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Athuman J. Magaya & Gladness Kotoroi

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This study was carried out at the Sokoine University of Agriculture Library also known as the Sokoine National Agricultural Library (SNAL) in Tanzania. It focuses on factors that influence postgraduate students' use of Libhub for accessing information at the Sokoine University (Main Campus). Specifically, the study aimed at analyzing level of SNAL's postgraduate student awareness on Libhub services, identifying factors that influence postgraduate students to use Libhub for information access, and find out challenges deterring SNAL postgraduate students' to access information using Libhub tool. The study used a single case study design and a mixed approach to collect data. A sample size of the study comprised of 54 respondents, where by 49 were postgraduate students and 5 were SNAL library staff members. The Library staffs were purposively selected and postgraduate students were conveniently selected. Questionnaire and interviews were the main instruments used to collect data. Both quantitative and qualitative data were collected. Quantitative data were analyzed using SPSS, Excel (Spreadsheet), and Microsoft Office Word and were presented using figures and tables, and qualitative data were content analyzed. Study findings revealed that majority of respondents agreed that the relevance of the information available through Libhub is one of the key factors for using and accessing information through Libhub. The finding further shows that inadequacy of computer and information literacy skills and lack of technical and ICT infrastructure are the main concerns. Researchers suggest that it is essential to create formal education and other procedures of creating awareness about the use value of Libhub for cutting across both Students and Library Management broadly.

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Exploring Factors Influencing Postgraduate Students' Utilization of Libhub Services at the Sokoine University of Agriculture Library

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ABSTRACT

This study was carried out at the Sokoine University of Agriculture Library also known as the Sokoine National Agricultural Library (SNAL) in Tanzania. It focuses on factors that influence postgraduate students' use of Libhub for accessing information at the Sokoine University (Main Campus). Specifically, the study aimed at analyzing level of SNAL's postgraduate student awareness on Libhub services, identifying factors that influence postgraduate students to use Libhub for information access, and find out challenges deterring SNAL postgraduate students' to access information using Libhub tool. The study used a single case study design and a mixed approach to collect data. A sample size of the study comprised of 54 respondents, where by 49 were postgraduate students and 5 were SNAL library staff members. The Library staffs were purposively selected and postgraduate students were conveniently selected. Questionnaire and interviews were the main instruments used to collect data. Both quantitative and qualitative data were collected. Quantitative data were analyzed using SPSS, Excel (Spreadsheet), and Microsoft Office Word and were presented using figures and tables, and qualitative data were content analyzed. Study findings revealed that majority of respondents agreed that the relevance of the information available through Libhub is one of the key factors for using and accessing information through Libhub. The finding further shows that inadequacy of computer and information literacy skills and lack of technical and ICT infrastructure are the main concerns. Researchers suggest that it is essential to create formal education and other procedures of creating awareness about the use value of Libhub for cutting across both Students and Library Management broadly.

Keywords: LibHub, Online information resources, Resource discovery tools, subscribed Resources, Sokoine University of Agriculture, Tanzania Academic Libraries Agriculture

INTRODUCTION

Academic libraries are the hubs for acquiring, processing, preserving, and disseminating information. The academic Library collection contains both printed and electronic resources for better provision of services to meet the information needs of its users (ALA, 2010). Access to the library collection remains a pipe dream for each library user (Majinge & Mutual, 2018) Most academic libraries subscribe and promote the use of e-resources, which are scholarly works made

available for access through the use of electronic devices (Mwantimwa, 2017). These e-resources can be accessed remotely by using computer networks or directly via e-resource devices such as discs or disks, cassettes, cartridges, and flash disks (Isibika & Kavishe, 2018). American Library Association (2010) indicated that due to the development of technology, access to information has now been transformed by the application of information and communication technologies (ICT). Information Communication Technology has changed the way researchers, students, and faculty access needed information (Mwantimwa, 2017). The birth of ICT has bridged the gaps that limit users to utilize Library resources. The majority of academic libraries nowadays have adopted the system of offering services to their users through subscribed electronic modes including databases (Ankrah & Atuase, 2018). However, the user due to various factors does not effectively consume these subscribed resources. Such factors including IP-based, which does the majority of users, are not known. This unconcise creates a barrier to users especially when the condition demands the user be within the campus and use the institution network to get access which sometimes may not be stable (Isibika & Kavishe, 2018).

