

Service Quality and Customer Satisfaction in Small and Medium sized Enterprises in Ibadan Metropolis, Oyo State

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Abstract

Customer satisfaction is the key to the long-term survival of any business. It promotes customer loyalty and ensures low customer attrition rate. In line with this, business owners and researchers are usually interested in factors that affect customer satisfaction. This study examines the influence of service quality on customer satisfaction in SMEs in Ibadan Metropolis, Oyo state. The study adopted a descriptive survey research method. The population encompassed residents of five local governments in Ibadan out of which 384 were systematically selected as the study sample. The research instrument is a structured questionnaire. Data was analysed using descriptive and inferential statistics. The study found a high level of customer satisfaction among the SMEs. While customers set their expectations quite high, these businesses generally meet them. The results also showed that service quality has a significant impact on customer satisfaction. The study concluded that service quality both play a crucial role in determining customer satisfaction. It was therefore recommended that SMEs should prioritize activities and policies that enhance the quality of services rendered to customers.

Keywords: Customer Satisfaction, Customer services, service quality, SMEs , Ibadan,

Word Count: 174

Introduction

Customer satisfaction is an important concept for all businesses, including Small and Medium-sized Enterprises (SMEs) dealing with fast-moving consumer goods. It refers to the degree to which customers are happy with the products, services, and overall experience provided by a business. Customer satisfaction is a psychological state which is influenced by several factors. According to Kotler (2016), satisfaction is a product of comparative judgments which means that customers' perception of a product's performance (or outcome) is measured against the specific expectations. Satisfaction is achieved when a product/service 'performs' as expected. On the other hand, the customer is dissatisfied and disappointed when the product/service received falls below expectations (Zakari & Ibrahim, 2021, Mannan, Chowdhury, Sarker, & Amir, 2019).

In SMEs, customer satisfaction can be a critical factor for success and growth, as it can lead to repeat business, positive word-of-mouth recommendations, and increased profitability (Otto, Szymanski, & Varadarajan, 2020). The performance and survival rates of Small and Medium Enterprises (SMEs) in Nigeria are shown to be unsatisfactory, with a significant number of these enterprises closing shortly after commencing operations (Aminu, 2016; Gwadabe & Amirah, 2017). Studies have shown that over 80% of small and medium-sized enterprises (SMEs) in Nigeria experienced failure prior to reaching their fifth-year milestone (Aminu et al., 2015). While several factors have been attributed to SMEs' failure in Nigeria, one of the most significant is loss of patronage due to poor service quality.

Service quality refers to the extent to which a service meets or exceeds customers' expectations. It is a measure of the overall satisfaction a customer has with a service and encompasses various aspects such as responsiveness, reliability, assurance, empathy, and tangibles (Nguyen, et al., 2020). Delivering high-quality service is important for customer retention, loyalty, and positive word-of-mouth, which ultimately leads to increased revenue and profitability for the business. The concept of service quality refers to how well a service meets or exceeds customers' expectations and needs. It is an important aspect of any service-based business, as customer satisfaction and loyalty are crucial to the success of such organizations. The measure of service quality includes responsiveness, reliability, assurance, empathy, and tangibles (Essardi, Mardikaningsih, & Darmawan, 2022).

For supermarkets who deal with products that can easily be obtained elsewhere, the best edge is to ensure that service quality obtainable is better than what is available elsewhere. However,

studies have rarely focused on the role of service quality on customer satisfaction, particularly in the context of Ibadan metropolis. This study therefore examines the role of service quality in customer satisfaction among retail stores in Ibadan metropolis with the intention of examining how the services and customer experience in these stores align with customer expectations and whether this has any influence on customer satisfaction.

Research Questions

The following questions guided the study;

1. What is the level of customer satisfaction in SMEs in Ibadan Metropolis?
2. What is the level of service quality in SMEs in Ibadan Metropolis

Hypothesis

The following null hypothesis was tested at a 0.005 level of significance:

H₀1: There is no significant influence of service quality on customer satisfaction in SME's in Ibadan Metropolis

Review of Related Literature

Scholars have always been interested in customer satisfaction because of its importance to business growth and sustainability. While customer satisfaction is often a matter of various variables, some of which may not even be within the control small and medium enterprises, one of the most controllable factors is service quality. As a result, studies have focused on the role of service quality on customer satisfaction across various organisations.

