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EDITORIAL

Journal of Science Education and Research (JSER) is a peer-reviewed published Bimonthly. It aimed at advancing knowledge and professionalism in all aspects of educational research, including but not limited to innovations in science education, educational technology, guidance and counselling psychology, childhood studies and early years, curriculum studies, evaluation, vocational training, planning, policy, pedagogy, human kinetics, health education and so on. JSER publish different types of research outputs including monographs, field articles, brief notes, comments on published articles and book reviews.

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Prof. Patrick C. Igbojinwaekwu
Editor-in-Chief

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**DIGITAL LITERACY SKILLS OF LIBRARIANS FOR COLLECTION
DEVELOPMENT IN UNIVERSITY LIBRARIES IN SOUTH-EAST**

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Abstract

The purpose of the study was to determine digital literacy skills of librarians for collection development in university libraries in South-East, Nigeria. Descriptive research design was adopted for the study. The population for the study consisted of 102 (54 experienced and 48 less experienced) librarians in 10 public university libraries in the South-East Nigeria. No sampling was done given the manageable population. Data for the study were collected using ‘‘Digital Literacy Skills of Librarians for Collection Development Test (DLSLCDT). DLSLCDT was validated by three experts. The reliability of DLSLCDT was ascertained using inter-rater/scorer reliability estimate to yield a score of 0.82. Data collected were analyzed using mean, standard deviation and t-test. The findings of the study revealed that librarians possessed digital literacy skills for collection development in university libraries. Furthermore, the experienced librarians were more digital literate for collection development in the university libraries than their less experienced counterparts. Based on the findings of the study, it was recommended among others that university management should organize workshops and seminars for less experienced librarians so as to bridge the digital literacy skill gap between them and their experienced counterparts.

Keywords: Digital Literacy Skills, Collection Development, Librarians

Introduction

The pivot of any library is collection. Library is critical to the storage and provision of information (print and digital) materials to meet the dire information needs of library users. The quality of the collection provided by university library is a measure of the effectiveness of their service delivery. It is expected of librarians to develop quality collections that align with the needs and preferences of library patrons. Thus, collection development embodies a range of activities such as selection, acquisition, stock evaluation, weeding as well as inter-library cooperation (Olubiyo, 2023). Collection development is at the core of service delivery in the library. Sun, Xie and Wang (2019) referred to collection development as the process of ensuring that information needs of library users are met in a timely and cost-effective manner through the use of information resources held locally and internationally.

There are series of activities that characterize collection development in university libraries. These activities include: assessing users' needs; formulating and using collection development policy; preparing budget; selecting and acquiring materials in all formats, evaluating materials to ascertain to which they can meet the users' needs, planning for resources-sharing and cooperative collection development (Gulnaz & Fatima, 2019; Mwilongo, Luambano & Lwehabura, 2020). It is instructive to note that despite the relevance of collection development to the delivery of quality services to library patrons, it has been undermined by certain factors. Kamau and Elegwa (2022) observed that such factors include the increasing demand for information caused by the increasing number of students and the complexity of digital resources among others.

The complexity of digital resources has re-inforced the need for librarians to be digitally literate for effectiveness in service delivery. However, Yakubu, Mohd Khalid, and Samsuddin, (2022) observed that many university libraries continue to use the traditional process of choosing materials for their collections. This is in consonance with the researcher's observation in university libraries in South-East, Nigeria. In contrast, Olijó (2018) observed that despite the fact that some librarian are digitally literate in the area of hardware and software, the challenge of poor usage is a limitation in harnessing the potentials of new technologies. This is rather worrisome given that the information need of library patrons (modern day students) who are digital natives may not be met if there are inadequacies or dearth of digital literacy skills among librarians. For librarians to deliver quality services to modern day students, digital literacy skill is key.