Academic libraries have adopted various strategies to address the challenge. These strategies embraced using of different technologies such as proxy servers, VPN, Athens authentication, and Shibboleth authentication tools (De Sarkar, 2015). These technologies offer users the right to access subscribed resources remotely. Other technologies embraced by academic libraries were Squid, Web proxy software that required technical skills as users are supposed to configure their browsers to get access to online resources (Bower & Mee, 2010).

The Sokoine National Agriculture Library, like other institutions of higher learning, has implemented a variety of strategies to ensure that its users have access to and use the subscribed e-resources. Among the approaches used by SNAL is the provision of a single search interface to the majority of the electronic materials subscribed to by the Library via the Consortium of Tanzania Universities and Research Libraries (COTUL). SNAL opted to use Libhub to address the issue of low usage of subscribed databases, which can be found at www.Libhub.sempertool.dk. Users can connect to the SUA network and use personal internet connectivity to access resources locally or remotely (Jabil & Katabalwa, 2016).

Libhub is one of the technologies used in the library to support access to subscribed resources. It is a resource management system and an information gateway that has been designed to enable discovery and accessibility to online information resources from various databases in a single search interface (Rawtani & Babbar, 2013). Libhub has over 15 million peer-reviewed journals dating back to 196. Additionally, there are over 35,000 e-books, 17,500 journal titles, and 380 databases and links using Libhub to facilitate library users' access to millions of electronic resources easily and wherever they are (Libhub, 2014).

Libhub services cover a broad set of tools, resources, and sustenance mechanisms offered by libraries to heighten users' access to information, assist research activities, and sustenance learning objectives. These services usually comprise access to digital collections such as electronic books, academic journals, databases, multimedia resources, and archival materials, all available remotely for convenient research from any location with an internet connection. It also offers online catalogues and discovery tools which are rich with advanced search topographies

and reference procedures, supporting users to professionally discover related materials within the library's collection.

Currently, SNAL is adopting Libhub to make the subscription database more accessible and usable for its users, notably the major stockholders and postgraduate students. The SNAL spent a significant amount of money to purchase the subscribed databases and the Libhub program to maximize the use of e-resources in the subscribed databases to realize monetary value. Several criteria can determine whether a postgraduate student can use the Libhub program to access subscribed databases. The library is, however, responsible for ensuring that these factors are handled to allow postgraduate students to use the Libhub program. Several studies have been conducted to examine factors influencing the adoption and usage of e-resources elsewhere in the world including (Mollel and Mwantemwa, (2019) in Tanzania, and Bwalya & Ssebale (2017) at Nkumba University Uganda. yet no study was conducted at SNAL to appraise factors that influence postgraduate students' use of Libhub to realize money value and postgraduate students' perception of Libhub services. The study was guided by the following research questions

- i. What is the level of awareness among Postgraduate Students as SNAL about Libhub accessibility and usage?
- ii. What are the factors influencing SNAL postgraduate students' use of Libhub for accessing information?
- iii. What are the challenges hindering SNAL postgraduate students from accessing information using Libhub

LITERATURE REVIEW

Postgraduates Students' Awareness of Libhub

Awareness is knowledge about something that exists or an understanding of a situation or subject at present based on information or experience (Ani & Ahiauzu, 2008). It can also be seen as knowledge or perception of a situation, fact, consciousness, recognition, realization, grasp, and acknowledgment of concern about and well-informed interest or familiarity in a particular situation or development.

Access to knowledge is an important asset for the development of every human being. Awareness of the availability of Libhub is when users of the library have acquired information and knowledge about the existence of Libhub (Libhub, 2014). When users of a library are exposed to information resources available in a particular library, they stand a chance of accessing them and are also encouraged to utilize them to satisfy their information needs. Awareness of Libhub by postgraduate students is an issue of much concern, since its availability may not be a guarantee to complete usage. Meaning that optimum utilization of Libhub by users depends on users' awareness regarding Libhub value for their academic development resources. This is noted from the study by Alison & Baziraake, (2012) who found that there is a relationship between awareness of the available e-resources and the intention to use it. The author further opined that if the users' level of awareness of the availability of e-resources is adequate, then this will positively impact their behavioral intention to use e-resources. Msagati, (2014) observed that e-resources may not be optimally used by users due to a lack of awareness. Thus, optimum utilization of e-resources by users depends on the level of awareness about those resources. Dulle, Majanja & Cloete, (2010) opined that most of the students are aware of e-resources and some claimed to access and use them to access scholarly content in their academic careers. They further revealed that the low utilization of e-resources outlets by students and researchers is probably attributed to a low level of awareness of the resources. Similarly, (Shaqour & Daher, 2010) reported that there is maximum use of online information resources by a group of international students at Queensland University library which is attributed to their level of awareness of the resources. They further preached that the Queensland University Library website displayed multiple online resources, including course materials, subscription-based databases, free internet sources, and an online information literacy tutorial. Moreover, academic and library staff tries harder to promote the use of online resources to students (Shaqour & Daher, 2010). This implies that a lack of deeper understanding of resources on some of the respondents may not guarantee the usage of those resources and hence the need for more awareness creation programme so that the concept is well understood.

