

# Personnel Information and Communication Technology Skills and Information Service Delivery in Libraries of Anglo-Saxon-Style State Universities in Cameroon

Mary Benita Lamnyuy<sup>1</sup>, Rosemary M. Shafack<sup>2</sup>, Njungwa Zinkeng Martina<sup>3</sup>

<sup>1</sup>PhD Research Student, Department of Library, Archival and Information Sciences, Faculty of Education, University of Buea, Cameroon.

<sup>2</sup>Professor of Library, Archival and Information Sciences, Department of Library, Archival and Information Sciences, Faculty of Education, University of Buea, Cameroon.

<sup>3</sup>Professor of Educational Psychology, Department of Educational Psychology, Faculty of Education, University of Buea, Cameroon.

DOI: <https://doi.org/10.47772/IJRISS.2026.100600552>

Received: 06 June 2026; Accepted: 12 June 2026; Published: 29 June 2026

## ABSTRACT

This study investigated personnel skills and their impact on information service delivery in academic libraries in Anglo-Saxon-style state Universities in Cameroon. The Cross-sectional survey research design was used in this study. The sample size for the study was 344 (323 postgraduate users and 21 professional staff). Data were collected using a questionnaire, interview guide and observation checklist. Reliability of the questionnaire was tested using Cronbach's Alpha test to check the internal consistency of the responses. The hypothesis was tested using a one-sample t-test analysis. Qualitative data collected through open-ended questions and semi-structured interviews were analysed thematically. Findings revealed that personnel skills have a moderately significant impact on information service delivery in Anglo-Saxon-style state universities in Cameroon. The t-test analysis revealed the t-cal. value = 93.613 is greater than the t-crit. value = 1.960 at  $\alpha < .05$  level of significance with degree of freedom (df) = 322. The study recommends that staff skills should be improved through training, physical information resources should be managed more digitally for easy accessibility, and a modern state-of-the-art structure should be provided to enhance complete digitisation in academic libraries. The study contributes to digital literature on the transformation of academic libraries in information service delivery.

**Keywords:** Personnel Skills, Information Service Delivery, Anglo-Saxon-Style State Universities, Libraries, Cameroon.

## INTRODUCTION

In every institution of learning, the role of the library is critical. A library acquires, organises, stores and disseminates information to its users, in print, electronic, graphic and other forms, for problem-solving. This makes it a citadel of knowledge. In this regard, state university libraries are expected to be leaders in information service delivery to their community of users. In other words, they are service-oriented organisations responsible for the provision of information resources and services to meet user information needs, especially in this information age. The advent of Information and Communication Technology (ICT) has transformed the way libraries operate, rendering traditional services obsolete and necessitating innovative approaches in information service delivery (Ubogu, 2019). Indeed, technology continues to reshape service delivery by demanding flexibility and creativity from innovative providers, giving an upper hand to training and retraining of staff, especially as technology keeps advancing. With these changing trends in Information Technology (IT), libraries are compelled to adjust their techniques of information resource acquisition and organisation, with the aim of meeting user needs (Eje & Dushu, 2018). This underscores the fact that adaptation is no longer optional but subject to embracing the new ways, so as to stay relevant in the ICT-changing world. This transformation of

academic library chores and techniques is necessary if they must live up to today's expectations in information service delivery (Evans, 2022). Consequently, there is a need for innovation as a continuous process rather than as a one-time change.

The transformation of information service delivery in academic libraries from manual operations to electronic ones enables easy access to information resources, such that they can be downloaded online with the aid of Internet services (Saka, Ahmed, & Akor, 2021). This Internet usage in library services is very important as it saves time and eases access, retrieval and use of information. Here, one can access, locate, retrieve and use information easily from home as well and more than one user can make use of a resource at a time. Obi, Okere and Kanu (2019) posit that it is now possible for a library, especially in the 21st Century, to serve as a platform where all information-bearing resources are made available and accessible to information users. This suggests that the library has shifted from a place of storage to a dynamic platform for information access and use. Eje and Dushu (2018) indicated that the transformation of academic libraries using ICT in every sphere is now the way to go. Therefore, the impact of using ICT in delivering information services in academic libraries via the Internet cannot be overemphasised. Emphasis on this is because the Internet has the ability to complement, reinforce, and enhance educational accomplishments for the benefit of all since it facilitates easy access to information (Hundo, 2020).

With regard to the above, academic libraries offer information services by providing convenient access to a vast array of digital information regardless of their location and time, which improves learning, teaching and research (Lee & Kim, 2020). This offers advantages like cost effectiveness, as the need for physical copies of materials is reduced, and space is saved since much physical storage space is not required. Swift and efficient information retrieval through advanced search functions is an additional advantage of information delivery through ICT and its numerous facets. Therefore, these are beneficial for students, researchers and professionals who demand timely access to the latest information services and resources relevant in their respective fields of study and work (Daniels, Wiche & Nsirim, 2023), enabling academics' endeavours and research achievements to be successful.