Researchers have shown interest in examining service quality in SMEs. Because of their importance in the creation of new jobs, the expansion of the country's GDP, and the reliable distribution of goods and services, small and medium-sized businesses (SMEs) are one of the primary motors propelling global economy. Empirical studies however indicates that customers respond or are influenced differently by various dimensions of service quality. Al Idrus, Abdussakir, Djakfar, and Al Idrus (2021) observed that poor product quality is one reason why Indonesian SMEs struggle to compete in the global industrial market and lose customers. This means that reliability is the chief source of customer satisfaction for this group of customers.

This is supported by the findings of Aditi, Hafizah, and Hermansyur (2021) who also reported that retail customers in Indonesia are influence by perceived value of the product being offered. According to the results, the perceived value of an e-service has a direct and positive effect on

customer satisfaction. What makes this study unique is the correlation model of how e-service, system quality, and perceived value all influence customer satisfaction among small and medium-sized enterprises.

In the same, Sanny et al., (2021) found that reliability or product quality rather than tangibility, as represented by aesthetics and promotion is major factor in customer satisfaction for customers dealing with online store. The study found that advertisements have a smaller impact on consumers' opinions than do quality services. On the other hand, Hyunmin (2021) reported that customers of logistic companies are more concerned and the assurance dimension of services. This means that satisfaction is mainly derived from the perception that the service providers are experts in the industry in which they operate.

However, scholars such as Rajić, Nikolić, and Milošević (2016) maintained that all dimensions of service quality converge together to drive customers' satisfaction. According to the study's findings, service quality has a direct effect on customer satisfaction. The study went further to say that customer satisfaction leads to trust in the business which has a direct effect on customer loyalty. Similarly, a study conducted Gandhi, Sachdeva, and Gupta (2018) found that both the actual and perceived quality of the service had a beneficial effect on post-purchase satisfaction and commitment. Overall, these studies suggest that service quality is an important factor in determining customer satisfaction and loyalty in SMEs.

Ali et al. (2021) also found that all dimensions of service quality such as empathy, responsiveness, assurance, and tangibles were found to have good relationships with customer satisfaction in the hospitality industry comprising of hotel, tourism services, event organizing, and transportation sector. The study however found that reliability had a negative relationship customer satisfaction

Prentice, Dominique Lopes, and Wang (2020) also examined the role service quality in the hospitality sector. The research focuses on the hospitality sector to examine how AI-powered applications and service quality enhance customer satisfaction in the hotel industry. The findings indicate that both AI and employee service quality account for substantial variations in customers' perceptions of service quality and their level of satisfaction and loyalty. But only some aspects of service quality actually mattered in influencing customer satisfaction. The implication of these findings is that, no matter the innovation introduced by SMEs, if such do not contribute to service quality, it may not have any effect on customer satisfaction.

Service quality also applies to the banking sector as shown in a study conducted by Fida, et al., (2020). The study found a statistically significant connection between service quality, customer satisfaction, and customer loyalty. The breakdown showed that empathy and responsiveness have a significant influence on customers' overall satisfaction, even more than other factors such as dependability, assurance, and. Tangibility.

The study conducted by Aremu, and Ademola, (2018) focused on the influence of services quality in the banking industry. Multiple correlation, descriptive analysis, and multiple regression are all used to make sense of the data. Specifically, the study found that tangibles, reliability, and responsiveness all had a significant impact on customers' satisfaction with the banking industry. The research showed that service quality is a key component of the banking industry's success in retaining satisfied customers. In a similar study, Sambo, Danladi, and Danjuma. (2021) examined the influence of service quality on customer satisfaction in the banking industry, particularly among female customers. This research took into account five aspects of service quality: tangibility, reliability, responsiveness, empathy, and assurance. The study found that female customers of deposit money banks in Adamawa state place a premium on dimensions of service quality. It was found that all service quality dimensions, except responsiveness, have statistically significant link with overall customer satisfaction (beta = 0.0042, t = 0.779, p0.437).