Factors influencing postgraduate students' use of Libhub to access information

Various scholars have identified different critical factors influencing the usage of e-resources. Wendo, (2013) revealed that there are personal and institutional factors that are considered when using e-resources. Equally, Alison and Baziraake, (2012) specified that various factors can influence usage of e-resources including individual organization, and social influence factors. (Alison et al., (2012) affirmed that utilization of digital content is influenced by human and institutional factors comprising providing information literacy training and internet bandwidth. Both personal and institutional factors are important in the usage of e-resources by users. Provision of adequate bandwidth becomes necessary for libraries, and for network services which assure the availability of electronic resources 24/7 (Eromosele, 2019; Okwilagwe & Ogbomo, 2012).

Most university libraries today have computer laboratories that are free to all students with no digital devices, to stimulate the use of digital resources owned by libraries (Kattimani & Naik, 2012) This implies that libraries should have the appropriate infrastructure to support the use of electronic resources. However, supportive infrastructure alone does not guarantee the usability of e-resources if one lacks computer skills. Suitable infrastructure is required in the use of e-resources but also the user must be computer literate to have effective utilization of e-resources of the particular library. Consequently, the necessary skills and competence in the different techniques of ICT skills are required. (Okwilagwe & Ogbomo, (2012) postulate that librarians, faculty members, and students are expected to have information and communication technology (ICT) skills to exploit information on electronic platforms. Information types and purposes may be the strongest reasons for one to use electronic resources. As opined by (Shaqourl & Daher, 2010) there are rapidly used electronic resources because users are looking for current information for research purposes. Contrary to what has been found by (Huded & Naikar, 2021), the majority of university students in India do not use e-resources for their research, hence, they end up citing and referencing old citations and references. Therefore, knowing the information you're looking for can determine the source and type of information because researchers are looking for current information compared to students.

Challenges facing students in accessing information through Libhub

Challenges are inevitable in the implementation of anything that has a beneficial outcome. Different aspects of challenges may hinder and facilitate a low percentage in the implementation of several activities in assessing electronic resources. Onyango, (2016) stated that in accessing electronic resources there are a lot of challenges such as shortage of equipment which includes; a few numbers of computers device, cables for the internet, routers, and other devices that makes difficulties on using electronic resources.

Lack of Information literacy (IL) skills and ICT skills has been pointed out as one of the major causes of the underutilization of electronic information resources in many African libraries. Computer literacy skills relate to computer hardware and software (keyboard, mouse, printer, file management, word processing, spreadsheets, databases, Internet, etc.), while IL focus on efficient and effective use of information sources to obtain the required information. This is supported by (Mulla, 2011) that a major barrier to the use of e-resources is the absence of user orientation training. This means some users are likely to have no ICT and IL skills that are required for accessing electronic information. The author also added that the majority of academics similarly face a problem of lack of training with the usage of e-resources.

Ajala & Ebijuwa, (2010) specified that internet access in the university environment provides the library with a means of delivering e-resources to users. Therefore, lack of it affects the optimum utilization of e-resources in many university institutions in Africa. Most African universities have poor and weak internet and network connectivity. It is maintained by (Aliyu, 2011) that in Africa there are weak ICT infrastructure that hinder the use of e-resources. Other study by (Shukla & Mishra, 2011) revealed that the majority of research scholars have the problem of low internet connectivity in the use of digital content. Also, (Mostofa & Mezbah-ul-Islam, 2015) declared the slow access speed of the internet as a continuing problem in accessing electronic resources. They also added that it takes too long to view or download pages and they find it difficult to get relevant information. In their views, (Bhatt & Rana, 2011) acknowledged that the most common problems with institutional repositories are low internet speed ~~connectivity~~, lack of awareness for accessing e-resources, technical problems, and doubts about permanency. Similar problems exist among users of library digital resources in general, but the degree of these problems varies significantly between developed countries and developing countries. Libraries are, therefore, charged with putting in place adequate mechanisms to enable effective and efficient access and use of electronic resources.