Electronic library information service delivery appears to be growing in importance, with on-going developments reshaping libraries amid a rapidly changing technological environment. This warrants that every library undergoes a transformation to meet the appropriate information service delivery needs of its clientele. Although academic libraries in Cameroon are observed to function more physically than virtually, this necessitates quality human resources, adequate financial resources and adequate information resources management, which are essential factors that can enable effective implementation of the transformation of academic libraries into virtual platforms for information service delivery.

Personnel ICT skills are one of the factors that necessitate effectiveness in library services, as mentioned above, and it is an important requirement of the 21st-century libraries (Shafack, 2020). Contextually, Bawack (2019) posits that Cameroon libraries, especially those in the Anglo-Saxon-style state universities have minimally skilled personnel, insisting that, among the professional staff who manage library services, very few are ICT literate. The limited skills may be a result of insufficient budgets, making it a challenge for libraries to upgrade staff skills, especially as there is a need to train and retrain staff as technology advances, staff retire, and in addition, search for greener pastures are a part of the system, posing a worry to the effectiveness of library services. Bawack (2019) posits that, apart from personnel skills, budget is a factor that affects information service delivery. He further adds that insufficient and dwindling low budgets hinder academic libraries in Cameroon from effectively building up state-of-the-art technologies, purchasing or paying subscriptions to e-journals, e-books and e-periodicals. In support of the low budget in Cameroon libraries, Bawack listed poor Internet connection, insufficient Internet bandwidth, lack of hardware and software as other factors that are a part of academic libraries in Cameroon.

National Policy is a factor that may affect information services in Cameroon libraries today, style state university libraries especially. In Anglo-Saxon-style state universities as well as other academic universities in Cameroon, faculties and students are involved in research-intensive projects, assisted by their libraries in providing both print and electronic library resources. At the end of each academic year, a good number of scientific papers and theses are expected to be produced. These academic resources need to be available to library users. The main problem here is that all these scientific productions are not known to researchers and students, because there is no national

policy guiding public dissemination of research results for Cameroon libraries (Bawack, 2019), rendering such initiatives dormant.

As an aspect of transformation, the open access resources and services that have been defined in the Budapest Initiative and the Berlin Declaration, like other agencies, have increasingly become available to Cameroonian academic university libraries, the Anglo-Saxon-style state university libraries not exempted. Relean-Jeans and Egbe (2024, p. 618) are categorical about this when they state that:

“Open source software technology in electronic management of digital libraries has become for information scientists as well as digital librarians, a gateway to information, widely opened towards the organisation and management of relevant information in this new era of information globalisation”.

Some university authorities in Cameroon make use of open access services and information resources, including the University of Bamenda and the University of Buea. The effective use of open access information resources and services in libraries depends on the availability of ICT and its accompanying components, like computers and Internet connectivity. Willinsky, Jonas, Shafack and Wisiy (2005, pp. 5-8) hold that:

“The University of Buea library was connected to the Internet via Optical Fibre Cable in 2003/2004 to the University of Buea Information Technology Centre (ITC), but had bandwidth issues. The problem of bandwidth is gradually being addressed as more finances have been recently provided to pay for it. The Central Library was provided with 25 Internet nodes extendable to 50, while the Annex Library had 5 functional nodes extendable to 15.”

Library demand is a factor that affects academic libraries in Cameroon. Libraries of the two Anglo-Saxon-style state universities in Cameroon (The University of Bamenda Central Library and the University of Buea main Library) are in one way or another affected by the demands of the digital age. The Universities of Bamenda, Buea, Dschang and Yaounde I are making obvious efforts to meet the digital requirements. “The library of the University of Yaounde I is currently digitising its resources, and the University of Buea has automated its library system using open-source software like “Pour Ma Bibliothèque” (PMB), DSpace and Koha” (Shafack, 2021, p. 17). With support from its parent institution, it is making available theses and dissertations online through the institutional repository using DSpace. This is a great opportunity for students and researchers who make use of the libraries, as it enables great achievements in learning.

Collaboration and partnership are other factors that can affect library service delivery in Cameroon. From all indications, in order to solve the worry of low budget, it seems that all academic libraries of State universities in Cameroon and other private universities have joined the Consortium of Cameroon University and Research Libraries (COCUREL) as a first major step to improve information service delivery. Through the consortium, academic libraries with Internet connectivity have access to a variety of licensed e-resources negotiated by the International Advocacy for Scientific Publications (INASP) (Bawack, 2019). Literature reveals that other academic librarians have made distinguished personal efforts to move to the digital age through massive online training.

