

Self-efficacy, computer anxiety and attitudes as correlates of librarians' use of digital tools for collection development in university libraries in Anambra State, Nigeria

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Abstract

The purpose of the study was to find out the relationship between the personal factors and librarians use of digital tools for collection development in Anambra State. Correlational research design was adopted for the study. The population for the study comprised 24 collection development librarians in the two public university (Nnamdi Azikiwe University, Awka and Chukwuemeka Odumegwu Ojukwu University, Igbariam) libraries in Anambra State. The sample size for the study was made up of 24 librarians in public university libraries in Anambra State. Data were collected using questionnaire from the 24 librarians through the help of three postgraduate students as research assistants. Data were analyzed using Pearson's Product Moment Correlation. The findings of the study revealed that while a very positive relationship existed between librarians' self-efficacy and their use of digital tools for collection development, a negative attitude existed between librarians' computer anxiety and their use of digital tools for collection development. The findings of the study further showed that a moderate positive relationship existed between librarians' attitudes and their use of digital tools for collection development in university libraries. It was concluded that librarians' self-efficacy and attitude positively correlated with their use of digital tools for collection development. It was recommended among others that library management should see to the regular organization of seminars and workshops for librarians on the need to sustain their self-efficacy in the use of digital tools for collection development in university libraries in Anambra State.

Keywords: Self-efficacy, attitudes, anxiety, digital tools and collection development.

Introduction

In a world of constant technological advancement, the needs of a library patron and librarians are ever-changing. With these advancements in technology, the tasks of librarianship evolve as well as the competencies associated with them. It is then vital that the task of collection development is undertaken by librarians for a quality service delivery to the library patrons in line with digitalization phenomenon. In line with the digitalization phenomenon, many tasks are performed with the aid of information and communication technologies (Srijamdee & Pholphirul, 2020). Indeed, tasks such as quality collection development is a key

contributor to meeting the information needs of library patrons. As such, collection development must keep up with the automation process for efficient service delivery.

The vitality of automation of collection development cannot be overstressed. This is given the fact that good number of library patrons in university libraries are modern day students who are digital natives. This has necessitated the transition from the use of print resources to digital tools for collection development in university libraries. The use of digital tools has revolutionized the development process in line with the information needs of library patrons. This is due to the fact that they

provide access at multiple points as well as varied search options; bring about retrieval at a fast pace; make content analysis at ease; facilitate virtual mode; reproduce easily; facilitate hypertext and multimedia format; eliminate printing and postage cost; and facilitate remote access (Mallick & Panda, 2021). Despite the relevance of the use of digital tools for collection development, the researchers, as librarians observed that there is still the preponderance of print resources in university library used for collection development. This has raised questions as to the factors responsible. Suffice it to say that institutional and personal factors could be responsible for the afore-mentioned trend.

Personal factors represent a set of characteristics which make every student unique in education process. Personal factors capture a set of attributes which distinguishes one individual from the other. Baidoo-Anu (2017) defined personal factors as issues that border capacity, absenteeism, self-efficacy, and locus of control, resilience, peer pressure, self-motivation, and ones' personal circumstances. In the context of the current study, personal factors are those surrounding-induced factors such as self-efficacy, attitude and anxiety that are capable of influencing librarians' use of digital tools for collection development in university libraries.

University libraries in Anambra State appear committed to meeting the needs of library patrons via the quality of services they provide. Thus, a thriving collection development put together by library staff is a formidable step in this direction. However, this can be hampered by personal factors as well as use of archaic tools for collection development. It is in view of the foregoing that the researchers deemed it expedient to ascertain the relationship between personal factors and librarians' use of digital tools for

collection development in university libraries in Anambra State.

Statement of the problem

Collection development is of paramount importance in university libraries. It brings about ease of service delivery to library patrons. In the past, it has been done with the use of print resources. However, with the evolution of technology coupled with the fact that a good number of library patrons in the university are digital natives, it is expected that librarians upgrade their use of tools for collection development in line with the needs of their patrons.

