 5012 and that gave sample size of 361 students from the faculties of Education, Business and management and Biomedical in KIU western campus making the total sample size of 502 respondent for the study. This was determined using the [4] sample size determination table that is attached as appendix C.

Data Collection Methods

For the purpose of this study, the researcher contacted sampled respondents for reliable information using observation/resource inspection checklist for academic staff, and a structured questionnaire for the student respondents.

Observation/Resource Inspection Checklist

The researcher used the observation/resource inspection checklist for academic staff and library admins in order to have a near one on one interaction with them, to record observations as in Yes/No options in order to establish observable items such as e-books, e-journals, online data bases, multimedia

resources, online public access catalogues (OPACS) and emails, if and when available.

Questionnaire

Questionnaires were administered on the student respondents. The questions were made up of close ended, which required respondents to give a yes or no answer, open ended which were questions that had unlimited responses. Respondents were to provide a free-form answer which were not restricted to a word or two, and multiple choice questions, which respondents had several option from which to choose. These questionnaires were administered to the respondents in their various study rooms by the researcher. Similarly, the questionnaire allowed for independence in responses from respondents even with the researcher’s presence.

Data Processing

Data collected from observation/resource inspection checklist were edited, categorized according to themes and then summarized into percentages in a computer spreadsheet. Data collected from the SAQS were also edited, categorized, coded and entered into the computer using the Statistical Package for Social Sciences (SPSS) to generate summary frequency tables, charts and graphics.

Data Analysis

Data were analyze according to each objective. Objective one and two were analyzed using the descriptive statistics,

A total of 502 questions were administered to the staff and student population from the three faculties Business and Management, Education and Biomedical science and library administrators of Kampala International University Western Campus, of which all the questionnaires were dully filled and returned, giving a response rate of 100%. 361 questionnaires were distributed to the students from the three faculties, faculty of business and management, faculty of education and

where the mean and standard deviations were obtained. The researcher used descriptive statistics to generate data and find out the prevalence rate at which these e-resources were available for teaching and learning and whether or not staff and students are aware of them and possess the necessary skills to be able to access them. Objective three was also analyzed using descriptive statistics using a four linkart scale. Lastly, inferential statistics was done in order to correlate the DV (teaching and learning), and IV (e-resources) and find out their significance.

Ethical Considerations

This research study was carried out subject to approval by the Research Ethics Committee of Kampala International University Western Campus, Uganda.

Informed consent: The principle of informed consent involved the researcher providing sufficient information and assuring the participant about taking part in the research to allow participants to understand the implications of participating in the research and to reach a fully informed, considered and freely given decision about whether or not to do so, without the exercise of any pressure. Voluntary participation of respondents in the research is important. Moreover, participants had the right to withdraw from the study at any stage if they wish to do so.

RESULTS

faculty of biomedical sciences which were filled and returned giving a 100% response rate while, a total of 141 questions were responded to by staff and library administrators by observing items such as e-books, e-journals, online databases, multimedia information resources OPACS, emails and e-music. A response rate of 100% was recorded on the staff population from the three faculties and library administrators.

