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# Library Staff Perceptions of Virtual Library and Information Services at Makerere and Uganda Christian Universities, Uganda

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## Abstract

*This study, which was underpinned by the ServQual model aims to determine the perceptions of library staff of Makerere and Uganda Christian Universities on the provision of virtual library and information services (VLIS), the challenges faced and strategies for the enhancement of VLIS provision. A qualitative design was used to collect data from eight library staff who were selected through purposive sampling until data reached saturation. The findings indicated that majority of librarians exhibit poor perceptions towards VLIS; as manifested in their reluctance to participate in VLIS provision, their conservatism, which impedes acceptance of new VLIS and their failure to apply knowledge and skills obtained during trainings. Several librarians perceive VLIS negatively, viewing VLIS activities as extra work and leaving it to only a few colleagues. In line with the tangibility element of the ServQual model which stipulates appropriate equipment resonates with adoption of new technologies, the study recommends that librarians fully accept, adapt, and provide VLIS in order to remain indispensable in today's technologically savvy academic environment. Despite the glaring wake-up call for libraries to fully embrace VLIS, it remained limited and the status of its provision not clearly known. This study presents librarians' perceptions towards VLIS for its enhanced provision. Although some studies exist in the area of virtual library resources, not many have thoroughly examined VLIS, their perceptions, provision and challenges in both public and private universities. This study hence adds to the existing body of literature on how VLIS can be enhanced, especially in developing countries.*

**Key words** — Online Academic Library Services, Staff attitudes towards Virtual Library and Information Services, Academic Libraries, Librarians' perceptions, Makerere University, Uganda Christian University, Uganda

## **1. Introduction**

The advancement in technology, research and innovation, along with evolving library user information needs, has significantly affected traditional library services (Augustine et al., 2018). The internet invasion has engendered 21st-century users who are less inclined to physically visit libraries but instead rely on alternative sources of information such as Google from their convenient locations (Kumbhar & Bidve, 2016). There is hence a great need for virtual library and information services (VLIS) due to invasive technology (Gul & Bano, 2019; Okundaye et al., 2019; Rahayu & Day, 2017), competition from non-library gateways (Kumbhar & Bidve, 2016), changing users' needs and institutional policies (Madu et al., 2020), as well as unprecedented calamities that threaten physical libraries (Bailey et al., 2020; Curzon, 2000; Doolittle, 2007; Liu et al., 2017).

For libraries to thrive and remain relevant in such an academic environment that is technologically advanced, they have to embrace VLIS in the face of information communication technology (ICT) proliferation (Gul & Bano, 2019). Indeed, several libraries have adopted VLIS such as e-resources, electronic document delivery services (EDDS), virtual information literacy, library website, online public access catalog (OPAC), scholarly communication, discovery tools, remote access to e-resources and Selective dissemination of information (SDI), e-mail services, social media platforms (Ali & Gatiti, 2020; Askin et al., 2021; Becker et al., 2022; Parmar et al., 2022; Shastri & Chudasma, 2022), and LibGuides (Mwanzu et al., 2022). Despite the numerous benefits VLIS offers however, such as timely and convenient access to a wide range of current electronic resources, its' adoption and implementation remain limited, especially in developing countries like Uganda where it was reportedly confined to addressing user queries and providing Electronic Document Delivery Services. (Nalumaga & Byamugisha, 2021).

In this light, it is worth noting that the successful adoption and implementation of any service largely depends on the willingness of staff responsible for offering that service. Much as this is true, previous research has indicated a negative perception of VLIS, which appears to restrict its implementation in terms of both quality and quantity (Nabushawo et al., 2016). This could mainly be attributed to the fact that virtual library services are still a delusion, especially in Africa, with many librarians still having misconceptions about what should constitute a virtual library, an issue that depicts limited knowledge about VLIS (Akpan & Eni, 2019). Indeed, most successful stories of VLIS have been registered in developed countries, unlike in developing countries where

librarians are still struggling with efficient provision of these services (Abubakar, 2022). This could imply that developing countries are still operating traditional libraries and largely offering physical library services. In addition, the generation of librarians also determines whether they will perceive VLIS negatively or positively. In a study that investigated librarians' perceptions of Facebook and Twitter as communication tools to provide virtual library services, Fasola (2015) revealed that younger librarians exhibited a more positive perception and higher acceptance of using these channels than older librarians.