A cursory look at collection development in university libraries in Anambra State revealed that there is still the preponderance of print materials in university libraries; suggesting that the use of digital tools for collection development appear not to be holding sway. This has raised questions as to the factors that are responsible for this worrisome trend. Much as various factors can be identified, the researchers are interested in finding out of personal factors are included. It is against this backdrop that the researchers sought to investigate the relationship between personal factors and librarians' use of digital tools for collection development in university libraries in Anambra State.

Objectives of the study

The study sought to determine:

1. librarians' self-efficacy for collection development in university libraries in Anambra State.
2. librarians' computer anxiety for collection development in university libraries in Anambra State.
3. librarians' attitudes towards collection development in university libraries in Anambra State.

4. extent to which librarians' use of digital tools for collection development in university libraries in Anambra State.
5. the relationship between librarians' self-efficacy and their use of digital tools for collection development in university libraries in Anambra State.
6. the relationship between librarians' computer anxiety and their use of digital tools for collection development in university libraries in Anambra State.
7. the relationship between librarians' attitudes and their use of digital tools for collection development in university libraries in Anambra State.

Research questions

The following research questions were raised to guide the study:

1. What is librarians' self-efficacy for collection development in university libraries in Anambra State?
2. What is librarians' computer anxiety for collection development in university libraries in Anambra State?
3. What is librarians' attitudes towards collection development in university libraries in Anambra State?
4. To what extent do librarians' use of digital tools for collection development in university libraries in Anambra State?
5. What is the relationship between librarians' self-efficacy and their use of digital tools for collection development in university libraries in Anambra State?
6. What is the relationship between librarians' computer anxiety and

their use of digital tools for collection development in university libraries in Anambra State?

7. What is the relationship between librarians' attitudes and their use of digital tools for collection development in university libraries in Anambra State ?

Literature review

Collection development (CD) is a central activity that is carried out by librarians. Yakubu (2023) defined collection development as an emerging concept that is tailored towards meeting the evolving demands of library patrons on collections. In line with global trend, collection development is expected to be done with the use of digital tools to the satisfaction of library patrons in the university who are digital natives. Digital tools capture technologies that assist libraries to fulfill information needs of users using library's collection (Mallick & Panda, 2021). Instant Messaging, RSS Feed (Really Simple Syndication or Rich Site Summary), Streaming Media, Podcasting, Vodcasting, SMS Enquiry Service, Blogs (or Web log), Wikis and social networks. The use of the foregoing digital tools for collection development could be a function of personal factors such as self-efficacy, attitude and anxiety.

Self-efficacy is vital for the use of digital tools for collection development by librarians. It is the confidence in one's belief in their ability to undertake a task. Digital self-efficacy refers to the belief about one's ability to succeed at a specific task involving the relevant use and meaningful integration of technological tools to classroom settings (Gomez, 2020). A librarian will believe in their ability to use digital tools for collection development when they have acquired the

requisite skills and knowledge that will aid their use of technology. In contrast, high self-efficacy of a librarian could mean strong self-confidence in the use of digital tools for collection development.

Attitude is defined as a person's emotional response to something. Librarians' attitudes are defined as their way of thinking, either positive or negative, towards a given subject (i.e., their own learning, the course content, or the instructor) (Vedder, 2018). Attitudes comprises cognitive, affective and behavioural reactions that an individual has towards an object based on their interest. Contextually, attitude towards the use of digital tools refers to a librarian's feelings as well as dispositions towards the use of digital tools for collection development.