Table 1: Awareness of E-resources

VARIABLE	FREQUENCY	PERCENTAGE (%)	MEAN	STD. DVTN
N=361				
Yes	316	87.6		
No	45	12.4	1.12	0.331

Source: Field data, February, 2019

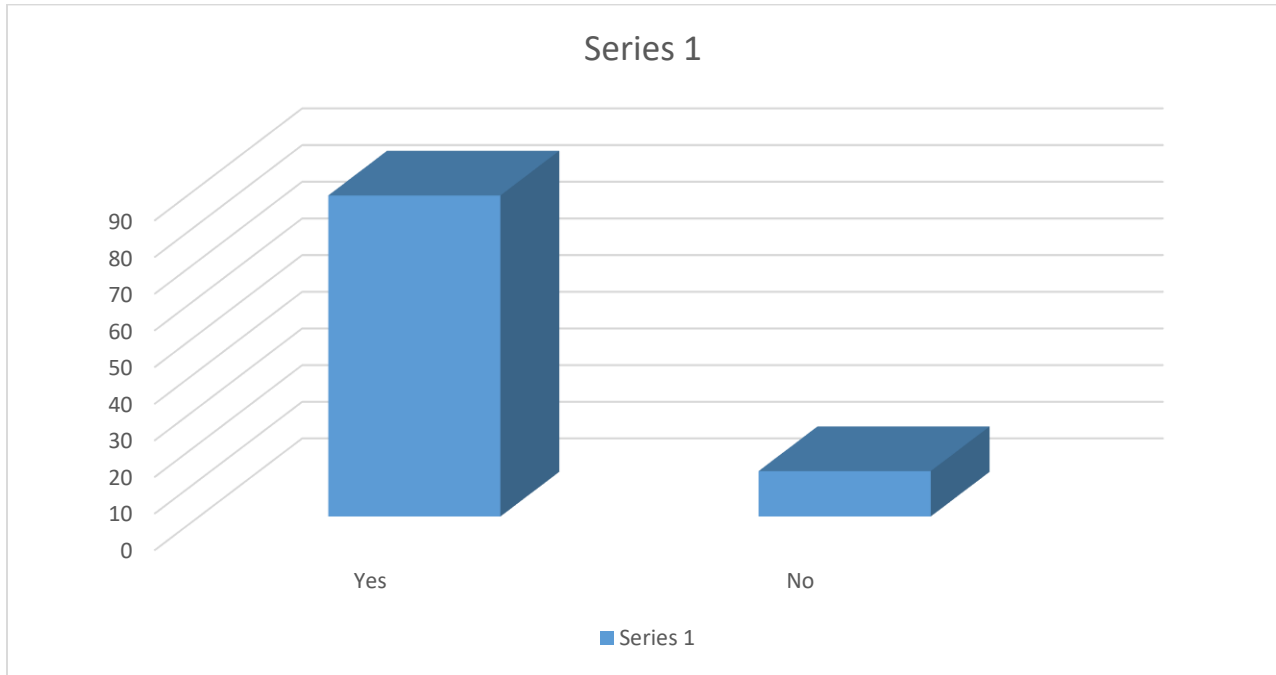


Figure 1: awareness of e-resources

Findings from this study showed that 316 (87.6%) students from the three faculties were aware of e-resources with a high response rate and 45 (12.4%) were not aware of e-resources with a low response rate. From the above findings it shows that

students know what e-resources are and their advantages. The mean response of 1.12 and standard deviation of 0.331 were obtained. This indicated that students were aware of e-resources.

Table 2: E-resource Availability

VARIABLE	FREQUENCY	PERCENTAGE (%)	Mean	STD. DEVTN
N=361				
Yes	263	73.0		
No	49	13.5		
No response	49	13.5	1.41	0.717