The study hence aimed to determine the perceptions of library staff of Makerere University and Uganda Christian University (UCU) in order to recommend strategies for enhanced provision of VLIS. The specific objectives included.

- 1). To determine librarians' perception of VLIS at Maklib and UCU library.
- 2) To establish challenges faced in VLIS provision at Maklib and UCU library.
- 3) To establish strategies for the enhancement of VLIS provision at Maklib and UCU library.

## **2. Theoretical framework**

The study was anchored on the ServQual model which stipulates that the utilization of a service by users is dependent on the perceived service quality offered by the library (Al Bassam & Al Shawi, 2011). The ServQual model is a descriptive method for determining the quality of customer service. It is a measure of how effectively a service matches customer expectations, and it is a very popular notion of service quality measurement (HeryWihardikaGriadhi, 2018). There are five elements that have an influence on the effectiveness of services: (1) Tangibility (appropriate planning including physical facilities, equipment), (2) Reliability that is; Service by Library staff including serving promptly, accurately, and satisfactorily; (3) Responsiveness (Use of library services and information), (4) Assurance (Customer Service including the knowledge, competence, courtesy, and credibility of staff), (5) Empathy (Added-Value Services including the ability to empathize with customers) (Ho et al., 2023; Parasuraman et al., 1985). Three aspects of the ServQual model were the most suitable to this study and hence adopted including reliability, assurance and empathy. The reliability component specifically pertained to the service provided by library staff, encompassing their capacity to serve users promptly, accurately, and satisfactorily.

Assurance guided in examination of customer service aspects such as the expertise, competence, courtesy, and credibility of library staff. Empathy probed the provision of added-value services and the capacity to empathize with customers (Ho et al., 2023; Parasuraman et al., 1985). By addressing these aspects, libraries can enhance their overall service quality and meet the expectations of their users. According to this model, service quality affects customer perception and consumption of the service (Gathoni & Van der Walt, 2019). So, it is crucial to determine how VLIS is perceived by library staff in order to enhance its utilization.

### **3. Literature review**

According to the ServQual model, the utilization of a service by users is dependent on the perceived service quality offered by the library (Al Bassam and Al Shawi, 2011). In spite of this, previous research has indicated a negative perception of VLIS, which appears to restrict its implementation in terms of both quality and quantity (Nabushawo et al., 2016). This could mainly be attributed to the fact that virtual library services are still a delusion, especially in Africa, with many librarians still having misconceptions about what should constitute a virtual library, an issue that depicts limited knowledge about VLIS (Akpan & Eni, 2019). Indeed, most successful stories of VLIS have been registered in developed countries, unlike in developing countries where librarians are still struggling with efficient provision of these services (Abubakar, 2022). This could imply that developing countries are still operating traditional libraries and largely offering physical library services.

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### **4. Research Methodology**

**Research design:** This paper draws from a comprehensive PhD study that employed a pragmatic research paradigm with mixed methods approach to examine VLIS for enhanced provision and utilization. Particularly, the qualitative design was adopted to determine library staff perceptions through in-depth individual interviews.

**Population and sampling:** Eight library staff were selected through purposive sampling techniques until data saturation was achieved (Braun & Clarke, 2012). Purposive sampling was applied by targeting University Librarians involved in formulation of organizational policies that affect VLIS provision. Being a qualitative study, we identified and recruited a small number to provide in-depth information about the concept being explored (Creswell & Creswell, 2018). These included

University Librarians who are in charge of decision-making; reference librarians who directly interact with users; e-Resources librarians who are in charge of virtual resources and systems administrators in charge of technical aspects.