Anxiety refers to a state of nervousness experienced by an individual in the course of doing or using something. Contextually, computer anxiety refers to phobia or fear experienced by a librarian in the course of using digital tools for collection development. Similarly, Berg-Beckhoff, Nielsen, and Larsen (2018) described computer anxiety as the following behavioral and cognitive symptoms: Excessive caution with computers, avoidance of computers, negative remarks about computers, and attempts to reduce the use of computers. Those who have computer anxiety may experience fear of the unknown, feeling of frustration, possible embarrassment, failure and disappointment (Bolandifar & Noordin, 2015). Suffice it to say that anxiety is positively or negatively associated with the use of digital tools for collection development among librarians.

There are gaps in the findings of some researchers on personal factors (anxiety, self-efficacy and attitudes) and use of digital tools. For instance, Meneses

(2022) determined the correlation between ICT utilization and computer anxiety among the programme heads of a state university and found a moderate negative linear relationship between the respondents' level of computer anxiety and their level of ICT utilization. In contrast, Osisanwo, Ehioghare and Abdulsalaam (2022) found a positive relationship between computer anxiety and students' utilization of Information Technology (IT) tools among the Library and Information Science (LIS) undergraduates. Furthermore, Amaechi, Enweani and Eke (2018) carried out a study on challenges to library and information services delivery in the 21st Century in three academic libraries in Imo State, Nigeria and found that librarians' phobia for emerging technologies was the major challenges to the use of ICTs in the library. The deduction from the foregoing studies is that much as personal factors and use of digital tools have been subjects of researches, none of the researches looked at the relationship between the personal factors and librarians use of digital tools for collection development in Anambra State.

Methods

Correlation research design was utilized by the study as it aimed at ascertaining relationship between variables (Nworgu, 2015). The research design was deemed appropriate as the study examined the relationship between personal factors and librarians use of digital tools for collection development in Anambra State. The population for the study comprised 24 collection development librarians in the two public university (Nnamdi Azikiwe University, Awka and Chukwuemeka Odumegwu Ojukwu University, Igbariam) libraries in Anambra State. No sampling was undertaken as the population is of

manageable size. Data collection was carried out using “Librarians’ Computer Anxiety Questionnaire” (LCANQ), “Librarians’ Attitude Questionnaire (LATQ), Librarians’ Self-Efficacy Questionnaire (LSQ)” and “Librarians’ Use of Digital Tools for Collection Development Questionnaire” (LUDTCDQ). LCANQ, LATQ, LSQ, and LUDTCDQ were constructed from literature by the researcher. The response formats for LCANQ, LATQ, LSQ ranged from SA= Strongly Agree, A= Agree, D, Undecided = U, Disagree, SD= Strongly Disagree with numerical indices of 4, 3, 2 and 1 for positively worded items while negatively worded items were reversely scored. The response format for LUDTCDQ ranged from Very High Extent (VHE), High Extent (HE), Low Extent (LE) AND Very Low Extent (VLE) with numerical indices of 4, 3, 2 and 1 for positively worded items while negatively worded items were reversely scored. The reliabilities of LCANQ, LATQ, LSQ and LUDTCDQ were tested using Cronbach alpha method. This was undertaken by administering 10 copies of each of LCANQ, LATQ, LSQ and LUDTCDQ to librarians in a public university in Imo State which is not part of the study area. The internal consistencies of the items in LCANQ, LATQ, LSQ and LUDTCDQ were ascertained using Cronbach statistics. The reliability indices of 0.81, 0.82, 0.72 and 0.73 were obtained which were high to confirm the LCANQ, LATQ, LSQ and LUDTCDQ as reliable given that they are in agreement with the suggestions of Shrestha (2021) that the adequate threshold value for Cronbach alpha should be >0.70 . Data were collected using questionnaire from the 24 librarians through the help of three postgraduate students as research assistants. This was done after transmission of letter of introduction to the

chief librarian to get her permission to familiarize with the respondents.