Information resources management is another factor that can affect academic libraries in Cameroon. This is so because, when resources are digitised and moved online as earlier indicated by Shafack (2021), it enables remote access, saves user time, especially as they can access such resources from any location and at any time with the assistance of a good Internet connection.

This study is guided by the Technology Acceptance Model (TAM) of Davis (1989), which is an ICT service theory that aims to predict and explain ICT usage behaviour, which causes potential adopters to accept or predict its use. The theory posits that perceived usefulness and perceived ease of use determine technology adoption. This is a necessity in academic libraries today, especially with the quest for ICT in libraries. The Model explains how personnel ICT skills impact the use of library technologies for information service delivery. When personnel possess adequate ICT skills, they perceive systems like KOHA and institutional repositories as easy and useful, leading to a positive attitude, high usage, and effective service delivery and vice versa.

---

## The Problem

Academic libraries are expected to offer automated services and online resources to ensure that clients can access them with flexibility at any time, and from any location. Some of these services that need automation are technical, reference and circulation services. In doing this, there is a need for adequate electronic resources which need to be well managed by library staff due to the presence, existence and possession of suitable professional skills by such members of staff. Hence, the possession and implementation of such highly expected professional library skills by staff members is a prerequisite for the facilitation of information service delivery.

Unfortunately, by observation and experience, most library services offered are still more physical in state universities libraries in Cameroon. This is so because users are still seemingly adherent to the use of a manual catalogue instead of the Online Public Access Catalogue, which they would have more preferably used in searching, locating and retrieving information resources from academic libraries such as those of Anglo-Saxon-style state universities in Cameroon. Despite the availability of integrated library software applications such as “Pour Ma Bibliothèque,” Koha and Dspace, which are intentionally designed by their manufacturers to facilitate the process of information accessibility, retrieval and utilisation among library patrons, queues of patrons are still visibly observable in academic libraries in Cameroon, especially when it comes to the delivery of services such as registration, charging and discharging of library resources.

This inaccuracy is further exacerbated by the incompetence of library staff in service delivery. Issues of incompetency are macroscopically glaring and unhidden within the library science sphere. It is certain that such issues are accompanied by untold impediments which offer a heavy burden on information service delivery to library patrons in academic libraries. Consequently, the presumption here is that there is hardly adequate and appropriate delivery of services in academic libraries when there is the unavailability of accompanying staff skills. In this regard, it is quite timely for this research to investigate the impact of personnel ICT skills on information service delivery in academic libraries in Anglo-Saxon-style state Universities in Cameroon.

## Research Objective

This research is designed to investigate the extent to which personnel ICT skills impact information service delivery in Anglo-Saxon-style state university libraries in Cameroon. Impact in line with this study is the predictive relationship between one variable and another, such that a change in one variable (the independent) could result in changes in another variable (the dependent). In the context of this study, it refers to the outcome of personnel skills on information service delivery. That is a change in the quality of information services due to the available personnel skills.

## Research Question

The question which this research sought to answer is: What is the impact of personnel ICT skills on information service delivery in Anglo-Saxon-style state university libraries in Cameroon?

## Hypothesis

The hypothesis for this study was stated as:

H<sub>0</sub>: Personnel ICT skills have no significant impact on information service delivery in Anglo-Saxon-style state university libraries in Cameroon.

H<sub>a</sub>: Personnel ICT skills have a significant impact on information service delivery in Anglo-Saxon style state university libraries in Cameroon.

## METHODOLOGY

A Cross-sectional survey research design with a mixed method was used in this study. This design was chosen because “it enabled the researcher to collect data at a point in time from many individuals with a sample from a large population to represent the entire population for the study” (Creswell, 2014, p. 174). The study was conducted in the only Anglo-Saxon-style state universities in Cameroon, precisely the University of Bamenda

and the University of Buea. These areas were chosen because they house the prospective users of the universities and the libraries that the study was concerned with. The population of the study comprised 7,144 library personnel and users (21 library staff and 7,123 postgraduate library users of the 2024-2025 academic year). The accessible population was 4,768 gotten from the two university libraries, and the sample size was 344 participants chosen as it was deemed representative for the study. This sample size of 344 is in line with the sample size table by Gil et al. (2010), cited in Taberdoost (2016), which gives an estimate of 344 as a convenient sample size for an estimated population of about 3,000 to 4,099, with a margin of error at 5% and a 95% confidence level, which is acceptable in the social sciences.