Digital literacy skills entail abilities acquired by individuals with a view to using information and communication technologies. They are competencies required to conveniently use variety of software applications and digital tools for meeting academic goals, solving basic computer problems, communication skills, managing personal information on networks, and the use of digital technologies (Sambo, Imam, & Akanbi, 2022). In other words, the functions of digital literacy skills are all-encompassing. Digital literacy skills describes the possession of knowledge, skills, and behaviour relevant to the use of digital technologies such as laptops, tablets, smartphones, desktop PCs among others (Endouware and Dushu, 2021). Contextually, digital literacy skills refer to capabilities possessed by librarians for use in collection development to the benefit of library patrons. They ease the difficulties associated with accessing and using digital resources, which have become a preference for hitch-free teaching, learning and research in educational institutions in may countries of the world. Fakunle, Bakare and Adeyeye (2022) pointed out that a digitally literate person has capability of identifying, accessing, managing, integrating, evaluating, analysing and synthesizing digital resources.

With digital literacy skills, librarians will be well-equipped for collection development, surfing the net, social networking, instant messaging, blogging and host of others digital oriented activities. Given that these skills can be learnt, it is expected of university librarians to strive towards their acquisition. Agim and Azolo (2019) found out that the digital literacy skill possessed by the 21st-century library staff that are capable of enhancing job performance are electronic mailing, internet browsing, mobile phone usage, social networking and others. Similarly, Bagavathi (2024); Okeji (2020) found that library professionals possessed the digital literacy skills. Additionally, Sambo *et al.* (2022) found that majority of certified librarians had digital literacy skills. In contrast, Endouware and Dushu (2021) found that there was low level of digital literacy skills among librarians. Interestingly, librarians' digital literacy skill and use of digital tools for collection development could differ based on their years of experience.

There is the likelihood of librarians with long years of experience (above 10 years) to prioritize effectiveness in service delivery, that they use digital tools. In contrast, there is the likelihood of librarians with long years of experience who have become used to traditional use of print materials for collection development to be reluctant in using digital tools for modern day students unlike their counterparts with short years (1-5, 6-10 years) of service delivery in the library. As per Kingston, Gupta and Torres (2023),

there is still a significant gap in digital literacy skills among less experienced library staff. This gap can weaken their ability to use cloud computing effectively and lead to the loss of innovation opportunities for library services. For Walker (2020), there is need for ongoing education programmes that enhance digital literacy skills among librarians across all levels irrespective of experience. Thus, it will be research worthy to unearth digital literacy skills of librarians for collection development in university libraries in South-East, Nigeria.

Research Question

The following research question was formulated to guide the study:

1. digital literacy skills of librarians for collection development in university libraries in South-East, Nigeria.
2. digital literacy skills of experienced librarians for collection development in university libraries in South-East, Nigeria.
3. digital literacy skills of less experienced librarians for collection development in university libraries in South-East, Nigeria.

Hypothesis

One hypothesis was tested at 0.05 level of significance. It was thus tested:

1. There is no significant difference between digital literacy skills of experienced and less experienced librarians for collection development in university libraries in South-East, Nigeria.

Methodology

Research Design: Descriptive research design was adopted for the study. According to Nworgu (2015), descriptive surveys refer to those studies which are targeted at collecting data on, and describing in a systematic manner; the characteristics, features or facts about a given population.

Procedure. The population for the study consisted of 102 (54 experienced and 48 less experienced) librarians in 10 public university libraries in the South-East Nigeria. No sampling was done given the manageable population. Data for the study were collected using “Digital Literacy Skills of Librarians for Collection Development Test (DLSLCDT)”. DLSLCDT is a 25-item test constructed by the researcher from literature. The construction of DLSLCDT was in such a manner that the subjects responded by choosing one of the four response options of A, B, C and D. The minimum score is zero while the maximum score is 100. DLSLCDT was validated by three experts in Faculty of Education, Nnamdi Azikiwe University, Awka. The

reliability of the DLSLCDT was established with inter-rater/scorer reliability estimate after administering it to 20 librarians from public university libraries in Delta State. This was accomplished by photocopying the answer script and giving to two scorers to mark. The two independent scores were collated and correlated using Pearson Moment Correlation; and reliability coefficient of 0.82 was found which was considered high to confirm the DLSLCDT as reliable since it falls in line with the recommendation of Nworgu (2015) who posited that an instrument is reliable and excellent when its reliability co-efficient is above 0.80 for quantitative research.