For research questions 1,2,3 and 4, analysis was based on the boundary limit of numbers as follows:

2.50 and above is for Agree while

2.50 and below is Disagree

Data were analyzed using Pearson’s Product Moment Correlation coefficient. In view of the postulation of Napitupulu, *et al.* (2018), correlation coefficient (r) was thus interpreted:

0.0– 0.199 = Very weak/low relationship

0.20 – 0.399 = Weak/low relationship

0.40 – 0.599 = Medium/moderate relationship

0.60 – 0.799 = Strong/high relationship

0.80 – 1.000 = Very strong/high

Results

The results of the study are presented in this section.

Research question one: What is librarians’ self-efficacy for collection development in university libraries in Anambra State? The data in Table 2 provide answer to this question.

Data in Table 2 show that items 2 has the highest mean score of 3.38; indicating that most of the respondents are in agreement that a task in collection development is easy when other librarians think it is hard. In contrast, item 5 has the lowest mean score of 2.13; indicating that the least number of respondent agree that no one cares if they do well in collection development or not. The grand mean of 2.86 shows an agreement among the respondents that they have self-efficacy for collection development.

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Research question two: What is librarians' computer anxiety for collection development in university libraries in Anambra State?

The data in Table 3 provide answer to this question.

Table 1: Distribution of respondents' demographics

<i>Demographics</i>	<i>Freq.</i>	<i>%</i>
Gender		
Male	07	29.17
Female	17	70.83
Total	24	100
Age		
21-30 years	04	16.67
31-40 years	10	41.66
41-50 years	06	25.00
51 and above	04	16.67
Years of Experience		
5-9 years	06	25.00
10-14 years	12	50.00
15-19 years	08	33.33
20 years and above	02	8.33

Table 2: Librarians' self-efficacy for collection development

<i>S/N</i>	<i>Items</i>	<i>SA</i>	<i>A</i>	<i>D</i>	<i>SD</i>	<i>Mean</i>	<i>Remark</i>
1.	I'm good with collection development.	10	08	05	01	3.13	A
2.	Sometimes, I think a task in collection development is easy when other librarians think it is hard.	15	05	02	02	3.38	A
3.	I'm of the best collection development librarians in my school.	14	01	07	02	3.13	A
4.	It is not hard for me to develop collections.	11	03	06	02	2.79	A
5.	No one cares if I do well in collection development or not.	05	05	04	08	2.13	D
6.	It does not matter if I do well in collection development.	06	04	12	02	2.58	A
Grand mean						2.86	A

Key: SA – Strongly Agree A- Agree D –Disagree SD – Strongly Disagree

Table 3: Librarians' computer anxiety for collection development

<i>S/N</i>	<i>Items</i>	<i>SA</i>	<i>A</i>	<i>D</i>	<i>SD</i>	<i>Mean</i>	<i>Remark</i>
1.	I feel relaxed while developing collections with digital tools.	04	08	10	02	2.58	A
2.	I have uneasy feelings while developing collections with digital tools.	06	03	06	09	2.25	D
3.	During collection development with digital tools, I find myself thinking whether I'll ever get through.	10	02	03	09	2.54	A
4.	The hardest I work at developing collections with digital tools, the more confused I get.	02	05	06	10	1.88	D
5.	Even when I'm prepared for collection development with digital tools, I get nervous about it.	07	03	04	08	2.21	D
6.	I wish collection development with digital tools did not bother me so much.	06	07	05	06	2.54	A
Grand mean						2.33	D

Data in Table 3 show that item 1 has the highest mean score of 2.58; indicating that most of the respondents are in agreement that they feel relaxed while developing collections with digital tools. In contrast, item 4 has the lowest mean score of 1.88; indicating that the least number of respondent agree that the hardest they work at developing collections with digital tools, the more confused they get. The grand mean of

2.33 shows an agreement among the respondents that majority do not have anxiety in collection development with digital tools in the university libraries.

Research question three: What is the librarians' attitude towards collection development in university libraries in Anambra State? The data in Table 4 provide answer to this question.