Of the 344 participants who took part in the study, 323 were postgraduate library users for the quantitative phase, and 21 were library professional staff for the qualitative phase. Data for the study were collected using a questionnaire, an interview guide and an observation checklist. The study utilised a 4-point Likert scale response format of Strongly Agree (SA = 4), Agree (D = 3), Disagree (D = 2), and Strongly Disagree (SD = 1). The Content Validity Index (CVI) of the questionnaire was calculated using the formula

$$CVI = \frac{\text{No.of items judged correct}}{\text{Total No.of items}} = \frac{26}{32} = 0.81.$$

This implies that the questionnaire was valid content-wise. The internal consistency reliability coefficient of the questionnaire for postgraduate student users was estimated at  $\alpha = 0.84$ , which, compared to the 0.70 level, shows that the instrument was reliable and could be used for the study. The descriptive statistical tools used for analysis were frequencies, percentages, means and standard deviations to answer the research question. With reference to inferential statistics, the hypothesis of the study was tested using a Student's t-test at  $\alpha \leq 0.05$  level of significance. The choice of the one-sample t-test was because the researchers evaluated the entire group (from the 2 libraries) as one against a baseline. In addition, this test was deemed necessary based on the researchers' intention to measure the sample mean against a target benchmark, the target neutral score based on the 4-point Likert scale. Data collected from the interview guide and observation checklist were analysed thematically.

## FINDINGS AND DISCUSSION

Following the data collection and analysis process, the findings from the questionnaire were first summarised statistically as presented in the following table:

**Table 1 Post-Graduate Students Opinions on Personnel ICT Skills and their Impact on Information Service Delivery in Academic Libraries**

| Item                                                                                                                                                         | S.A           | A              | D              | S.D           | Collapsed      |                |          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|----------------|---------------|----------------|----------------|----------|
|                                                                                                                                                              |               |                |                |               | SA/A           | SD/D           | Decision |
| 1. Skilled personnel provide efficient and effective services to meet my needs when using the library.                                                       | 50<br>(15.5%) | 106<br>(32.8%) | 127<br>(39.3%) | 40<br>(12.4%) | 156<br>(48.3%) | 167<br>(51.7%) | D        |
| 2. Library personnel acquire necessary OPAC skills enabling effective information dissemination to users.                                                    | 18<br>(5.6%)  | 94<br>(29.1%)  | 181<br>(56.0%) | 30<br>(9.3%)  | 112<br>(34.7%) | 211<br>(65.3%) | D        |
| 3. Library staff's virtual reference skills effectively meet my needs through social media platforms.                                                        | 30<br>(9.3%)  | 129<br>(39.9%) | 134<br>(41.5%) | 30<br>(9.3%)  | 159<br>(49.2%) | 164<br>(50.8%) | D        |
| 4. Our library lack trained information technology staff and systems administrators that continue to automate, build informed skills and maintained systems. | 23<br>(7.1%)  | 156<br>(48.3%) | 118<br>(36.5%) | 26<br>(8.0%)  | 179<br>(55.4%) | 144<br>(44.5%) | A        |
| 5. Library staff collaborate effectively with other libraries to deliver adequate services.                                                                  | 38<br>(11.8%) | 104<br>(32.2%) | 153<br>(47.4%) | 28<br>(8.7%)  | 142<br>(44.0%) | 181<br>(56.1%) | D        |

|                                                                                                                                                                        |                              |                                |                               |                             |                                |                               |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------------|-------------------------------|-----------------------------|--------------------------------|-------------------------------|----------|
| 6. Staff with patron management skills efficiently facilitate user circulation services such as checking out and returning materials, renewing loans and registration. | 24<br>(7.4%)                 | 148<br>(45.8%)                 | 133<br>(41.2%)                | 18<br>(5.6%)                | 172<br>(53.2%)                 | 151<br>(46.8%)                | A        |
| 7. Library staff possess the required technical skills to effectively support library system services.                                                                 | 61<br>(18.9%)                | 154<br>(47.7%)                 | 81<br>(25.1%)                 | 27<br>(8.3%)                | 215<br>(66.6%)                 | 108<br>(33.4%)                | A        |
| 8. Information literacy of library staff have empowered students to effectively evaluate information whenever they locate and access information.                      | 60<br>(18.6%)                | 123<br>(38.1%)                 | 117<br>(36.2%)                | 23<br>(7.1%)                | 183<br>(56.7%)                 | 140<br>(43.3%)                | A        |
| Multiple Response Set                                                                                                                                                  | <b>304</b><br><b>(11.8%)</b> | <b>1,014</b><br><b>(39.2%)</b> | <b>1044</b><br><b>(40.4%)</b> | <b>222</b><br><b>(8.6%)</b> | <b>1,318</b><br><b>(51.0%)</b> | <b>1266</b><br><b>(49.0%)</b> | <b>A</b> |

**Source:** Findings from the Field, 2026

Respondents held varying opinions on personnel skills in library services. Based on the findings above, 167 respondents felt that skilled personnel are not meeting user needs, while 156 disagreed, saying personnel are doing okay. Most skilled personnel not meeting user needs might be a result of obsolete skills not compatible with the recent library software in use. Besides, skills age fast as ICT advances. Impact does not only depend on the level of skill but on a skill that matches the need. The implication of the findings here is that libraries need to boost staff skills or training to better serve users, especially as the majority do not seem satisfied with the services they are receiving. In addition, libraries need to match skills with services needed to enable effectiveness in meeting user needs.