**Area of study:** The study was conducted at Makerere University Library (Maklib) and UCU library. The researchers specifically intended to target universities which had evidence of VLIS provision in the form of statistics in the year 2020/2021 when the library buildings were physically inaccessible due to COVID-19 lockdown. Among the first three universities, according to the 2021 Ugandan University Ranking (UniRank, 2023), only Makerere University and UCU had evidence in the form of statistics that they actively provided VLIS. UCU had user statistics from RemoteX, while Makerere statistics were extracted from MyLoft, which gives access to the different platforms that make up the digital library containing all library resources. In both the RemoteX and MyLoft platforms, users could access the library's e-resources remotely, even during the lockdown.

**Ethical considerations:** In this study, permission was obtained from the Research and Ethics Committee (UCUREC-2022-323) before data collection. Voluntary participation was observed by giving participants liberty to freely participate in or opt-out of the study anytime at will. Informed consent was also granted when the researcher informed participants of the purpose, benefits, and risks of the study. Anonymity and confidentiality, where the identities of participants were concealed, were also ensured (Bordens & Abbott, 2018). For the trustworthiness of this study, member checking was ensured where researchers emailed transcripts to the participants to verify that their submissions were captured accurately.

## **5. Findings of the study**

The study explored librarians' perceptions towards VLIS. As VLIS providers, how librarians perceive VLIS is vital in their delivery of the services. Several themes emerged from the data including poor perception among majority of librarians, Failure to apply knowledge acquired from trainings, conservativeness and lack of confidence by most librarians

### **Poor perception among majority of librarians**

The findings indicated that attitude was a great factor that influences provision of VLIS services. A Maklib staff exposed that librarians' attitude towards VLIS are very poor. He explained that

when librarians are identified for training and something new is introduced to them, they will not perceive it as an opportunity to learn but rather as extra workload that is being added on to them. The biggest hindrance to VLIS, is poor attitude, as this library staff explained:

If the university or the library in particular went ahead and provided training opportunities for people, you identify people who can handle this particular virtual service and then you provide for them the training. Our attitudes, our attitudes are very poor, you introduce something new to people, they feel you are adding them more workload. Actually, I could say the biggest hindrance to our services is the attitude (Staff U1S).

Asked about librarian's responsiveness towards virtual services, many interviewees observed that just a small section of staff are interested and hence flexible in the actual provision of VLIS. A respondent from Makerere University explained that majority of librarians are apathetic and even when called upon, their response is far from positive. She cited an example of how she had sent out a call for librarians to come and facilitate about three training sessions in one week but only one person responded as she explained:

The support team is very flexible but not everyone. Once you tell them we have this training, they will fill the gap but generally the whole professional staff are not flexible.

Remember this week I sent a communication about three trainings that we have and I communicated to our staff that please we are going to cover these areas and whoever is willing to come and facilitate, please let us know, only one person volunteered (Staff U1E).

Another library staff from UCU also shared similar findings. He could not hide his gratification in a team of a few dedicated staff who he is proud to work with. He however revealed that there are staff who are totally disinterested, just drag their feet and see no need to improve. He referred to them as "pointing librarian", who prefer to sit in one place and direct users by pointing where a certain book is located. He wonders what their value is in what they are doing and thinks they are not fit to be librarians as expressed in his words:

I'm proud to have such a team and I'm happy working with them. They are committed to what they are doing and it is a good feeling to have such a team. There are those staff who would just drag their feet, those who are totally disinterested, they probably feel entitled.

They don't see the value of what you are presenting to them, they don't feel like they need to improve. But what that means really is that you are not that fit to be a librarian honestly, because if we are in the help industry which we are, there is no way you may not want to help. You can't tell me you are going to be a pointing librarian. How, where is value in what you are doing? (Staff U2L).

### **Failure to apply knowledge acquired from trainings**

Unfortunately, much as staff are trained in VLIS provision, many of them reportedly attend trainings for the sake of it. They do not apply the knowledge acquired from trainings back to their places of work as staff U1R lamented:

A quarter of the staff could be willing to learn. So, if you train like 60 members of staff, only ten or twenty are willing to learn. Most of them come to attend for the sake, but they are not willing to apply what they have learnt (Staff U1R).