Table 4: Librarians' attitude towards collection development

S/N	Items	SA	A	D	SD	Mean	Remark
1.	I feel very happy when I'm developing collections.	11	03	06	02	2.79	A
2.	Collection development is enjoyable to me.	06	07	05	06	2.54	A
3.	I can only develop collections when it is mandatory.	06	03	06	09	2.25	D
4.	I do not bother about collection development when I can do other things in the library.	06	04	12	02	2.58	A
5.	I prefer developing collections to any other task in the library.	07	07	05	03	2.58	A
6.	I'm willing to spend a whole day developing collections.	09	05	04	04	2.63	A
Grand Mean						2.56	A

Key: SA – Strongly Agree A- Agree D –Disagree SD – Strongly Disagree

Data in Table 4 show that item 1 has the highest mean score of 2.79; indicating that most of the respondents are in agreement that they feel very happy when developing collections. In contrast, item 3 has the lowest mean score of 2.25; indicating that the least number of respondent agree that can only develop collections when it is made mandatory. The grand mean of 2.56 shows an agreement among the respondents that

they have positive attitude towards collection development in the university libraries.

Research question four: To what extent do librarians use of digital tools for collection development in university libraries in Anambra State ? The data in Table 5 provide answer to this question.

Table 5: Librarians' use of digital tools for collection development

S/N	Items	VHE	HE	LE	VLE	Mean	Remark
1.	Instant Messaging	15	05	02	02	3.38	HE
2.	Blogs.	06	07	05	06	2.54	HE
3.	Podcasting.	05	06	07	06	2.25	LE
4.	Vodcasting.	04	06	06	08	2.25	LE
5.	Wikis.	06	03	06	09	2.25	LE
6.	Social network.	07	07	05	03	2.58	HE
Grand Mean						2.57	HE

Key: Very High Extent (VHE), High Extent (HE), Low Extent (LE) AND Very Low Extent (VLE)

Data in Table 5 show that item 1 has the highest mean score of 3.38; indicating that most of the respondents use instant messaging for collection development to a high extent. In contrast, item 3, 4 and 5 have the lowest mean score of 2.25; indicating

that the respondents use podcasting , vodcasting and wikis to a low extent in collection development. The grand mean of 2.57 shows an agreement among the respondents that they use digital tools for

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collection development to a high extent in university libraries.

Research question five: What is the relationship between librarians' self-efficacy

and their use of digital tools for collection development in the university libraries in Anambra State? The data in Table 6 provide answer to this question.

Table 6: Pearson's r on relationship between librarians' self-efficacy and their use of digital tools for collection development in the university libraries

Source of Variation	N	R	Remark
Self-Efficacy	24	0.801	Very High Positive Relationship
Use of Digital Tools			

Data in Table 6 show that a very high positive relationship exists between librarians' self-efficacy and their use of digital tools for collection development in university libraries. This is evident by the size of Pearson's Correlation Coefficient r, which is 0.801.

Research question six: What is the relationship between librarians' anxiety and their use of digital tools for collection development in university libraries in Anambra State? The data in Table 7 provide answer to this question.

Table 7: Pearson's r on relationship between librarians' anxiety and their use of digital tools for collection development in the university libraries

Source of Variation	N	R	Remark
Anxiety	24	-0.643	High Negative Relationship
Use of digital tools			

Data in Table 7 show that a high negative relationship exists between librarians' anxiety and their use of digital tools for collection development in university libraries. This is evident by the size of Pearson's Correlation Coefficient r, which is -0.643.

Research question seven: What is the relationship between librarians' attitudes and their use of digital tools for collection development in the university libraries in Anambra State? The data in Table 8 provide answer to this question.

Table 8: Pearson's r on relationship between librarians' attitudes and their use of digital tools for collection development in the university libraries

Source of Variation	N	R	Remark
Attitudes	24	0.427	Moderate Positive Relationship
Use of Digital Tools			

Data in Table 8 show that there is a moderate positive relationship existing between librarians' attitudes and their use of digital tools for collection development in university libraries. This is evident by the size of Pearson's Correlation Coefficient r , which is 0.427.