Similarly, 211 respondents had the opinion that library personnel do not acquire necessary OPAC skills, while 112 felt that they do. Personnel might lack basic navigation skills, such as login and access via web or library terminals, simple search by author, title or keywords, to assist users in carrying out searches. Advanced search using Boolean operators could have been a worry to them, and also user education skills, such as providing instructions to users on how to carry out information evaluation. Personnel with these skills can guide less competent users to make effective use of OPAC services and more. This could be that some users who are active on WhatsApp and Facebook find staff replies, while some do not. Therefore, findings suggest that libraries prioritise OPAC training for staff to enable that they acquire the skills to teach, guide and assist users effectively on information dissemination to satisfy their individual needs.

Furthermore, 164 respondents said that library staff's virtual reference skills effectively meet user needs through social media platforms, while 159 had the opinion that they do. The majority may have had positive experiences, such as quick replies to their queries, or that they had low expectations (basic needs), requiring little response time. Equally, if the digital environment (WhatsApp, Facebook) were user-friendly, they would definitely be for it and vice versa. However, the gap shows that respondents are at almost equal percentages. This suggests that staff need a clearer strategy to effectively leverage social media for user engagement, especially as it is a chance to guide users with new resources and build a love for reading. Libraries can therefore build on existing strengths and address weaknesses to improve social media reference services to meet users' expectations in virtual reference services in the digital age.

In addition, 179 respondents felt that libraries lack sufficient IT experts to drive automation and skill building, while 144 felt that libraries have sufficient IT experts for that purpose. This might be because the majority of negative responses saw visible gaps in services, especially when automation fails; they assume that an IT person is managing it. It could also be that the library still uses manual processes, such as long queues for borrowing and user registration, or that the libraries do not have ready IT service specialists. This means that libraries might be struggling to keep up with technological demands, impacting service delivery. Although a limited majority indicate that staff are doing ok. Overall, it is a call to prioritise IT capacity building to enable libraries to enhance their effectiveness in delivering user services. More to this, 181 respondents believed that library staff

collaboration with other libraries to deliver adequate services needs to be improved, while 142 were of the opinion that staff effectively collaborate with other libraries to deliver services adequately. It might be that the majority experienced delays, limited access or lack of access to the partners' resources or that they had poor communication between libraries. This disparity in responses highlights an opportunity for libraries to assess and enhance their collaborative efforts, possibly through training, resource sharing, or clearer communication channels to boost collaboration with other libraries.

Moreover, 172 respondents highlighted a positive impact of patron management skills on circulation services, a clear indication that staff skills play a role in efficient services like checkouts, returns, and renewals. However, 151 respondents had negative opinions of this statement, which suggests that there's still work to be done to maximise impact. This is especially because circulation service is the heartbeat of a library, and is the main point of contact for patrons, which helps them find and access resources.

In addition to other findings, 183 respondents agreed that information literacy of library staff has empowered users to effectively evaluate information whenever they locate and access it; on the other hand, 140 are of the opinion that it has not. The majority who responded showed that users with the information literacy skills acquired from staff training enabled them apply skills like cross-checking of information they retrieved, making use of databases that staff showed them and citing sources of information they made use of. To build on this for more users to make maximum evaluation, libraries might focus on: enhancing staff's literacy training and focusing more on areas where users struggle in evaluating.

In all, personnel skills have a moderate impact on information service delivery in Anglo-Saxon-style state university libraries in Cameroon. The findings from the data analysis show that 1,318 (51.0%) responses agreed with the assertion that personnel skills have a moderate impact on information service delivery in Anglo-Saxon-style state university libraries in Cameroon, while 1266 (49.0 %) were against the opinion. The implication, therefore, is that there should be a great improvement in personnel ICT skills so as to greatly improve information service delivery in Anglo-Saxon-style state university libraries in Cameroon. ICT skills are very important as far as information service delivery is concerned because for libraries to function well, either manually or online, ICT skills are very much required.

## Findings from the Interviews

The table below shows the responses from personnel on ICT skills and the impact on information service delivery in Anglo-Saxon-style state university libraries in Cameroon.