Source: *Field data, February, 2019*

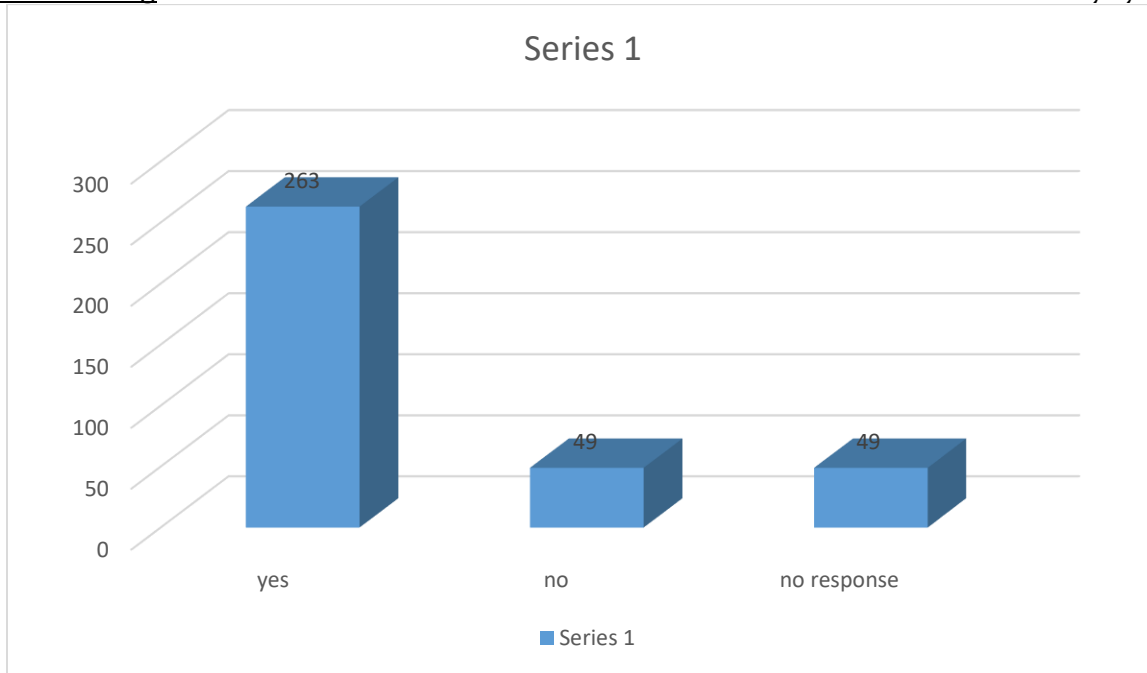


Figure 2: e-resource availability

Results showed that majority of the respondents 263 (73%) from the three faculties accepted that e-resources were available, 49 (13.5%) said e-resources were not available and 49 (13.5%) never responded whether e-resources were

available or not, giving us a high response rate on availability. The mean of 1.41 and standard deviation of 0.717 were obtained showing a positive response on availability.

Table 3: Types of E-resources Available

VARIABLE	Available	Percentage (%)	Not available	Percentage (%)	Frequency	Mean	Std. Dev.
N=1081							
E-books	170	62.5	85	31.2	255	1.33	0.472
E-journals	34	12.8	80	29.4	114	1.70	0.460
Online databases	67	24.6	66	24.3	133	1.50	0.502
Multimedia resources	100	36.8	26	9.6	126	1.21	0.406
OPAC	35	12.9	18	6.6	53	1.34	0.478
e-mails	272	100	0	0	272	1.00	0.000
e-Music	90	33.1	44	16.2	134	1.33	0.471

Source: Field data, February, 2018

From the data generated, it was found out that majority of the respondents 170 (62.5%) from the three faculties said e-books were available and 85 (31.2%) said e-books were not available with a mean of 1.33 and standard deviation of 0.472

showing a significant agreement on availability, 34 (12.8%) said e-journals while 80 (29.4%) said e-journals were not available with a mean of 1.70 and standard deviation of 0.460, 67 (24.6%) said online data bases were available while 66 (24.3%)

said they were not available. the mean of 1.50 and standard deviation of 0.502 were obtained showing a disagreement. 100(36.8%), said multimedia information resources were available, while 26 (9.6%) said multimedia information resources were not available with a significant mean of 1.21 and standard deviation of 0.406 showing multimedia resources are available. also 35 (12.9%) said OPACS were available while 18(6.6%) said they were not available with a mean of 1.34 and standard deviation of 0.478 showing a disagreement. 272(100%) said emails were available with mean of 1.00 showing positive significant on availability. And

lastly, 90(33.1%) said e-music were available while 44(16.2%) said they were not available with a mean of 1.33 and standard deviation of 0.471 showing and agreement on availability. From the above findings, a high response rate was generated from the fact that emails were more available because students use their emails on daily bases, and secondly that e-books were also available. This shows that e-books are “flexible”, e-books are cheap and increased comfort, makes referencing easier. E-books allows you to search for topics and key words inside or out on the web.