METHODOLOGY

This study was conducted at the Sokoine University of Agriculture in Morogoro region in Tanzania. The researchers used a case study design because it focused only on a single institution so as to effectively draw out the information relating to factors that motivate postgraduate students to use information through Libhub at SNAL. Both qualitative and quantitative data were collected through interviews and questionnaire. The sample size of this study included a total of (54) fifty-four respondents, where forty-nine (49) ~~respondents~~ were postgraduate students who were conveniently selected and five (5) library staff who were purposively selected including; Director of the library, system administrator, electronic resources coordinator, and two heads of Departments. The study collected both primary and secondary data and it used questionnaire and interviews to collect primary data. Secondary data were collected by reading relevant and current journal articles, and research reports, and accessed from reliable sources, which contained information relating to the study. The collection of primary and secondary data was guided by research objectives. Data were analyzed using SPSS Version 20 and Microsoft Excel Spreadsheet and were presented in graphs, charts, and tables. We analyzed qualitative data using the “Content Analysis Method.”

Respondents' Rate

During data collection, 49 questionnaire were distributed to the respondents, and all them returned the questionnaire forming a response rate of 100%. The response rate was considered good enough to proceed with data analysis and conclusion.

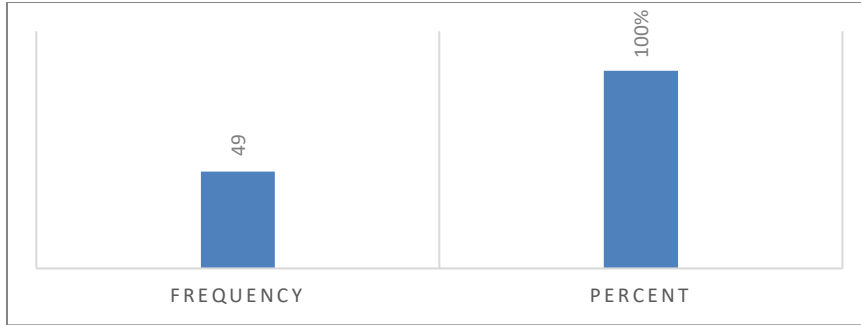


Figure 1: Number of questionnaire distributed and returned

Respondents' demographic characteristics

The presentation of background information of respondents in this study was made up of gender and age as briefly explained below:

Respondents' Gender

Gender is an imperative aspect of the fair participation of respondents in a scientific investigation. Knowing this implication, our study accommodated it by including both males and females in the sample. Descriptively, there were sixteen (16) female respondents' equivalent to (33%) and thirty-three (33) male respondents' equivalent to (67%). Equally, the assessment of ages of respondents took place in four categories. Findings show that (8.1%) were between 21 to 23 years, (16.3%) were between 24 to 26 years, (40.8%) were between 27 to 33 years, and (34.6%) were above 34 years.

Result and discussion

Findings from this study are presented based on the research questions, which guided the study as shown below:

Postgraduate students' level of awareness regarding Libhub

Table 1 below designates students' distribution awareness regarding Libhub services at SNAL.

Table 1: Postgraduate students' Libhub awareness (No. =49)

Category	Frequency	(%)
Yes	4	100
No	0	0
Total	49	100

The findings above indicated that all respondents (100%) agreed that they are aware of Libhub.

The way postgraduate students learned about Libhub services at SNAL

Table 2 below illustrates the methods employed by respondents to become aware of the available Libhub services at SNAL

Table 2: Various ways that students can learn about Libhub services at SNAL (No. =49)

Variables	Frequency	Percent
Information Literacy Program	32	65.3
Asking Librarian	6	12.2
Friends	4	8.2
Library Posters & Brochures	8	16.3
Library Orientation	2	4.1
Library Newsletter	6	12.2
SNAL website	22	44.9
SUA homepage	18	36.7

The Table2 above indicates that, the majority of postgraduate students (65.3) have learned Libhub services through an information literacy program, followed by (44.9 %) who have learned through the SNAL website, (36.7%)–through the SUA homepage, (12.2%) through asking a librarian, (16.3%), through library posters and brochures, (12.2%) through the library newsletter, and (8.2%) through friends.

Table 3: Using Libhub for searching information (No. =49)

Category	Frequency	(%)
Yes	38	77.5
No	11	22.4
Total	49	100

We requested postgraduate students to indicate whether they have used Libhub for searching information. The results exhibited that (77.5%) agreed that they used Libhub for searching information, while (22.4%) indicated that they have not used Libhub for searching information.