### **Conservativeness of librarians**

Librarians were reported to exhibit conservativeness, wanting to maintain the way things have always been done in the past. A Makerere University library staff reported that in case a new idea is brought up, some librarians will oppose it, accusing him to show off, yet he is still new and young. This implies that older librarians may not easily embrace VLIS as the young generation as explained by staff U1R:

They are used to a system where they say; this is what is supposed to be done, how it was done is how it is supposed to be done. In case you try to change, you are seen as someone who is an enemy, trying to show off. You say let's try to do this, they say, no, no, you are new and young, we have been here for twenty years and this is how we have been doing this, so that attitude to change, is such a very big challenge here (Staff U1R).

### **Lack of confidence by librarians**

Librarians were reported to lack confidence to comfortably provide VLIS and yet fear to express their inadequacy so as to be assisted to learn. Staff U2E informed that during library staff training session, some librarians lack knowledge in certain areas and yet are shy to disclose their ignorance. As a result, during the training, they hide their identity and use pseudonym such that

no one will identify who they really are. She explained that some people deliberately refuse to display their names in the training but instead disguise themselves as techno pop. It is only much later after the training that such a person will approach the trainer and ask why they wanted them to reveal their identity as explained:

Some people can be intimidated by others. Some people would even refuse to put their names, on zoom; you see like techno pop will chat and put issues but you don't know who the person is and then later they will come and say, what did you want with me? (Staff U2E)

## **6. Setbacks limiting VLIS provision**

The library staff were also asked to air out setbacks which are hindrances to provision and utilization of VLIS. They advanced several factors which are recorded in the proceeding section.

### **Insufficient infrastructure**

Smart phones are necessary to enable VLIS provision even outside office running other errands. Staff U1R explained that although laptops were provided by their university administration, it's not easy to move with a laptop everywhere. He gave an example that when he is going to town, he cannot go with a laptop yet he can take a phone because of its portability. Unfortunately, librarians are not availed with mobile phones specifically dedicated to VLIS. Instead, they use their personal phones and staff U1R cited challenges associated with this, in his own words:

We need the gadgets like now personally, I use my phone, and this phone is limited in space meaning that I have to delete some messages which are good for record keeping purpose but because it's my personal phone, I give much attention to my personal messages than the organizational messages. So that is one, if the library could provide a phone dedicated specifically for virtual library services, that would be good (Staff U1R).

### **Lack of official communication lines designated for VLIS**

In addition to using their personal mobile phones to offer VLIS, the respondent disclosed that even the contact numbers put on the website for users to consult are staff personal phone numbers. Clarifying about the danger of this, staff U1R explained that when a staff member leaves the workstation, they definitely have to go along with their phone numbers. This means the library has

to switch to a new line from the one which users were familiar with. It can also mean that users can keep contacting the staff who left yet their attitude towards their workplace might have deteriorated as staff U1R narrated:

One of the proposals is that when we get a phone for the person in charge of the virtual reference services, we should also get an official line for the library to be used for all those services. This means that if I go somewhere or I leave the library, they have to disconnect my number and yet users are used to it. And my attitude, someone might never know how the attitude changes when you leave the particular job so it's better to get a Sim card, a phone and then maybe constant data provisions for that person. Staff U1R

### **Insufficient facilitation of staff with data and airtime**

Much as it is true that VLIS cannot be provided without data, library staff are availed with little or sometimes no data. As a result, facilitators of the training have to improvise for back-up data on their mobile phones in the event that internet goes off in the middle of a training. Staff U1R reveals that this data is by and large not provided by the library administration, even when facilitators are conducting library trainings as he informed:

In most cases, having data back-up is our own initiative because our motivation comes when the users' needs are met. Sometimes the library also provides some airtime which is not so regular but that one cannot stop us from providing the service (Staff U1R).