Table 4: Use of E-Resources for Learning

VARIABLE	FREQUENCY	PERCENTAGE (%)
N=1361		
Class work	304	84.2
Research/project work	174	48.2
Assignments	256	70.9
Multimedia Instruction and learning	122	33.8
Access learning materials	144	39.9
Reading in preparation for exams	264	73.1
Seminar presentation	97	26.8

Source: *Field data, February, 2019*

From the above results, respondents were allowed to select more than one choice and so the frequency was more than 361. a high response rate 304 (84.2%) was generated from the fact that students from the three faculties use e-resource for class work purposes, 174 (48.2%) use e-resources for research/project work, 256 (70.9%) respondents said they use e-resources for assignments, 122 (33.8%) use e-resources for multimedia instruction and

learning, 144 (39.9%) said they use e-resources for teaching, 264 (73.1%) responses came from the fact they use e-resources for learning, 97 (26.8%) use e-resources for seminar presentations... A high response rate was recorded from the use of e-resources for class work purposes because students need to do class work as part of learning activities and they need these e-resources to search for information.

Table 5: Awareness of E-Resources

VARIABLE	FREQUENCY	PERCENTAGE (%)	MEAN DIFFERENCE	STDN
N=141				
Yes	133	94.3		
No	8	5.7	1.06	0.232

Source: Field data, February, 2019

From the table above, a high response rate 133 (94.3%) was recorded from the staff population of the three faculties and library admins who said they were aware of e-resources, while a low response rate of

8 (5.7%) said they were not aware of e-resources. A mean of 1.06 and standard deviation of 0.232 were obtained. This therefore implies that a majority of the staff are aware of e-resources and that they have value in teaching.