Table 4: Postgraduate students accessing Libhub services

Category	Frequency	Percentage (%)
Local Access	13	27
Remote Access	36	73

The result from Table 3 revealed that the majority of postgraduate students (73%) designated that they accessed Libhub remotely; few students (27%) said that they access Libhub only when they are at the SNAL premises.

Device used by postgraduate students to access Libhub services at SNAL

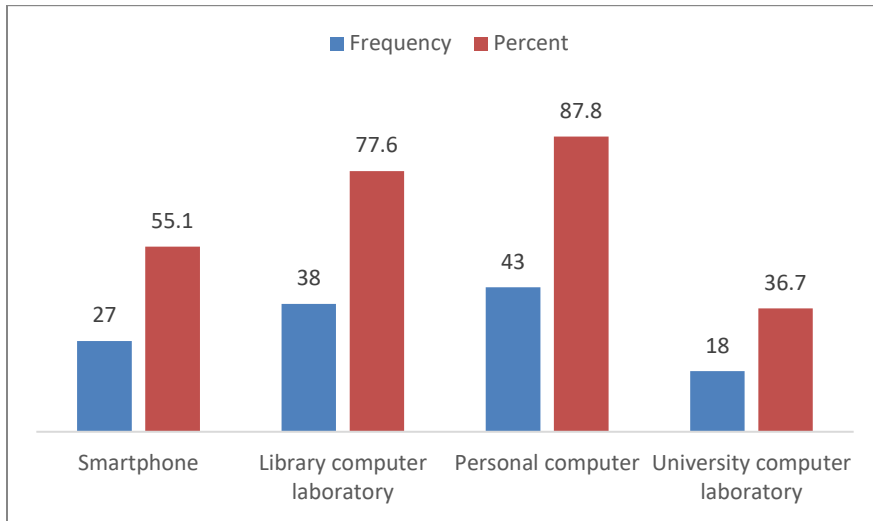


Figure2: Device used to access Libhub resources

Findings from Figure 2 above show that (87.8%) use a personal computer to access Libhub, followed by (77.6%) of respondents who used the library computer laboratory to access information resources on Libhub, while (55.1%) of respondents used a smartphone for accessing Libhub and only (36.7%) respondents used the University computer laboratory.

Table 5: ICT skills and knowledge of an electronic device (No.=49)

Variable	SA	A	D	SD
Personal competency skills and knowledge is the most factors that facilitate use of electronic services.	23 (47%)	8(16%)	3(6%)	15(31%)

Key: SA= Strongly Agree A= Agree D= Disagree SD= Strongly Disagree

From Table 5 above, 63% of the respondents strongly agreed and agree that that personal competency skills and knowledge are the most important factors facilitating use of electronic services and (37%) of the respondents strongly disagreed with the statement. This indicates that personal competency skills and knowledge are the most important factors facilitating use of electronic services.

Table 6: The situation of reliability and speed Wi-Fi services at the SNAL

Variable	Strongly agree	Neutral	Strongly disagree
Wi-Fi services at the SNAL are reliable and strong.	39(80%)	6(12%)	4(8%)

The Table 6 shows a majority (80%) of postgraduates strongly agreed that Wi-Fi speed at SNAL is good and reliable, (12.%) were neutral, and (8%) strongly disagreed that Wi-Fi speed at SNAL is reliable for the postgraduate student to use and access electronic resources.

Table 7: Relevance of the information available through Libhub

Variable	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	F	%	f	%	f	%	F	%	f	%
The information available through accessing Libhub is very relevant.	16	32.7	12	24.5	9	18.4	8	16.3	4	8.2

The researchers also wanted to know whether the relevance of the information available is one of the key factors that inspire the use and access of information through Libhub. The result indicates that the majority of 16 (32.7%) students strongly agreed, 12 (24.5%) agreed 9 (18.4%) were neutral, 8 (16.3%) disagreed and 4 (8.2%) strongly disagreed that relevance of the information available through Libhub is one of the key factors for using and accessing information through such a software

Table 8: Satisfaction when accessing and searching information through Libhub

Variables	Frequency	Response (%)
Strongly Agree	7	14.2
Agree	8	16.3
Neutral	3	6.1
Disagree	21	42.8
Strongly Disagree	10	20.4

Results from Table 8 above show that, (42.8%) of respondents disagreed on satisfaction, (20.4%) strongly disagreed, (6.1%) were neutral, (16.3%) agreed, and (14.2%) strongly agreed that the extent of satisfaction users get when accessing and using information through Libhub is one of the key factors.