**Table 2 Opinions of Library Staff on Personnel ICT Skills and their Impact on Information Service Delivery in Academic Libraries**

| Research Question                                                                                            | Themes                           | Responses                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. What is the capacity of library staff?                                                                    | Staff Capacity Building          | "Library capacity has gone down drastically because retirements, search for greener pastures and more."                                                                                                                          |
| 2. Are they equipped with various skills necessary for the effective transformation of library services?     | Skills Development               | "Technophobic staff although given training; they haven't picked up the skills. Some are feet dragging in line with current trends. Some even shy away from touching even the mouse. Few are excited and have learnt the skills" |
| 3. If no, are they given regular advanced- training to equip them with such skills? If yes, how? If no, why? | Continuous Professional Training | "Staff are given regular training through workshops, seminars every year by ICTs specialists but yet some staff have refused to pick despite that training is free."                                                             |
| 4. Are the numbers of staff with ICTs skills adequate for effective transformation?                          | ICT Skills Adequacy              | "There are minimal ICT trained staff"                                                                                                                                                                                            |

|                                                                             |                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5. What is the current level of transformation of library service delivery? | Current state of Library Services                      | “Most services are developed through ICTs. For example: Cataloguing is automatic except classification which is impossible now”.<br>“Registration system is electronic, Deposition of thesis and dissertation is electronic, and running of repository is electronic.”                                                                                                                                                                                                                   |
| 6. How have staff skills affected information service delivery?             | Impact of Staff skills on Information Service Delivery | “The respondents highlighted that Staff skills have improved information service delivery, noting that the acquisition of new skills has enabled staff to efficiently deliver services. However, a few skilled staff are overworked while others struggled with technophobia, causing workload imbalance. They mentioned that automated system has been a major improvement, allowing tasks to be completed quickly and accurately, unlike the manual system which was previously used.” |

**Source:** Findings from the Field, 2026

Table 2 shows a thematic presentation of opinions of library personnel on library staff skills and impact on information service delivery. The findings corroborate those from the questionnaire. Concerning the capacity of library staff, one respondent said: *“Staff Capacity is minimal, in the entire library. There are just 2 professionals and 1 paraprofessional staff”*. In seeking to know if staff are equipped with various skills necessary for the effective transformation of library services, they said: *“Staff are not fully equipped but are equipped to an extent, because most staff are not from the field of librarianship but from various backgrounds. Therefore, equipping them is challenging, especially since some of them are not even interested in the work, particularly as they come from different professional backgrounds”*. Asking if staff are given regular advanced training to equip them with such skills, they all accepted that: *“They are given in-house training, for example, on-the-job training”*.

Concerning the number of staff with adequate ICT skills for effective transformation, all stated that: *“The number of staff with ICT skills is very minimal for effective transformation. The greatest challenge is that when appointed from different fields and later deployed to other services upon appointment, the library remained stagnant. As such, there is training and retraining with very little gain to the library”*. One respondent said that concerning the current level of transformation of library service delivery: *“The current level of library transformation is rated at 50%, especially as Users can get access to OPAC due to cataloguing and classification, and circulation desk improvement. This is so because of electronic engagement in work done, though at times work is manual because of challenges on the other hand, such as skill gap problem, funding as a problem and limited infrastructure”*.

How have staff skills affected information service delivery? It was said that: *“Through a few trained staff, there is quality service delivery both electronically and manually, Staff with trained skills support users technically, skilled staff train users and provide users with information literacy instructions”*. On the other hand, challenges limit effective information service delivery in that: *“Not all necessary equipment is available, Technophobic attitude of staff and users, User dissatisfaction, Inadequately trained staff, Technology challenges. As technology keeps changing, new skills are needed, and as such, there is a need to train and retrain”*. This means that personnel skills are very much necessary in the academic library, as it affects the library positively. Therefore, a library with limited skills is bound to fail. Further information from the observation checklist is captured in the following table.

**Table 3 A Comparison of Personnel ICT Skills and Information Service Delivery in the Two Anglo-Saxon Styled State University Libraries in Cameroon**

| Variable         | Themes                   | University of Buea   | University of Bamenda |
|------------------|--------------------------|----------------------|-----------------------|
| Personnel skills | OPAC skills              | Available            | Available             |
|                  | Virtual Reference skills | Minimal availability | Minimal availability  |
|                  | Patron Management skills | Minimal availability | Minimal availability  |
|                  | Information Literacy     | Available            | Minimal availability  |

|  |                    |                      |                      |
|--|--------------------|----------------------|----------------------|
|  | Instruction skills | Available            | Available            |
|  | Technical skills   | Minimal availability | Minimal availability |
|  | ICT skills         | Available            | Minimal availability |

**Source:** Findings from the Field, 2026

Findings from the observation checklist as captured on Table 3 show that OPAC skills, virtual reference skills, patron management skills, information literacy, instruction skills, technical skills, and ICT skills are available in the two universities, but some are available to a minimal extent. The University of Buea Library had readily available staff with OPAC skills, Information literacy, Instruction skills, Technical skills and ICT skills as compared to the University of Bamenda Central Library which had fewer available staff with such capacities. Staff of both libraries were however found to be struggling with virtual reference skills, patron management skills and technical skills, showing the need for improvement.