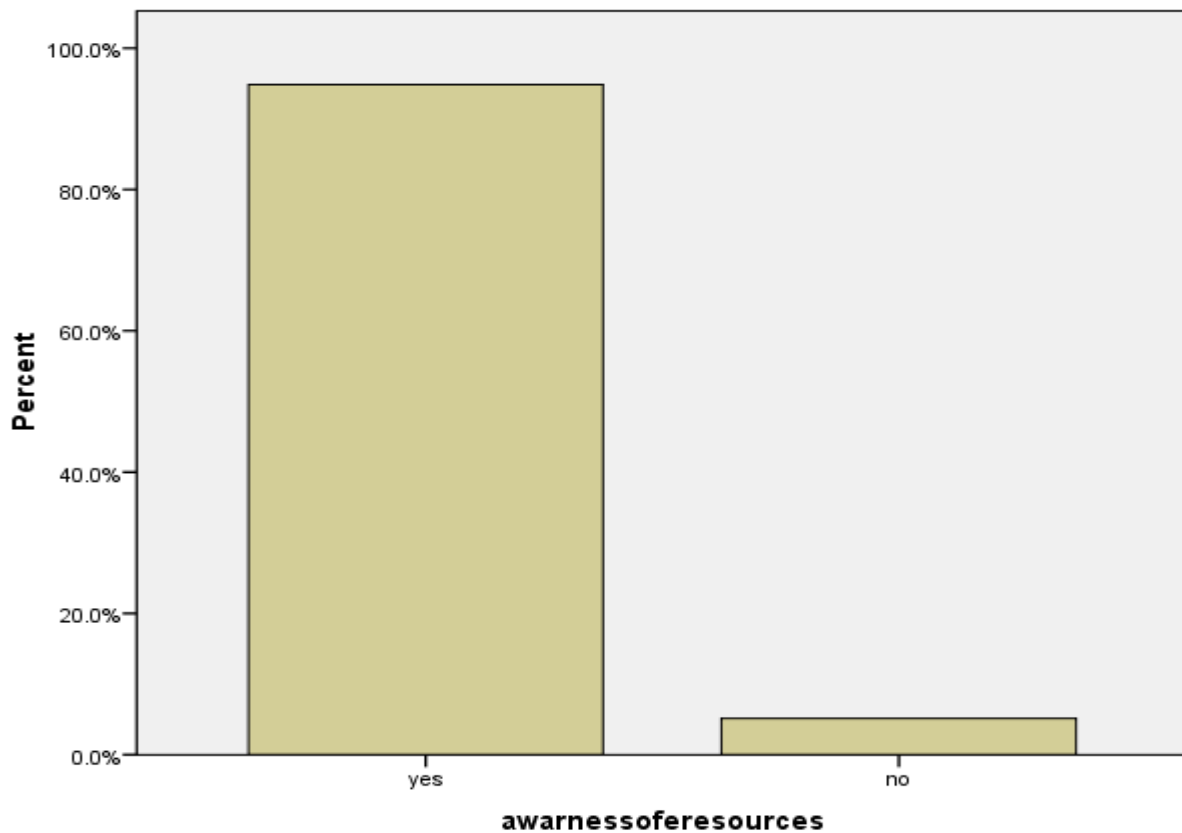


Figure 3: awareness of e-resources

Table 6: E-resource Availability

VARIABLE	FREQUENCY	PERCENTAGE (%)	MEAN	STD. DEVIATION
N=141				
Yes	34	24.1		
NO	100	70.9		
No response	7	5.0	1.80	0.497

Source: *Field data, February, 2019*

The results above shows that a majority of the staff from the three faculties said these e-resources were not available with a high response rate of 100 (70.9%) while a percentage of the staff including library admins said these e-resources were available, and 34 (24.1%), while 7 (5.0%) of the staff population never responded.

From the above results, a mean of 1.82 and standard deviation of 0.513 were obtained which was showing a negativity on availability of e-resources. These e-resources have to be available for staff to use because it will give them access to a variety of information students need for learning and make teaching activities easier.