Table 9: Students' Frequency of use of Libhub services at SNAL (No. =49)

Variables	Frequency	Response (%)
Daily	4	8.1
Weekly	12	24.4
Monthly	8	16.3
Occasionally	23	46.9
Never	2	4

From Table 9 above, (46.9%) of postgraduate students, access Libhub occasionally when they need e-resources. This study implies that postgraduate students at SNAL, (24.4%) on a weekly basis, (16.3%) on a monthly, and (4.1%) on daily basis

Table10: Challenges that Hinder Access to Libhub Services (No. =49)

Variables	Strongly agree		Agree		Normal		Disagree	
	F	%	f	%	F	%	f	%
Irrelevant material found in Libhub	9	18.4	14	28.6	24	49.0	2	4.0
Lack of person computer	12	25.5	2	4.1	29	59.2	6	12.2
Shortage of computers in the Library computer laboratory	22	45.0	16	32.7	7	14.3	4	8.2
Unreliable power supply	31	63.3	9	18.4	3	6.1	6	12.2
Inadequate ICT connectivity and infrastructure	14	28.6	5	10.2	21	42.9	9	18.4
Inadequate support from librarians	8	16.3	17	34.7	11	22.4	13	26.5
Insufficient training on Libhub	31	63.3	13	26.5	4	8.2	1	2.0
Inadequate Computer literacy skill	19	38.8	10	20.4	2	4.1	18	36.7
Slow access of internet connectivity	27	55.1	7	14.3	12	25.5	3	6.1
Lack of awareness	23	47.0	11	22.4	6	12.2	9	18.4

DISCUSSIONS

We presented the study findings based on respondents' demographic characteristics and the study objectives namely; analyze the level of SNAL postgraduate student's awareness of Libhub services, identify factors that influence postgraduate students' use of Libhub for accessing information and SNAL, and find out challenges hindering postgraduate students in accessing information through using Libhub at SNAL.

Respondents' rate

We distributed forty-nine (49) questionnaire, and the return rate was 100%. This achievement became promising because of our determination towards the study knowing about the utilization of Libhub by postgraduate students to access electronic information at SNAL. Equally, this 100% achievement also become conceivable because of the support we got from the SNAL management who connected us with the respondents. Concurrently, the SNAL Library management was eager to see this study happening because they wanted to use the study findings to analyze E-resources utilization.

Demographic characteristics of respondents

The study findings highlighted a notable gender disproportion among users of Libhub services at the SNAL, with a clear majority of respondents being males. This disparity served as emotional mirror image of the gender gap widespread among post-graduate students in their utilization of academic resources. It proposes a potential difference in access or preference towards utilizing e-resources, with female students possibly encountering more compared to their male counterparts. In terms of respondents' age demographics, the data revealed a predominant age range of 27 to 33 years old. This demographic profile is chiefly related to our study objectives, as individuals within this age group are often considered adept users of online resources. Their understanding with digital platforms and likely practice with academic research make them an ideal group to investigate regarding their utilization patterns and partialities regarding Libhub services.

Postgraduate students Libhub awareness

We enquired the respondents to specify their level of awareness regarding the Libhub services available at SNAL. We found that it is important to seek respondents' Libhub awareness in the first place because this acted as our road map judgment. This is because awareness is the key determinant that can make postgraduate students use electronic resources. Regarding students' awareness, we found that most of them had a deep knowledge and understanding of Libhub services. This specifies that the SNAL academic library has done an excessive job of promoting electronic resources to its users. We note that students' awareness on Libhub is facilitated by SNAL guidelines of 2014 that emphasize students' awareness on the available e-resources to increase visibility and usage of the resources. The findings were vindicated by an interview with the SNAL Director who informed us that;

“The SNAL library provides information literacy training every Wednesday in the Library Computer Laboratory. The training helped to raise electronic resources awareness among postgraduate students”. On the same manner, one of the heads of departments during the interview also explained that;

“We have various ways of learning about Libhub For example, when you visit the SNAL or SUA website, you can find some instructions there on how to use our e-resources, including Libhub. There are also some YouTube videos posted there that instruct users on how to access it. Moreover, we have a library orientation for new library users/students, and every Wednesday we offer an information literacy program”.

We were also aspired to know the way postgraduate students get to know about Libhub services at SNAL. We found out that most of the students learned Libhub services through information literacy programmes and through the SNAL Website. This suggests that the integration of ICT in the library contributed in building an easy learning environment. This study further stipulates that the user of the library stand a chance of accessing electronic resources once they are exposed to information resources available in a particular library. The finding is supported by Katabalwa and Jabir (2016) study which reported that e-resource use in libraries and information literacy programs is crucial.