Potluri and Angiating (2018) examined the role of service quality on patient satisfaction with Nigeria's health care system. The study found that the majority of respondents were dissatisfied with the service providers' responsiveness when contrasted to the tangibility and reliability of the service. The tangibility quality attribute does not correlate with life satisfaction. When asked how they feel about the health facility as a whole, 42% of respondents gave a neutral response, meaning they are neither satisfied nor unhappy. Similarly, Adepoju, Opafunso, and Ajayi, (2018) conducted to determine the influence of service quality on customer satisfaction in the health sector. The study reported low level of satisfaction among the patients. This was attributed to low ratings of service quality dimensions such as assurance, reliability, tangibles, empathy, and responsiveness. The study also discovered a strong correlation between patient satisfaction and the provision of tangibles, assurance, reliability, and empathy. In order to provide high-quality care and boost patient satisfaction overall, the study found that PHC service providers should pay close attention to the gaps.

The obvious gap in these studies is the absence of detailed attention to how each dimension of service quality is perceived by customers of supermarket in Nigeria. While these studies have shown the influence of various dimensions of service quality in sectors such as hospitality, telecommunication, health and banking, there is a need for more empirical studies relating to the influence of service quality on the level of satisfaction among the customers.

Research Methods

The study adopts the survey research method. The study population over three million customers who visit and purchase goods or services from any of the SMEs located in the study area which will be Ibadan metropolis. The study sample consist of 384 consumers. This number was derived using the Krejcie and Morgan sample size table. An Online Questionnaire developed with Google Form Google was used to collect the research data. The instrument was pre-tested on consumers in Oyo town (N= 30) and the analysis showed a Cronbach value of 7.83.

Results

Table 1: Demographic Analysis

		Frequency	Percent
Gender	Male	95	38.5
	Female	153	61.5
	Total	248	100.0
Age	Below 25	41	16.4
	26 – 35	83	34.4
	36 – 44	57	23.0
	Above 45	65	26.2
	Total	248	100.0
Local Government	Ibadan North	64	26
	Ibadan southWest	81	32.8
	Ibadan southEast	26	10.7
	Ibadan North East	10	4.1
	Ibadan Northwest	65	26.5
	Total	248	100.0
Level of Education	Secondary School	79	32.0
	Tertiary Institution	169	68.0

Total	248	100.0
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Source: Fieldwork 2023

Table 1 presents a demographic analysis of the study's participants, offering valuable insights into the composition of the sample. The table is divided into four main demographic categories: Gender, Age, Local Government, and Level of Education. Each category is accompanied by the frequency and percentage of participants falling into the respective subgroups.

In terms of gender distribution, the majority of the participants are female, representing 61.5% of the total sample, while males account for 38.5%. This gender distribution highlights the predominantly female composition of the study's participants, indicating a potential gender disparity in the roles and experiences of individuals in the local government workforce in the Ibadan Metropolis.

The Age category provides an overview of the age groups within the sample. Participants are divided into four age groups: Below 25, 26 – 35, 36 – 44, and Above 45. The largest age group in the sample is the 26 – 35 categories, making up 34.4% of the total participants. The second largest group is Above 45, representing 26.2%. This data suggests that a significant portion of the sample consists of midcareer and older individuals, which may have implications for their job satisfaction, career development, and experiences within the local government.

The Local Government category breaks down the participants by the specific local government area to which they belong. The highest number of participants comes from Ibadan Southwest, constituting 32.8% of the sample, followed by Ibadan Northwest at 26.5%. These variations in the distribution across local government areas highlight potential regional differences that could influence job satisfaction and organizational experiences.

Finally, the Level of Education category provides insight into the educational backgrounds of the participants. The majority of participants have attended tertiary institutions, accounting for 68.0% of the sample. In contrast, 32.0% have completed their education at the secondary school level. This education distribution informs us about the educational qualifications of the sample and can be significant in understanding the participants' skillsets and qualifications in their roles within local government. In summary, Table 4.1's demographic analysis helps provide a comprehensive profile of the study's participants. It highlights the gender composition, age distribution, regional representation, and educational backgrounds, all of which are essential factors to consider when interpreting the study's findings and drawing conclusions related to job satisfaction among secretaries in local governments within the Ibadan Metropolis.

Research Question 1: What is the level of customer satisfaction in SME's in Ibadan Metropolis?