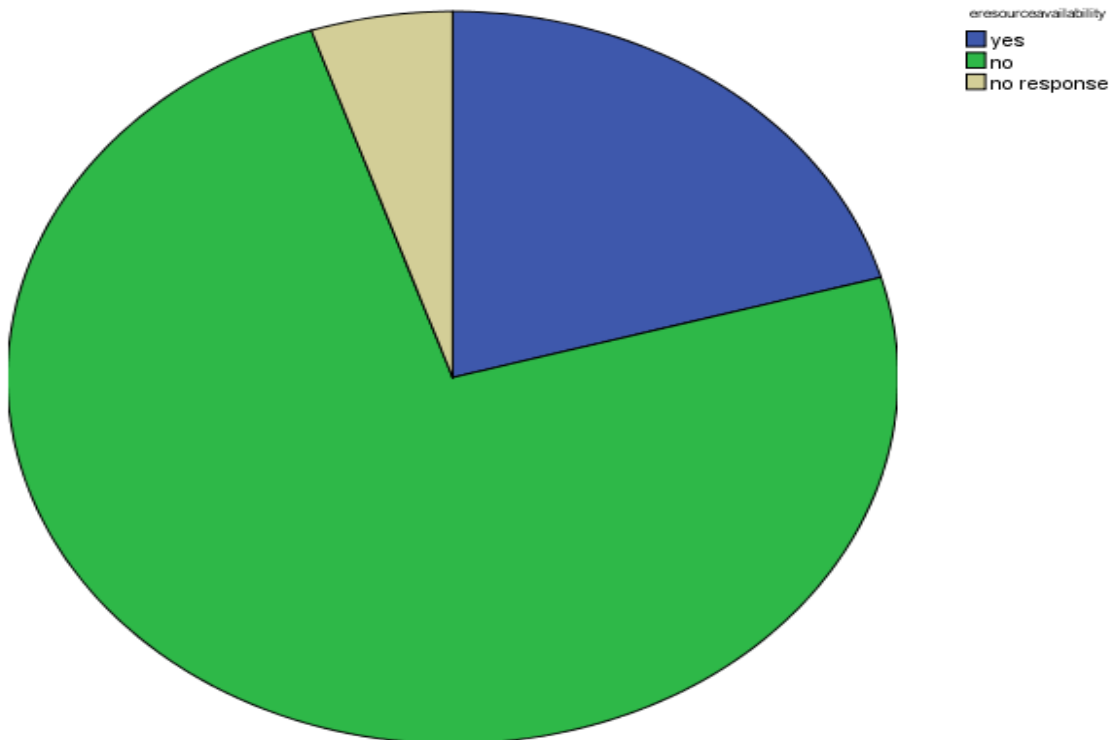


Figure 4: e-resources availability

Table 7: Types of E-Resources Available

E-resources	Available	Not available	Mean	Std. Dev.
	N=29			
e-books	26 (89.7)	3 (10.3)	1.10	0.31
e-journals	27 (93.1)	2 (6.9)	1.11	0.26
Online databases	17 (58.6)	12 (41.4)	1.41	0.50
Multimedia resources	13 (44.8)	16 (55.2)	1.55	0.506
OPACS	21 (72.4)	8 (27.6)	1.28	0.46
e-mails	29 (100)	0 (0.0)	1.00	0.00
e-Music	28 (96.6)	1 (4.4)	1.00	0.00

Source: *Field data, February, 2019*

From the above table, the data generated shows that 26 (89.7%) of the respondents from the three faculties said e-books were available and 3 (10.3%) said they were not available. the mean of 1.10 and standard deviation of 0.310 were obtained. secondly, 27 (93.1%) said e-journals were available while 2 (6.9%) said they were not available with mean and standard deviation of 1.107 and 0.262 were obtained, showing lack of availability. thirdly, 17 (58.6%) said online databases were available while 12 (41.4%) said they were not available with a mean of 1.41 and standard deviation of 0.501 were gotten. also, 13 (44.8%) said multimedia resources

were available while 16 (55.2%) said they were not available. the mean of 1.55 and standard deviation of 0.506 were obtained showing lack of availability. again, 21 (72.5%) respondents said OPACS were available while 8 (27.6) said they were not available with mean and standard deviation of 1.28 and 0.45. in addition, 29 (100%) of the respondents said emails were available while 0% said they were not available with a mean of 1.00 and lastly, 28 (96.6%) of the respondents said e-music was available while 1 (4,4%) said it was not available. a mean of 1.00 was obtained. From the above discussion, the means are all positive showing that only a few of the e-resources are not available.