It was observed in the two libraries that staff catalogue and classify new materials by use of Koha software, making resources discoverable by patrons through OPAC. In searching and retrieving materials, librarians use OPAC to search for books and other materials, based on patron requests, and then guide patrons on how to locate them on the shelves or do it for them while saving users time. In line with virtual reference service skills, the two libraries mostly chat and deliver information through calls and messages on phones, WhatsApp and or Emails. Patron management skills were observed in the two libraries with the use of Koha software in managing users' accounts and services. Concerning ICT skills, staff in the two libraries could communicate with users and assist them in delivering information by calls and messages through phones and computers with internet connection, using social media platforms and emails. Personnel skills are a necessity in academic libraries in information service delivery, and as such the need to advance such skills for library sustainability, especially through training and resource management.

## Testing of Hypothesis

The hypothesis of this study was set as follows:

H<sub>0</sub>: Personnel ICT skills have no significant impact on information service delivery in Anglo- Saxon-style state university libraries in Cameroon.

H<sub>a</sub>: Personnel ICT skills have a significant impact on information service delivery in Anglo-Saxon styled state university libraries in Cameroon.

Results obtained from the one-sample t-test are summarised in the following table:

**Table 4 One Sample T-test for Personnel ICT Skills and the impact on Information Service Delivery in Anglo-Saxon Styled State University libraries in Cameroon**

| Variable                                   | N   | $\bar{X}$ | Std Deviation | Std Error | T      | Df  | Sig. (2-tailed) |
|--------------------------------------------|-----|-----------|---------------|-----------|--------|-----|-----------------|
| The transformation of personnel ICT skills | 323 | 19.67     | 3.77          | .210      | 93.613 | 322 | .000            |

$\bar{X}$  = Mean score  $t$  = t-calculated value  $df$  = degree of freedom Std Error = Standard Error (**Source:** The authors, 2026)

As presented in the table above, the independent t-test analysis shows that the t-cal. value = 93.613 is greater than the t-crit. value = 1.960 at  $\alpha < .05$  level of significance, with degree of freedom ( $df$ ) = 322. The analysis indicates a moderately significant impact of personnel ICT skills on information service delivery, since t-cal. value (93.613) is  $>$  t-crit. value (1.960) at  $p < 0.05$  level of significance. We therefore reject the null hypothesis and conclude that personnel ICT skills have a moderately significant impact on information service delivery in Anglo-Saxon-style state university libraries in Cameroon. This therefore confirms that adoption of ICT reduces the time library staff take to process user requests and thus reduces wait time on the part of library users.

Based on the findings of this study, the existence of staff with few skills mean that staff with the skills would definitely be overworked and can barely do much compared to when the skills are adequate, making work lighter. This is an indication that users would be served less and vice versa. This is a worry, especially as Shafack (2020) sees the need for academic institutions to be entrusted with producing a new breed of graduates that make up the critical workforce, equipped with the right skills and competencies. This, to her, is a necessity for the competitive market in a knowledge-based economy where information is a commodity and power. Osagie's report in (2009), cited in Nkamnebe, Okeke, Udem & Nkamnebe (2015), supported findings and the view of Shafack that there is an inadequate number of highly-skilled professionals who make use of ICTs for the acquisition, processing, and dissemination of information in a most efficient and cost-effective way in most academic libraries in Nigeria. In line, inadequate personnel skills result in incomplete cataloguing and limited access to online resources, which reduces user satisfaction (Breeding, 2018). Bawack (2019) posits that Cameroon libraries, especially the Anglo-Saxon state university libraries, have minimally skilled personnel, insisting that, among the professional staff who manage library services, very few are ICT literate.

## CONCLUSIONS

The study which had as objective to investigate the extent to which personnel ICT skills impact information service delivery in Anglo-Saxon-style state university libraries in Cameroon found that personnel ICT skills have a moderately significant impact on information service delivery in Anglo-Saxon-style state university libraries in Cameroon. The test of the hypothesis showed that personnel skills have a moderately significant impact on information service delivery in Anglo-Saxon-style state university libraries in Cameroon. The responses from the interview showed that library staff capacity has gone down drastically because of retirements and the search for greener pastures. It shows that staff are also given regular training through workshops and seminars every year by ICT specialists, but some staff have refused to pick up despite the fact that the training is free. The findings from the observation checklist show that OPAC skills, virtual reference skills, patron management skills, information literacy instruction skills, technical skills, and ICT skills are available in the two university libraries, though fewer skills are available in University of Bamenda Central Library than in the University of Buea Library. The low competencies in library services are a call for concern; as such, the following recommendations are a necessity.