Table 2: Level of Customer Satisfaction in SME's in Ibadan Metropolis, Oyo State, Nigeria

Expectation	Very High	High	Low	Very Low	Mean
I have high expectation of quality products in this store	201 (81.1%)	47 18.9%			3.81
I have high expectation of good price in this store	134 (54.1%)	113 (45.9%)			3.54
I have high expectation of good customer services	147 (59.8%)	85 (34.4%)	14 (5.7%)		3.54
I have high expectation of seamless transaction in this store	137 (55.7%)	96 (38.5%)	14 (5.7%)		3.50
Average Mean					3.60
Perceived Performance					
The quality of services met my expectations.	126 (53.3%)	112 (45.9%)	2 (0.8%)		3.52
The delivery time met my expectations.	177 (55.7%)	97 (39.3%)	9 (4.1%)	2 (0.8%)	3.50
The features/functionality of products met my expectations.	119 (48.4%)	126 (51.6%)			3.48
Average mean					3.50
Expectation Disconfirmation					
The store is indeed the best place to shop	109 (44.6%)	101 (45.5%)	22 (9.1%)	2 (0.8%)	3.34
I am satisfied with the overall customer experience.	1799 (73.0%)	67 (27.0%)			3.73
The price of products and services met my expectations.	139 (55.4%)	105 (43.0%)	4 (1.7%)		3.54
The customer service met my expectations.	129 (51.6%)	87 (35.2%)	30 (12.3%)	2 (0.8%)	3.38
Average mean					3.49
Aggregate mean					3.53

Decision rule: low mean is < 2.5, moderate mean is = 2.5 and high mean is > 2.5

Source: Field work, 2023.

Table 2 presents the results of the responses on customer satisfaction within small and medium sized enterprises (SMEs) situated in the Ibadan Metropolis of Oyo State, Nigeria. This table shows that customer satisfaction into three distinct sections such as expectation, perceived performance and expectation disconfirmation.

Under the expectation section, respondents shared their anticipation regarding several aspects of their shopping experiences. The results showed that 81.1% of respondents indicated that they held very high expectations about the products offered in the supermarkets, while an additional 18.9% also indicated that they had high expectation. It is clear that the quality of products holds paramount importance. The mean score of 3.81 tells us that expectations are set remarkably high.

In addition, 54.1% of the respondents indicated very high expectation and 45.9% indication high expectation about low prices in the stores. This indicates that affordability is a crucial factor in their shopping experience. In a similar vein, customer services were also highly anticipated, with 59.8% indicating very high and 34.4% indicating high expectation. However, it's worth noting that 5.7% of the respondents had low expectation, suggesting room for improvement in customer service. The final element in the expectation section relates to the anticipation of seamless transactions. A notable 55.7% of respondents indicated that they had very high expectation of transacting with ease, with 38.5% also having high expectations. Nonetheless, 5.7% of the respondents indicated that they had low expectation, implying that transaction processes might need finetuning.

In the second section which is the perceived performance section, the results show how well the store's actual performance aligns with customer expectations. Majority of the respondents felt that the quality of services very high (53.3%) while 45.9% of the respondents also indicated that it is high. Also, 55.7% of the respondents rated the delivery time very high and 39.3% of them rated it as high in meeting their expectations. Similarly, majority of the respondents believed that the features and functionality of products in the stores also met their expectations with 48.4% of the respondents indicating that this is to a very high extent and 51.6% indicating high extent. This suggests that these SMEs are delivering on customer expectations, reflected in a respectable average mean score of 3.50 for this section.

The third section of Table 4.2 dealt with expectation disconfirmation. The section assessed whether customers' expectations were met or not. About 44.6% of the respondents indicated that their expectations were very highly met and 45.5% indicating that it was highly met, but

9.1% indicated it was very low and 0.8% indicating low. This indicates that while many are satisfied, there's room for improvement to align everyone's perception.

One of the most positive findings is that 73.0% of respondents indicating that they were very highly satisfied with the overall customer experience, while 27.0% indicated very high. The mean score of 3.73 signifies a significant level of contentment among customers. Customers largely agreed that the price of products and services met their expectations (55.4% very high and 43.0% rated high). However, 1.7% indicated that it was very low, suggesting a small but notable area for price related improvement. Finally, for customer service, 51.6% of respondents indicated that their expectations were very highly met, and 35.2% responded that it was high. However, 12.3% of the respondents rated meeting their expectation very low, signalling an opportunity to enhance customer service.