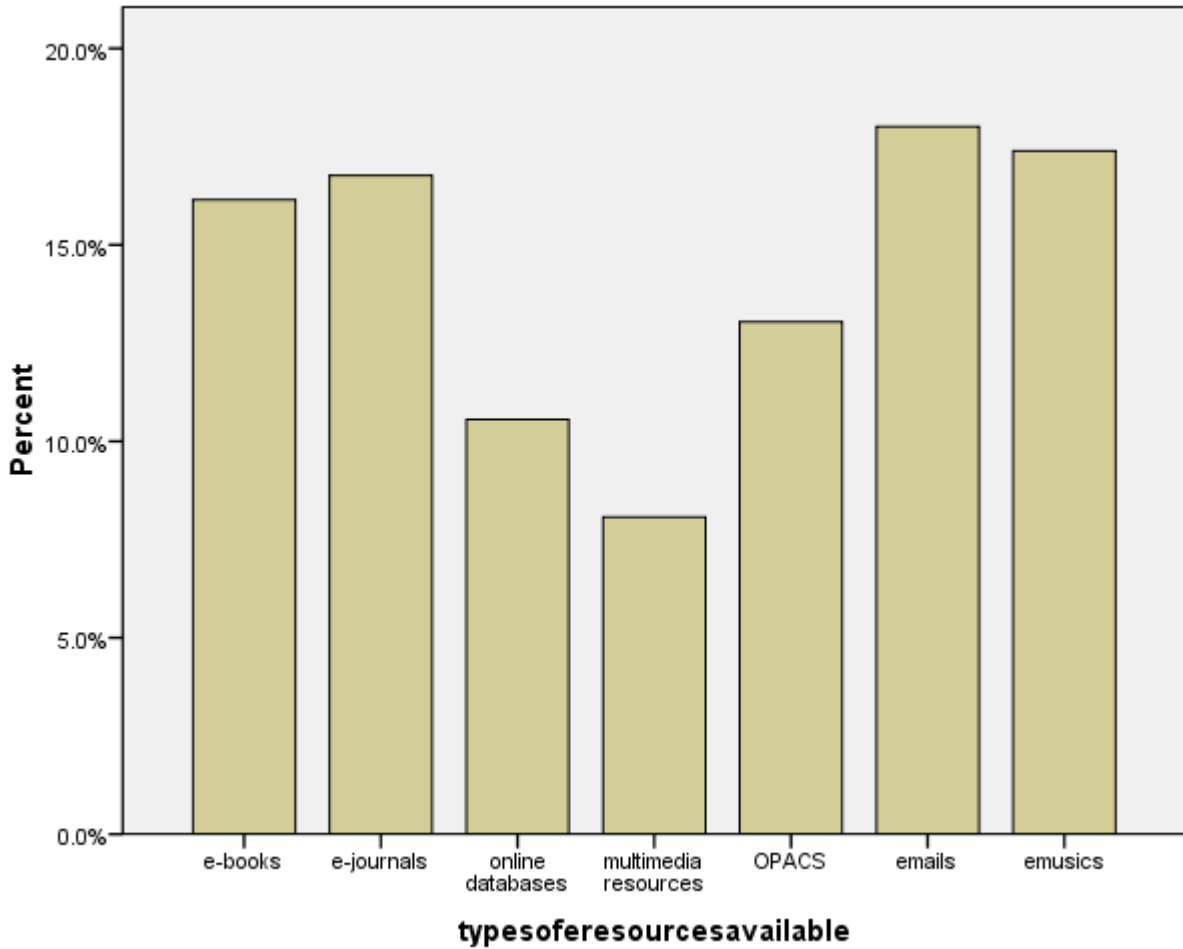


Figure 5: types of e-resources availability

Table 8: Use of E-Resources for Teaching

VARIABLE	FREQUENCY	PERCENTAGES (%)
	N=320	
Easy access to teaching Materials	100	31.2
Ease in the formulation of test/exams questions	90	28.1
Research purposes	80	25.0
Effective seminar presentations	50	15.6

Source: Field data, February, 2019

The table above allowed respondents to select more than one option that explains why the frequency was more than 141. It indicated the purpose of use of e-resources for teaching. it shows that 100 staff use e-resources because it helps in easy access to teaching materials, with a percentage of 31.2%, 90 use e-resources

because it helps in the formulation of test and exams questions, with a percentage of 28.1%, 80 use e-resources for research purposes with a percentage of 25.0%, and lastly 50 use e-resources because it helps in effective seminar presentations with a percentage of 15.6%. This therefore mean that e-resources are important sources of

information and should be used in teaching and learning.

Table 9: Point of Access of E-Resources

VARIABLE	FREQUENCY	PERCENTAGE (%)	MEAN	STD. DEV.
N=141				
Office	54	38.3		
Home	81	57.4		
Library	2	1.4		
Office & Library	1	0.7		
All the above	3	2.1	1.69	0.679

Source: *Field data, February, 2019*

The results below indicates that 54 (38.3%) of the staff population from the three faculties including library admins access these e-resources from their offices, a majority of the staff with a response rate of 81 (57.4%) access these e-resources from home. 2(1.4%) staff from the three faculties access e-resources from the library and, 1 (0.7%) of the staff access these e-resources from office/library, and library and 3 (2.1%) access e-resources

from home, office, library, office/library. The mean obtain was 1.69 (negative) and a standard deviation of 0.679. This therefore implies that these e-resources are not available for staff as a high response rate is recorded that staff access e-resources from home and not from their offices as the case maybe. They need to have access to these e-resources in their offices to make teaching activities efficient and effective.

Table 10: Means of Access of E-Resources

VARIABLE	FREQUENCY	PERCENTAGE (%)	MEAN	STD. DEV.
N=141				
Personally	126	89.4		
With assistant from libs staff	0	0		
ICT staff	8	5.7		
No response	7	5.0	1.24	0.748

Source: *Field data, February, 2019*

The table above shows that a majority of the staff from the three faculties including library admins access these e-resources personally with a high response rate of 126 (89.4%), no staff access e-resources with help from librarians, a percentage of the

staff 8 (5.7%) access them with help from ICT staff, and a small percentage 7 (5.0%) of the staff never responded, with a mean of 1.24 implying staff do not need help in accessing e-resources. and standard deviation of 0.748.