Discussion

The findings of the study showed that a very high positive relationship exists between librarians' self-efficacy and their use of digital tools for collection development in university libraries in Anambra State. Apparently, it shows that the more self-efficacious a librarian is, the greater the tendency for them to use digital tools for collection development. In other words, the librarian has become accustomed to the use of digital resources that their self-efficacy has been enhanced to use digital tools for collection development. It shows that the use of technology can hardly be separated from self-efficacy.

The findings of the study further revealed that a high negative relationship exists between librarians' computer anxiety and their use of digital tools for collection development in university libraries in Anambra State. This implies that the more technologically anxious a librarian is, the lesser the tendency for them to use digital tools for collection development. Put differently, anxiety does not enhance the use of digital tools for collection development. This stems from the fact that a librarian that is given to anxiety would, to all intents and purposes, lack the requisite self-efficacy to use digital tools for collection development. The deduction here is that the preponderance of the use of print tools in place of digital tools for collection development may hardly be unconnected to librarians' anxiety in the use of digital tools. Corroborating the findings of the current study, Meneses (2022) found a moderate negative linear relationship between the programmes heads' level of computer anxiety and their level of ICT utilization. The finding of the current

study is further corroborated by Amaechi, Enweani and Eke (2018) who found that librarians' phobia (anxiety) for emerging technologies was the major challenges to the use of ICTs in the library. This goes to show that anxiety is a major hindrance to the use of digital tools for collection development among librarians. Contradicting the findings of the current study, Osisanwo, Ehioghae and Abdulsalaam (2022) found a positive relationship between computer anxiety and students' utilization of Information Technology (IT) tools among the Library and Information Science (LIS) undergraduates. This suggests that computer anxiety motivated the students to use ICT tools. The afore-mentioned contradiction may not be separated from disparity in sample characteristics in the areas of study.

Moreover, the findings of the study showed that a moderate positive relationship exists between librarians' attitudes and their use of digital tools for collection development in university libraries. The deduction here is that much as there is a positive attitude among librarians towards the use of digital tools for collection development, it is not considerable. In other words, there is a limit to the enthusiasm of librarians as it concerns their use of digital tools for collection development. Much as there is paucity of related researches on the subject of interest, Huang, Theo and Zhou (2017) found that English language teachers had positive attitudes towards the integration of ICT in education. Contrasting the findings of the study, Guillén-Gámez and Mayorga-Fernández (2020) found that higher education teachers' lowest level of attitudes towards ICT integration belonged to behavioral ones, which was followed by affective ones. The foregoing contrast may not be separated from the distinction in the category of respondents in the reviewed and current studies.

Conclusion

Based on the research findings, it is rather apparent that personal factors are positively or negatively associated with librarians' use of digital resources for collection development in university libraries in Anambra State. It goes without saying that collection development is so vital to the course of librarianship that the use of digital tools in line with global practices cannot be more apt. However, while a positive relationship existed between librarians' self-efficacy and their use of digital tools for collection development, a negative attitude existed between librarians' anxiety and their use of digital tools for collection development. It was further concluded that a positive relationship existed between librarians' attitudes and their use of digital tools for collection development in university libraries in Anambra State.

Based on the findings of this study, the following recommendations are made:

1. Library management in university libraries in Anambra state should see to the regular organization of seminars and workshops for librarians on the need to sustain their self-efficacy to enhance their use of digital tools for collection development in university libraries.
2. Librarians in university libraries in Anambra state should improve their attitude towards the use of digital tools for collection development in university libraries.
3. Librarians in university libraries in Anambra State should make conscious efforts towards eschewing computer anxiety so as to enhance their use of digital tools for collection development in university libraries to the satisfaction of library patrons who are digital natives.

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