Table 4.2 paints a vivid picture of customer expectations, perceived performance, and expectation disconfirmation in SMEs in the Ibadan Metropolis. While customers set their expectations quite high, these businesses generally meet them. However, there are areas for improvement, particularly in customer service and in making sure the store lives up to their reputation as the best place to shop. These insights are invaluable for SMEs aiming to enhance customer satisfaction and deliver a truly exceptional shopping experience.

Research Question 2: What is the level of service quality in SMEs in Ibadan Metropolis

Table 3 Level of Service Quality in SMEs in Ibadan Metropolis

Reliability	Very High	High	Low	Very Low	Mean
The supermarket delivers its services as promised.	134 (56.4%)	85 (35.9%)	16 (6.8%)	2 (0.9%)	3.48
The supermarket completes allow customers to complete transactions within reasonable timeframes.	103 (41.8%)	103 (41.8%)	29 (11.5%)	12 (4.9%)	3.20
The supermarket keeps customers informed about any changes or delays in the service.	143 (57.9%)	91 (37.2%)	12 (5.0%)		3.53
Average mean					3.40
Assurance					
The supermarket staff demonstrates knowledge and expertise in their field.	107 (43.8%)	123 (50.4%)	12 (5.0%)	2 (0.8%)	3.37

The supermarket staff instills confidence and trust in their customers.	164 (66.4%)	69 (27.9%)	14 (5.7%)		3.61
The supermarket has employees who are courteous and professional.	112 (45.1%)	119 (48.4%)	15 (5.7%)	2 (0.8%)	3.38
Average Mean					3.45
Empathy					
The supermarket treats customers with respect, dignity, and empathy.	137 (55.7%)	93 (37.7%)	15 (5.7%)	2 (0.8%)	3.48
The supermarket provides personalized attention and care.	125 (50.4%)	123 (49.6%)			3.50
The supermarket is willing to listen and understand customer concerns	94 (37.7%)	125 (50.8%)	27 (10.7%)	2 (0.8%)	3.25
I derived joy when using e-Learning System with others	137 (55.7%)	93 (37.7%)	16 (6.6%)		3.49
Average Mean					3.43
Responsiveness					
The supermarket promptly responds to customers' requests and inquiries.	137 (55.7%)	96 (38.5%)	14 (5.7%)		3.50
The supermarket is willing to go the extra mile to meet customers' needs.	159 (64%)	85 (34.4%)		4 (1.6%)	3.61
The supermarket keeps customers updated on the progress of your service request.	137 (55.7%)	107 (43.4%)		2 (0.8%)	3.54
Average Mean					3.55
Tangibility					
The supermarket has modern and UpToDate equipment and facilities.	261 (56.6%)	93 (37.7%)	12 (4.9%)	2 (0.8%)	3.50
The supermarket's physical appearance is professional and well maintained.	137 (55.7%)	77 (31.1%)	28 (11.5%)	4 (1.6%)	3.41
The supermarket's employees have a neat and professional appearance.	107 (43.8%)	122 (50.4%)	12 (5.0%)	2 (0.8%)	3.37
Average Mean					3.43
Aggregate Mean					3.45
Decision rule: low mean is < 2.5, moderate mean is = 2.5 and high mean is > 2.5					
Source: Field work, 2023.					

Table 4.4 offers a comprehensive insight into the level of service quality in SMEs within the bustling Ibadan Metropolis. The table is thoughtfully segmented into various dimensions of

service quality, each shedding light on different aspects of the customer experience. In the dimension of reliability, majority of respondents (56.4%) expressed "Very High" confidence in the reliability of the supermarket to deliver its services as promised, while 35.9% considered it "High." Only a small percentage perceived it as "Low" (6.8%) or "Very Low" (0.9%). The mean for this aspect is 3.48, indicating a strong level of reliability. Also, a considerable percentage found the aspect of the supermarket allowing customers to complete transactions within reasonable time frames as "Very High" (41.8%) and "High" (41.8%). However, 11.5% rated it as "Low," and 4.9% as "Very Low." The mean for this dimension is 3.20, indicating a moderate level of completion reliability. Furthermore, the ratings of the supermarket keeping customers informed about any changes or delays in the service show that the majority of respondents believed the supermarket was "Very High" (57.9%) in keeping customers informed, while 37.2% rated it as "High." A small proportion considered it "Low" (5.0%). The mean for this dimension is 3.53, signifying a high level of reliability.