Internet is a major backbone of VLIS and indeed, universities have endeavored to provide access. At Makerere University however, investment in procurement of computers is being phased out and gradually giving way to expansion of internet access. Staff U1S informed that Makerere is working towards ensuring that there is internet availability in all parts of the university so that all the university community can have access as he narrated:

As the university we are moving away from labs, having like 100 computers in one room, as a university we are moving away, towards access. By access we mean that we provide you the user with internet connectivity, so we no longer really buy the physical PCs but we have tried to expand connectivity to all areas of the library, even outside the library and the university has even gone beyond that, it has provided it even in the halls of residences, so we have wireless all over the place (Staff U1S).

However, much as there are efforts of extensive internet provision, there are still challenges of slow internet connection in certain areas of the institutions. The UCU library building for example, has certain floors where internet is poor. Staff U2E said that there are spots which are known to have strong Wi-fi and other areas known for poor Wi-fi as she explained:

Yeah, challenges are there. Like this level, if I can give an example, this level where we are, the internet is slow. It is not as stable and strong as it is on level 2. Interestingly, we're in the building inside but when you get outside there, it is very strong. So, there are spots usually where you know that Wi-Fi is strong. I am not sure if the walls can block the Wi-fi but it is weak in some areas (Staff U2E).

Slowness in internet was attributed to peak hours by some interviewees. It was reported that internet slows down especially at the afternoon when many users are searching databases at ago. Staff U1E however notices a general improvement in the internet compared to how it used to be previously as she re-counted:

Sometimes, it is really slow especially on the peak hours like in the afternoon, in the evenings it's really very slow but I think it has been improved over time, it's not as bad as it used to be and it usually happens maybe like an evening when you are all searching at the same time and then we have challenges, even when I am in office here the internet is really fast compared to the previously (Staff U1E).

This respondent further noted that internet issues are very common in developing countries. Staff U1E cited an example of the previous day where internet went off and they could hardly do anything, explaining that, "In a developing country, I should say, there will always be internet instability, there are times internet just goes off, now like you remember yesterday, internet just went off, we could hardly do anything (Staff U1E).

## **7. Suggestions to improve VLIS provision**

### **Inclusiveness of all librarians in VLIS provision**

Equal inclusion of librarians in VLIS provision emerged to be the general goal of library administrators interviewed. One librarian explained that all library staff should acquire necessary capabilities and participate in VLIS provision. This is because a single individual may not have

knowledge of everything hence there is need for division of labor where each librarian specializes in a given field as she explained:

We had already a training team in place and a training team means that it's not a few staff, we had to look at every college, first of all the core team, actually is not only from the main library but from different colleges. Eventually you find that everyone is drawn in because if I don't know something, I ask, who knows? Somebody else can get me the information (Staff U1L).

Participation of all library staff is also vital based on the amount of work that could be overwhelming for only a handful of librarians. Staff U1R explained that when uploading students' research in the IR was made mandatory through a university policy, it became much work to edit students' research before they could be cleared for graduation. He explained that unlike before when only the digitization section could handle editing of research, this time all college librarians had to be involved in editing so as to expedite the process as he narrated:

It's a collective effort. Initially, before it was made mandatory, it was digitization section handling but when it became mandatory, numbers were over whelming because it needed someone to first get the work approved to get clearance which would take months. So, what was done is, all librarians were trained in editing. However, to avoid errors and standardization, it's only the college librarians who were given rights. They identified staff whom they think have the potential and enthusiasm to do the editing, they delegate that staff to work on the college collection (Staff U1R).

A staff from UCU shared a similar experience of how each librarian is in charge of a given service. This shows that not only one librarian should charge of each and every VLIS service provided in the university as explained that, "We have divided ourselves; One is in charge of Instagram, another in charge of Facebook, another in charge of Twitter and then all of us telegram" (Staff U2E).

Departure of staff was cited as another reason why all staff, not only a few are encouraged to engage in VLIS provision. Staff U1L explained that skilled staff can leave or retire and a gap will be left to fill. The strategy hence, is to ensure that everyone gets to know how to provide virtual services as staff U1L explains that, "Even the best trained staff can leave.

Like you, you are very good at something you have been training and then you leave. So, our idea now, is to ensure that as many people as possible should know” (Staff U1L).