We also intended to know if SNAL markets its electronic services to its users. We found out that SNAL uses various tools to market its services such as posters and noticeboards across

the university and university mail that informed the students and faculty members who all have university-based email accounts about the available e-resources. The findings are similar to Mwantimwa and Elia, (2017) study which informed that SNAL used its websites for training sessions every Wednesday to inform users on e-resources collection.

We were also fascinated to identify whether postgraduate students at SNAL use Libhub for searching electronic information. Through questionnaire, we found out that postgraduate students use Libhub to search information. This implies that despite the noted significance of books and other printed materials in the library yet, the availability of organized electronic resources in libraries is fundamental for the student especially postgraduate students in publishing their scholarly works. The study findings match with Msofe and Ngulube, (2016) who established that due to the explosion of e-resources, the diversity of search tools available, and the constant evolution of electronic sources of information, most university libraries are investing heavily in e-resources to satisfy teaching, learning, and research needs. This findings also concurs with that of Ruzegea and Msonde, (2021) who commented that the usage of e-resources in higher learning institutions has become more popular in recent years.

The finding corresponds with answers from interview with the head of department who stated that:

“SNAL provides username and password to its users to allow them to have access and use of electronic resources on the university's computer network and even while they are outside the university network through remote access tools.”

This infers that student can use their mobile devices to access and use the subscribed and free electronic resources. This response from the head of department is supported by Ahmed, (2013) study who reported that since Libhub's introduction in the mid-2014, the use of e-resources has been simplified as it has made it easier to access resources when users are on campus and off-campus, just like the way other universities are doing it across the world.

Devices used by postgraduate students to access information through LibHurb

We also found that the majority of postgraduate students use personal computers to search for information. This finding stipulates that most library users' especially postgraduate students in this current era use mobile technologies such as smartphones, tablets, and iPads, which make it easy for them to have everything they need at hand. Students also indicated that they mostly use university computer laboratories to search for Libhub services. This implies that the availability of desktop computers at SNAL and SUA computer laboratories with reliable Internet access, coupled with the provision of a regular power supply, facilitates the students' convenient access to e-resources for their research and studies on campus. The findings are in line with Technology Acceptance Model (TAM), which was introduced by Fred Davis in 1989, that explain how external variables are likely to influence an individual's decision to use new technology.

ICT Personal competency skills and knowledge of using electronic devices

We were also interested to understand the key factors that influence postgraduate students' use of Libhub services. Some of these factors are such as personal competency skills, knowledge on using electronic devices, , reliable and speedy Wi-Fi services, the extent of satisfaction users get when accessing and using information through Libhub and relevance of the information available

through Libhub. Students strongly agreed that ICT skills and knowledge of electronic devices are the key factors for searching and accessing e-resources on Libhub. This finding is similar to Ruzegea & Msonde (2021) who explained that the student's competence in the use of ICT has become a necessary component in promoting effective access to and usage of e-resources. Therefore, students are obligated to have ICT skills to enable them to exploit the potential of the Internet to search and retrieve e-resources useful for their research. On the other hand, Ranasinghe *et al.*, (2012) further suggested that computer and information literacy skills influence the usage of e-resources.

We also found out that most of the students strongly disagreed. Implying that personal competency skills and knowledge are not the only factors that can facilitate postgraduate students' use of electronic services offered by the University. Implying that students' usage of electronic services is subject to various factors other than their ICT competencies. In this view, SNAL should think of reviving ways of supporting students to have access to and use electronic services apart from believing that once students have ICT skills can access and use electronic information that is available in their collection.

Furthermore, we found that the majority of postgraduate students strongly agreed that the Wi-Fi speed at SNAL is good while few were neutral and strongly disagreed that the Wi-Fi speed at SNAL is good. The findings we collected from students, were supported by the finding we acquired from one of the library ICT experts who specified that

“Internet service in the libraries is one of the most important services at this moment, as libraries now have most of the online material and promote the use of it. Therefore, having WI-FI services encourages the user to utilize those online resources”.

This entails that SNAL has a strong and reliable internet connection that supports users' access to electronic services. It further entails that due to the reliability and stability of Wi-Fi at SNAL, postgraduate students love using Libhub services. The study findings concur with the (Ani, 2010) study which acknowledged that strong and reliable internet connectivity facilitates the proper access and necessary maximization of the use of e-resources.