In the Assurance section, respondents expressed confidence in the staff's knowledge believing that supermarket staff demonstrates knowledge and expertise in their field, with 43.8% considering it "Very High" and 50.4% as "High." A small percentage found it "Low" (5.0%) or "Very Low" (0.8%). The mean for this aspect is 3.37, indicating a strong level of assurance. Also, majority perceived the supermarket staff instilling confidence and trust in their customers: as "Very High" (66.4%), while 27.9% rated it as "High." A small proportion found it "Low" (5.7%). The mean for this dimension is 3.61, indicating a high level of assurance. In the same vein, A significant portion found the aspect of the supermarket having employees who are courteous and professional: to be "Very High" (45.1%) and "High" (48.4%). Some respondents perceived it as "Low" (5.7%) or "Very Low" (0.8%). The mean for this aspect is 3.38, signifying a strong level of assurance.

The next section is empathy, most respondents believed the supermarket treats customers empathetically, with 55.7% considering it "Very High" and 37.7% as "High." A smaller portion found it "Low" (5.7%) or "Very Low" (0.8%). The mean for this dimension is 3.48, indicating a strong level of empathy. The supermarkets were also perceived to provide personalized attention and care: Respondents perceived this aspect positively, with 50.4% considering it "Very High" and 49.6% as "High." The mean for this aspect is 3.50, signifying a high level of empathy. Also, the supermarket is perceived as willing to listen and understand customer concerns: The majority of respondents believed the supermarket should be "Very High" (37.7%) in listening and understanding customer concerns. A significant portion rated it as

"High" (50.8%). Some found it "Low" (10.7%) or "Very Low" (0.8%). The mean for this dimension is 3.25, indicating a moderate level of empathy.

In the aspect of responsiveness, a considerable percentage of the respondents found the practice of supermarkets promptly responding to customers' requests and inquiries "Very High" (55.7%) and "High" (38.5%). Some perceived it as "Low" (5.7%). The mean for this aspect is 3.50, indicating a high level of responsiveness. Also, majority of the respondents perceived the aspect of supermarkets showing willingness to go the extra mile to meet customers' needs: positively, with 64.0% considering it "Very High" and 34.4% as "High." A small proportion found it "Low" (1.6%). The mean for this dimension is 3.61, indicating a high level of responsiveness. Furthermore, most respondents believed the supermarkets should be rated "Very High" (55.7%) in keeping customers updated, while 43.4% rated it as "High." A small proportion considered it "Low" (0.8%). The mean for this dimension is 3.54, signifying a high level of responsiveness.

The next section is tangibility.: A majority of respondents perceived the supermarket as "Very High" (56.6%) in having modern and up-to-date equipment and facilities, with 37.7% considering it "High." A smaller portion found it "Low" (4.9%) or "Very Low" (0.8%). The mean for this aspect is 3.50, indicating a high level of tangibility. Also, the supermarket's physical appearance is professional and well-maintained. Respondents believed the physical appearance is "Very High" (55.7%) and "High" (31.1%). A significant portion perceived it as "Low" (11.5%) and "Very Low" (1.6%). The mean for this dimension is 3.41, signifying a high level of tangibility. Regarding the supermarket's employees, majority of the respondents perceived the supermarket's employees having a neat and professional appearance positively, with 43.8% considering it "Very High" and 50.4% as "High." A smaller portion found it "Low" (5.0%) or "Very Low" (0.8%). The mean for this aspect is 3.37, indicating a strong level of tangibility. The aggregate mean for all dimensions combined is 3.45, indicating a generally high level of service quality across the board.