DISCUSSION

This objective was to identify availability and awareness of e-resources utilization in supporting teaching and learning in Kampala international University Western

Campus. Findings from the data collected revealed that students and staff were aware of e-resources. This is supported by the DOI theory of [5], staff and students

know the value of e-resources and so will adopt and use them. Awareness of electronic resources therefore means staff and students have knowledge of the availability of the resources, their services and the extent of use [6]. The students said e-resources were available. This in line with a study conducted by [7] who said e-resources were available in the University

The educational sector since the commencement of the use of e-resource for teaching, has recorded great impacts. The use of e-resources makes teaching and learning more effective and efficient which means staff and students need to take advantage of it numerous benefits and opportunities it offers. They were aware of

CONCLUSION

Banyuy *et al* of Calabar in Nigeria, Inferential statistics showed a correlation between use of e-resources for teaching and learning and e-resource awareness, e-resource availability, use of e-resource and skills required to access e-resources. The analysis showed that there was a positive significant relationship with use of e-resources for teaching and learning.

these e-resources, had the necessary skills required to access them. From the above findings, we can conclude that students therefore need to be given special training on the skills needed to access e-resources to be used for their learning activities and these e-resources needs to be available in their large numbers and in all disciplines.

REFERENCES

1. Ani, O. E., Ngulube, P. and Onyancha, B. (2015a). Perceived effect of accessibility and utilization of electronic resources on productivity of academic staff in selected Nigerian universities. *SAGE Open*, 5(4).
2. Massachusetts Institute of Technology Association of American Universities (2018). www.aau.edu. Retrieved 2018-08-17.
3. Dadzie, P. S. (2005). Electronic resources: access and usage at Ashesi University College. *Campus-Wide Information Systems*, 22(5), 290-297. <https://doi.org/10.1108/10650740510632208>
4. Krejcie, R. V. and Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607-610.
5. Sahin, I. and Rogers, F. (2006). Detailed Review of Rogers' Diffusion of Innovations Theory and Educational Technology-Related Studies Based on Rogers. *The Turkish Online Journal of Educational Technology*, 5(2), 14-23.
6. Egberongbe, H. S. (2011). The Use and Impact of Electronic Resources at the University of Lagos. *Library Philosophy & Practice*, 147-155. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=lih&AN=77410567&site=ehost-live>
7. Tette, E. M. A., Sifah, E. K., Nartey, E. T., Nuro-Ameyaw, P., Tete-Donkor, P. and Biritwum, R. B. (2016). Maternal profiles and social determinants of malnutrition and the MDGs: What have we learnt?. *BMC public health*, 16, 214.
8. William Mufana Masisani, Ibrahim Adabara (2022). Monitoring with Communication Technologies of the Smart Grid. *IDOSR Journal of Applied Sciences*, 7(1): 102-112.
9. Rebecca Kisakye (2022). Simulation and Analysis of Dipole Transmitter Antenna (KIU Laboratory). *IDOSR Journal of Computer and Applied Sciences* 7(1): 119-135.
10. Mukisa Sarah Namugenyi, Feiswal Abdalla (2022). An Automated Student Registration System: A Case Study of Lugazi Primary School. *INOSR Experimental Sciences*, 10(1):25-41.
11. Anthony Nambale, Zainab Kalyankolo, Umar Kalyankolo (2022). Design and Implementation of an Intelligent Voice Controlled Wheel Chair. *IDOSR Journal of Science and Technology*, 7(1); 67-76.
12. Elisado Mwesigye (2022). Management styles used in the selected secondary schools in Uganda. *IAA Journal of Education*, 8(1): 90-96.
13. Sekiti Hamisi, Ibrahim Adabara (2022). Security Analysis for Virtual Private Network Based on Site to Site Circuit Switching (Vpns2scs) Case Study: Liquid Telecommunication Ggaba. *IDOSR Journal of Computer and Applied Sciences*, 7(1): 95-108.