We also found that students strongly agreed that it is easy to use the information through Libhub because it provides a library gateway to information with a single interface to discover and access the institution subscribed databases. In connection with this, the TAM Model advanced by (Davis, 1986) specifically addresses the determinants of system use and acceptance among users through perceived usefulness and ease of use. The perceived usefulness of e-resources improves teaching performance and research tasks while perceived ease of use is the extent to which a person believes that using the system will be free from error. This finding is supported by (Rawtani & Babbar, 2013) who indicated that most of the electronic resources subscribed to by the SNAL have been linked and are accessed through Libhub. In addition, the study findings correspond with (Hindagolla, 2014) who commented that relevance and system quality have been reported to influence the perceived usefulness, ease of use, and eventual acceptance and use of e-resources.

We also wanted to know about the students' frequency of usage of the Libhub service at SNAL. We used interviews and questionnaire to collect information regarding students'

frequency of use of online library services. This is because we wanted to get information from students and library staff as well. The information we got from the library staff is that usage statistics is promising since there is an increase in usage statistics of e-resources. From students' responses, we found that most of them use Libhub slightly due to the lack of training and skills on how to access information through Libhub. These responses were supported by SNAL Libhub usage statistics we got from electronic coordinator who admitted that "there has been a slight increase in usage of Libhub since April 2013, in which the downloads of full-text online articles were only 304 per month as compared to 1,733 articles per month as of January 2016 (SNAL Libhub usage statistics, 2016)".

We were also interested to know about the challenges that hinder postgraduate students from accessing information through Libhub. From students' responses, we noted that unreliable power supply, inadequate training on Libhub, slow access to internet inadequate computers in the library and inadequate computer literacy skills were the major challenges that hindered postgraduate students in searching information through Libhub. The findings were also supported by the response from one of the Libhub administrators during the interview who informed us that:

"In fact, in the use of technologies, limitations are inevitable, for example here we frequently face the problem of power cut off, as you know this is one of the oldest universities, so even its infrastructures are very old, that is why we face this problem. Although we have stood by the generator, we have not always used it because it is expensive to run that generator for an extended period of time"

SUMMARY

This research study was conducted at the Sokoine University of Agriculture-Main Campus in Morogoro Region in Tanzania. The study examined factors that influence postgraduate students' use of Libhub to access information at the Sokoine University of Agriculture Library. The study involved 54 respondents, whereas 5 (Library staff) were involved in oral interviews and 49 were administered questionnaire. The study had (33) male respondents, equivalent to (67%) while female respondents were (33%). The majority of students belonged to the age group of 27 to 33 (40.8%). The study found that postgraduate students were aware of Libhub. The study findings indicated that postgraduate students became aware of Libhub services in the library through the information literacy program, SNAL website, and SUA homepage. The findings further indicated that postgraduate students were using Libhub for accessing information. It further indicated that postgraduate students were accessing Libhub either locally or remotely by using personal computers, the library computer laboratory, the university computer laboratory, and their smartphones. The study revealed that postgraduate students possess basic computer skills but lacks adequate information searching skills. Also, SNAL provides a WI-FI service for students to use when they are in the library building. Again, postgraduate students were constrained by various factors in the use of Libhub for accessing information. Those constraints include, slow access to the internet connection inadequate computer literacy skills, inadequate training on Libhub, inadequate support from librarians, inadequate ICT infrastructure, unreliable

power supply, shortage of computers in the library computer laboratory, inadequate personal computers, irrelevant material found in Libhub.

CONCLUSION

The following conclusions is drawn from the objectives of the study. Through the findings of this research. We found that, SNAL has gone through a substantial transformation to arrange and circulate information; Libhub has developed into a significant instrument for gaining access to information to facilitate teaching and research. The research focused on the factors that influence postgraduate students' to use of Libhub in accessing information, and the findings from this study indicated that postgraduate students from SNAL are fully aware of the Libhub and its potential, they access Libhub occasionally when they need e-resources. The study concludes that, among other factors at SNAL the availability of desktop computer laboratories with reliable Internet access accelerated students' convenient access and use of e-resources through Libhub.

RECOMMENDATIONS

Through our study findings, we recommend that the SNAL management should boost the utilization of e-resources through Libhub, and training among users and librarians and it should be a continuous process. The staff should, in turn, equip students with innovative methods and techniques of searching to easily search, evaluate, and retrieve e-resources through Libhub. We also recommend that SNAL should also address the situation of reliable power supply by making sure that there is an automatic generator in place. We also recommend SNAL to improve its Internet speed to enable users to easily access information without much waste of time .

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