Ho1: There is no significant influence of service quality on customer satisfaction in SME's in Ibadan Metropolis

Table 4: Influence Of Service Quality on Customer Satisfaction in SMEs in Ibadan Metropolis, Oyo State, Nigeria.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.805 ^a	.649	.646	.20421

a. Predictors: (Constant), Service Quality

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.233	1	9.233	221.404	.000 ^b
	Residual	5.004	120	.042		
	Total	14.238	246			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Service Quality

Coefficients^a

Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	
1	(Constant)	1.255	.154		8.151 .000
	Service Quality	.655	.044	.805	14.880 .000

a. Dependent Variable: Customer Satisfaction

The regression analysis presented in table 4(a – c) shows the influence of service quality on customer satisfaction in SME's in Ibadan Metropolis, Oyo state, Nigeria. From table 4.6a (model summary) it can be seen that service quality explained 64.9% of the total variance in customer satisfaction in SME's in Ibadan Metropolis, Oyo state, Nigeria (Adj R2 = 0.649).

Table 4b presents the analysis of variance in the relationship between service quality and the customer satisfaction among the respondents. From the values presented in the table, it also shows that service quality has a significant influence on customer satisfaction among the respondents. ($F(1, 246) = 221.404, p < 0.05$).

In the same vein, table 4c also shows that, if all other factors remain constant, a unit change in service quality will lead to 0.655 increase in customer satisfaction in SMEs in Ibadan Metropolis, Oyo state, Nigeria at 95% level of confidence ($B = 0.655, p < 0.05$). Therefore,

based on the result of the regression analysis, the null hypothesis which states that; there will be no significant influence of service quality on customer satisfaction in SME's in Ibadan Metropolis in Oyo state, Nigeria is rejected.

Discussion of Findings

The study found a high level of customer satisfaction among the SMEs. While customers set their expectations quite high, these businesses generally meet them. However, there are areas for improvement, particularly in customer service and in making sure the store lives up to their reputation as the best place to shop.

The study's finding of a high level of customer satisfaction among Small and Medium-sized Enterprises (SMEs) in Ibadan Metropolis is consistent with research on customer satisfaction across different industries. In many cases, customers tend to have high expectations, which can be influenced by factors like exposure to quality service from other businesses, advertising, or word-of-mouth recommendations (Zeithaml, Bitner, & Gremler, 2018). SMEs in competitive environments, such as those in Ibadan Metropolis, must therefore work to meet or even exceed these high customer expectations to ensure satisfaction.

One common theme in customer satisfaction research is the importance of aligning customer expectations with actual service delivery. This alignment is critical for ensuring customer satisfaction, and it is encouraging to see that in this case, customer expectations are generally being met. This suggests that these SMEs are cognizant of their customers' expectations and are making efforts to deliver accordingly. The finding that there are areas for improvement, particularly in customer service, is also in line with similar studies. Customer service is a pivotal aspect of the overall customer experience, and deficiencies in this area can significantly impact customer satisfaction. Therefore, businesses, including SMEs, must continually work on enhancing their customer service through staff training, improved responsiveness, and greater empathy in their interactions with customers (Harahap, Hurriyati, & Amanah, 2020; Chou, Huang, & Tu, 2023).

The findings of the study reveal that Small and Medium-sized Enterprises (SMEs) in Ibadan Metropolis provide a high level of service quality. These businesses are particularly strong in several key dimensions of service quality, including reliability, assurance, empathy, responsiveness, and tangibility. These dimensions play a crucial role in shaping the perceptions of customers and their overall satisfaction. Assurance is a notable strength of these SMEs, involving the demonstration of knowledge and expertise, as well as the instillation of

confidence and trust in customers. Staff professionalism and competence significantly contribute to this dimension of service quality. Empathy is another dimension where SMEs excel. The findings reveal that businesses in the region treat customers with respect, dignity, and empathy. This emphasis on empathy is crucial in enhancing the overall customer experience (Ndofirepi, 2020).

Despite these strengths, the study also identifies areas for improvement. Notably, while the SMEs excel in reliability, there is an opportunity to enhance the completion of transactions within reasonable timeframes. Efficiency and time management in service delivery are highly valued by customers, making it essential to address any delays in transactions. Additionally, although the study highlights empathy and responsiveness as strengths, there is an opportunity for SMEs to further elevate their customer service. This could involve additional training for staff, improved communication, and proactive efforts to exceed customer expectations (Zibarzani et al., 2022).