Data Analysis: Data from research questions were analysed using mean and standard deviation while paired t-test was used to test the hypotheses at 0.05 level of significance. For the hypotheses, p-value interpretation was used with the decision rule that if the p-value is less than <0.05 , the null hypothesis was rejected but when the p-value is higher than 0.05, the null hypothesis was not rejected.

Results

Table 1: t-Test analysis of the Significant Difference between Experienced and Less Experienced Librarians' Digital Literacy Skills for Collection Development in University Libraries

Gender	N	\bar{X}	SD	df	p-value	alpha level	Decision
Experienced	54	79.10	11.73	100	0.01	0.05	Significant
Less Experienced	48	61.52	9.61				

Data in Table 1 show that experienced librarians have a higher mean achievement score than their less experienced counterparts. This indicates that experienced librarians outperform their less experienced counterparts. Similarly, the standard deviations of 11.73 and 9.61 for those experienced and less experienced librarians show that the less experienced librarians are more homogenous in their responses to digital literacy skills for collection development in university libraries than their experienced counterparts. Again, the data in Table 1 reveal a significant difference between experienced and less experienced librarians' digital literacy skills for collection development in university libraries. The analysis revealed that since the p-value of 0.01 is less than 0.05 alpha

level at 100 degrees of freedom, the null hypothesis is rejected. This means that there is a significant difference between experienced and less experienced librarians' digital literacy skills for collection development in university libraries in favour of experienced librarians.

Discussion

The findings of the study indicated that librarians possessed digital literacy skills for collection development in university libraries. This may be attributed to the fact that librarians are aligning with the current trend of librarianship that emphasizes the use of digital tools for efficient service delivery. It can further be attributed to the fact that within the university community, a good number of library users are modern day students who are digital natives. Thus, to meet their needs and interest, the acquisition of digital literacy skills is key to the use of digital tools for collection development. Consistent with the finding of the study, Bagavathi (2024); Okeji (2020) found that library professionals possessed the digital literacy skills. Additionally, Sambo *et al.* (2022) found that majority of certified librarians had digital literacy skills. This point to the fact that digital literacy skill is a necessity for librarians to deliver quality service to library patrons. The finding of the study, is however, contradicted by that of Endouware and Dushu (2021) that there was low level of digital literacy skills among librarians. The afore-mentioned contradiction may not be unconnected to disparities in sample characteristics.

The findings of the study further showed that experienced librarians outperform their less experienced counterparts. This indicates that experienced librarians are more digitally literate for collection development than their less experienced counterparts. Corroborating the afore-mentioned finding, Kingston *et al.* (2023) found that a significant gap existed in digital literacy skills among less experienced library staff. This gap can weaken their ability to use digital tools for collection development and lead to the loss of innovation opportunities for library services. Additionally, a significant difference existed between experienced and less experienced librarians' digital literacy skills for collection development in university libraries in favour of experienced librarians. This trend may not be unconnected to the fact that experienced librarians have been more exposed to in-service training on the use of digital tools for collection development than their less experienced counterparts. Similarly, Walker (2020) echoed the need for ongoing education programmes that enhance digital literacy skills among librarians across all levels irrespective of experience. In other words, the

place of organization of seminars and workshops for the acquisition of digital literacy skills for collection development in such a manner that ensures efficient service delivery to library users who are digital natives is not only timely but a matter of necessity.

Conclusions

In view of the findings of the study, it was concluded that librarians possessed digital literacy skills for collection development in university libraries in South-East, Nigeria. It was further concluded years of experience moderated librarians' digital literacy skills for collection development in university libraries.

Recommendations

In view of the findings of the study, the following recommendations were made:

1. Librarians should sustain their acquisition of digital literacy skill for collection development.
2. University management should organize workshops and seminars for less experienced librarians so as to bridge the digital literacy skill gap between them and their experienced counterparts.

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