### **Transfers**

Occasional transfers were suggested as one of the strategies to give librarians an opportunity of performing new challenging tasks and help to improve their attitude towards VLIS. A Makerere University staff was of the view that when a librarian is given a new office where they must deliver on VLIS provision, they will have no choice but to get out of their comfort zones and learn VLIS provision as he narrated:

Some people see transfers as a bad thing, but me I see transfers as something positive because anytime you are put to a new place, there are new changes you bring and if you want to implement something; bring in new people in case the other ones are hesitant to change. If you transfer someone who is not interested in trainings and make them the head periodicals, the one who coordinates all the trainings, there is no way training requests will come to you and you fail to train (Staff U1R).

### **Hampering promotions of the “mentally lazy librarians”**

One respondent referred to some librarians as “mentally lazy” and suggested hampering their promotions as another strategy to interest them in VLIS provision. A staff member from UCU felt that a promotion should be earned and it should be based on one’s value to the organization as argued in his own words that, “The next time you come for promotion, requesting, I say okay, you would like to be promoted, for what purpose and how? How are you going to earn the promotion? You’ve been doing this for years, where’s your value?” (Staff U2L).

### **Termination of the non-performing librarians**

This was suggested as another way of awakening staff that are not willing to learn and provide VLIS. A UCU staff suggested that “lazy librarians” who do not measure up to the current changing roles of librarianship should be relieved of their duties and only keep the active team, as he cautioned:

...You let go of those who are not up to speed and keep the team that you know is very active and very specific. As librarians, our roles change greatly. Just to emphasize this, we had in quotes “Lazy librarians” (Staff U2L).

Good communication with staff was cited as a suggestion to improve VLIS. Once the communication is poor among library staff, it is hard to know that a colleague needs assistance. From Makerere University, staff U1E explained that good communication promotes teamwork as librarians get to appreciate that they are part of the team. In addition, this respondent narrated that when the communication is spoor, some librarians will develop a wrong attitude that VLIS is meant to be provided by specific people and not all librarians. She recalled that after a certain training, librarians willingly participated and teamwork was realized, as stated:

“With staff, communication is key. If you know something, and you don’t communicate, some people will not bother so what we do, through those trainings we communicate. And you see, when you communicate, their attitude starts changing and they are like oh, now we are also part of them. When you don’t communicate, they will think; anything to do with this, that is someone’s thing, so that is the kind of thing that we want to phase out because if we don’t communicate, some people are naturally not bothered at all (Staff U1E).

## **8. Discussion and implications of findings**

Findings revealed that majority of librarians have a poor attitude towards VLIS. Several interviewees disclosed that librarians view VLIS activities as extra work loaded on to them, leaving the work to only a handful of their colleagues. VLIS activities like conducting of IL training and editing students’ research for uploading in the IR before graduation among others can be very tasking. Despite of this, many librarians perceive that such work is meant for only a few of their colleagues. This contradicts the reliability dimension of the ServQual model where librarians are expected to be committed to provision of satisfactory services in a timely manner (Gathoni & Van der Walt, 2019). This finding is unfortunately not unique to the surveyed universities. Extant literature has revealed pessimism of librarians’ attitude towards VLIS. Nabushawo et al. (2016) concurred that there are negative attitudes towards online services and resultantly, limited practice of virtual services leading to inadequacy of VLIS in terms of quality and quantity. In another study, “Towards implementing a virtual library for universities in Nigeria”, Akpan and Eni (2019)

submitted that virtual library services are still a delusion in Africa, with librarians still having misconceptions of what should constitute a virtual library, an issue that depicts limited knowledge about VLIS.

Fasola (2015) too supplemented that that librarians who were older in age exhibited a negative perception of using social media platforms as channels of communication to users than younger librarians. Abubakar (2021) made a general observation that unlike in developed countries where VLIS has registered success, librarians in developing countries are still struggling with efficient provision of VLIS and still operating traditional libraries and largely offering physical services. These findings point to the fact that many librarians have not yet adapted to the rapidly advancing technological academic environment, which is sarcastic given their changing roles. Librarians are urged to adhere to the changing technological world in order to meet library users' ever-changing diverse needs.