## RECOMMENDATIONS

Since the study found that personnel ICT skills have a moderately significant impact on information service delivery in Anglo-Saxon-style state university libraries in Cameroon, the study makes the following recommendation:

The ICT skills of staff in academic libraries should be improved through training to enable effective information service delivery to library users.

Libraries need to prioritise OPAC training for staff to enable them to guide and assist users effectively.

Staff need a clearer strategy to effectively leverage social media for user engagement.

Academic libraries need to prioritise IT capacity building to enable effectiveness in delivering user services.

## LIMITATIONS

The study had the following limitations:

The scope of the sample size limited data collection only from postgraduate users of the two Anglo-Saxon-style state University libraries in Cameroon. Other users of the two university libraries were not part of the study, whose opinions might have contributed greatly to the findings of the study. Secondly, size was drawn globally from the two university libraries.

The study relied mostly on external literature reviews, potentially reducing contextual relevance and applicability of findings to the local context because of the limited access to literature and empirical studies on Anglo-Saxon-

style state university libraries in Cameroon (Bamenda and Buea).

From the researcher's observation, some respondents tended to confide information concerning personnel ICT skills and information service delivery in their institutions' libraries for their personal reasons, though it was made clear to them that their opinion was for the research purpose only.

## REFERENCES

1. Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approach* (4<sup>th</sup> ed). Sage.
2. Daniels, G.N, Wiche, H. I., & Nsirim, D. (2023). Librarians' ICT skills and effective library service delivery in university libraries in River State. *Library Philosophy and Practice*.
3. Eje, O. C & Dushu, T. (2018). Transforming library and information services delivery using innovation technologies. *Library Philosophy and Practice*.
4. Evans, G. E., & Greenwell, S. (2018). *Academic librarianship* (2<sup>nd</sup> ed.). ALA Neal-Schuman.
5. Ezeibe, R., Udo-Okon, T. N. & Okwu, E. (2021). Skill needs of Library Personnel for effective cataloging and classification: in Akwa Ibom State, Nigeria. *International Journal of Academic Information System Research (LJAISR)* 5(6) 21-26. Retrieved on 25/4/26 from: <https://eajournals.org>.
6. Hundo, W. D. (2020). Staff quality and Information Service delivery by by libraries in French based instructions in South Western Nigeria. *Library an Information Perspective and Research*, 2 (2).
7. Lee, S.C & Kim, J. T. (2020). Academic libraries and delivery of digital information services. *Journal of Academic Librarianship*, 46(4),102345.
8. Nkamnebe, E. C. Okeke, I. E. Udem, O. K. & Nkamnebe, C. B. (2015). Extent of information and communication technology skills possessed by librarians in University Libraries in Anambra State, Nigeria. *Information and Knowledge Management (Online)*, 5 (9).
9. Obi, I. C. Okere, N.E & Kanu. C. L. (2019). Influence of social media on library service delivery to students in the University of Medical Sciences, Ondo City, Nigeria. *Research Journal of Library and Information Sciences* 3(2).
10. Relean-Jeans, M., & Egbe, I. M. (2024). Application of Open Source Software Technology in Electronic Information Management in Digital Libraries: The case of Dspace. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, 8(4), 618 – 627.
11. Saka, K. A., Ahmed, A.O., & Akor, P.U. (2021). Transition and transformation of libraries from Manual to digital: The case of Nigeria. *The information Technologist*, 18 (1).
12. Shafack, R. M. (2021). Automation challenges in academic libraries: An exploration in academic libraries. *International Journal of Innovative analysis of emerging Technology*1(1), 13-17.
13. Shafack, R. M. (2020). *Information literacy education and the role of libraries*. Notion Press. pp 83-85.
14. Ubogu, J. O. (2019). Impact of information and communication technology in Nigerian university libraries. *OALib* 06(e5340).
15. Taherdoost, H. (2016). Sampling methods in research methodology: How to choose a sampling technique for research, Helvetic Edition LTD. *International Journal of Academic Research in Management* 5(2):22961-1747. Viewed from Doi:10.2139/sam.3205035
16. Willinsky , J. Jonas, R., Shafack, R. M. & Wisiy, K. C. (2005). Access to Research in Cameroon Universities. *The electronic Journal on Information Systems in Development Countries*, 21, 1-15. <http://www.ejisde.org/oj32/index.Php/ejisde/aticle/view/137/133>.