The study findings also revealed lack of official laptops, phones and lines designated for VLIS. Contrarily, the ServQual model dimension of tangibility guides that university libraries prioritize the provision of adequate facilities and resources, so as to enable optimal utilization of their services (Ho et al., 2023) . Indeed, ICT facilities are a great enabler for leveraging VLIS provision and consumption. Library staff emphasized that for VLIS to be provided and consumed successfully, there are ICT prerequisites that must be in place including computers, internet, smartphones, and airtime. However, on their part as VLIS providers, librarians reported a lack of laptops, except for a few team leaders. These results are in agreement with Nalumaga and Byamugisha (2021) findings which alluded that Makerere University cited lack of institutional laptops for librarians except for project based equipment. Results of this study also exposed the need for reliable internet. Indeed, reliable internet is still a challenge and its need has been emphasized by other authors, especially in Africa. Bushman et al. (2021) highlighted that the average internet speed in Uganda is only 2.4 Mbps, which is much lower than the 7.0 Mbps global average.

Mobile phones too, were mentioned as a requirement for the convenient provision of VLIS. Library staff mentioned that phones are portable to move with, enabling users' queries to be addressed even when one is running other errands in town. Additionally, findings informed that mobile phones are compatible with many virtual library applications and serve as internet backups in case of power outages. Other studies also submitted numerous functions of phones to VLIS provision

and utilization. (Askin et al., 2021) in agreement emphasized that phones are useful in calling library patrons regarding resetting their accounts and passwords. Much as the importance of phones in VLIS provision is emphasized in the extant literature, the current study findings reveal that surveyed universities do not have official smart mobile phones and lines specifically dedicated to VLIS. This calls for enhancement of efforts towards VLIS provision by availing official smartphones and phone numbers that are specifically designated for VLIS provision, instead of relying on personal phones and lines for individual librarians.

Results of the study revealed lack of confidence and failure of library staff to implement knowledge from CPDs. In spite of the several efforts invested in equipping librarians with digital and IL skills, findings of the study findings still revealed some inefficiencies in librarians' skills. Several respondents disclosed that some library staff hide their identity during virtual training for fear of expression, while others are unresponsive about VLIS activities due to a lack of the necessary knowledge and skills. The lack of necessary skills, reportedly causes a lack of confidence and affects VLIS provision. Hamad et al. (2021) concurred with these findings when they reported that the level of digital skills has a positive influence on library staff acceptance and use of technology.

## **9. Conclusion**

The study concluded that there is evidence of technophobia among majority of librarians as manifested in the fear, dislike and avoidance of VLIS provision. The study further concluded that possession of digital and IL skills was another facilitator for VLIS provision, access and utilization. Yet, the study established that the much-needed digital and IL skills for facilitation of VLIS provision are still lacking for the majority of librarians.

## **10. Recommendations**

The recommendations below are submitted in accordance to the ServQual model that underpinned this study. In line with responsiveness, one of the five attributes of the ServQual model which stipulates service utilization, together with empathy, another attribute which requires librarians to provide value-added services and empathize with users (Ho et al., 2023; Parasuraman et al., 1985), we recommend inclusion of all staff in VLIS provision. This could be achieved by timetabling library staff for conducting IL and transferring staff to sections which are actively involved in

VLIS provision as well as intentionally considering VLIS provision activities in staff appraisals as a pre-requisite for promotion.

Furthermore, whereas library staff retooling for the acquisition of IL skills should be a responsibility of several players including library management and external stakeholders like library consortia (Robinson, 2019), individual librarians should primarily shoulder the responsibility of self-reinvention to keep abreast with the current ICT trends (Varlejs et al., 2016). Unfortunately, the current study findings indicated that the majority of library staff lack interest in acquiring the necessary skills for VLIS provision. Library staff are hence admonished to take personal initiatives to re-skill themselves so as to provide quality services in the current changed technological environment. Library associations too are urged to interest and train all library staff in the acquisition of IL skills while library management is reprimanded to assign VLIS tasks to all library staff to offer virtual instruction. This way, library staff will be motivated to improve their skills.

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