The study also found, through the text of hypothesis, that service quality has a significant influence on customer satisfaction in SMEs in Ibadan metropolis. The finding aligns with the SERVQUAL model, a widely recognized framework for assessing service quality. According to SERVQUAL, service quality dimensions, including reliability, assurance, empathy, responsiveness, and tangibility, directly impact customer satisfaction. These dimensions encompass factors like employee knowledge, courtesy, reliability, and tangible aspects of the service environment, which are consistent with the factors examined in the study (Mohammad, 2015).

Existing literature consistently highlights the importance of service reliability in influencing customer satisfaction. Reliability refers to the consistency and dependability of service delivery. When services are reliable, customers are more likely to be satisfied (Mannan, et al., 2019). The study's finding that reliability significantly influences customer satisfaction corroborates this well-established relationship. The assurance dimension, which includes elements like employee knowledge and professionalism, plays a vital role in building customer trust and confidence. Existing research emphasizes that trust is a critical component of customer satisfaction. The finding that assurance significantly influences customer satisfaction aligns with this emphasis on trust (Zakari & Ibrahim, 2021). While the relationship between service quality and customer satisfaction is well-documented, the study's findings are context-specific to SMEs in Ibadan Metropolis. This context-specific insight suggests that the impact

of service quality may vary based on regional factors, customer expectations, and the competitive landscape (Babakus, et al.,2003). It contributes to a nuanced understanding of service quality's role in customer satisfaction within this specific context.

Conclusion

In conclusion, this study provides valuable insights into the factors influencing customer satisfaction in Small and Medium-sized Enterprises (SMEs) in Ibadan Metropolis. The findings reveal that service quality play a crucial role in determining customer satisfaction. This research underscores the need for SMEs to adopt a holistic approach that integrates service quality to achieve high customer satisfaction levels. Such a strategic focus not only leads to satisfied and loyal customers but also enhances the competitive advantage of SMEs in the local business landscape.

Recommendations

The following recommendations are considered relevant in this study

- i. Businesses should focus on enhancing service quality dimensions, especially reliability and responsiveness. Efforts to meet customer expectations in these areas can result in improved customer satisfaction and loyalty.
- ii. SMEs should actively seek feedback from customers to understand their expectations, concerns, and preferences. Regular surveys and feedback mechanisms can provide insights for continuous improvement.
- iii. To improve the reliability of service, SMEs should work on optimizing their processes to ensure timely service delivery, allowing customers to complete transactions within reasonable timeframes.

References

- Adepoju, O. O., Opafunso, Z., & Ajayi, M. (2018). Primary health care in south west Nigeria: Evaluating service quality and patients' satisfaction. *African Journal of Science, Technology, Innovation and Development*, 10(1), 13-19.
- Aditi, B., Hafizah, H., & Hermansyur, H. (2021). The role of e-services, quality system and perceived value on customer satisfaction: an empirical study on Indonesian SMEs. *Journal of Industrial Engineering & Management Research*, 2(3), 193-205.

- Al Idrus, S., Abdussakir, A., Djakfar, M., & Al Idrus, S. (2021). The effect of product knowledge and service quality on customer satisfaction. *The Journal of Asian Finance, Economics and Business*, 8(1), 927-938.
- Ali, B. J., Gardi, B., Jabbar Othman, B., Ali Ahmed, S., Burhan Ismael, N., Abdalla Hamza, P., & Anwar, G. (2021). Hotel service quality: The impact of service quality on customer satisfaction in hospitality. *International Journal of Engineering, Business and Management*, 5(3), 14-28.
- Aminu, S.A., Olayinka, K.A., Akinkunmi, M., Salau, J.T. & Odesanya, E.O., 2015. Entrepreneurial Marketing: Understanding the Interface Between Entrepreneurship and Marketing in Nigeria. *International Journal of Management Sciences and Humanities*, 3(1), pp.46-67.
- Aremu, M. A., Aremu, M. A., & Ademola, O. O. (2018). Exploring the impact of service quality on customer satisfaction in Nigerian banking Industry. *KIU Journal of Humanities*, 2(2 (A)), 163-175.
- Babakus, E., Yavas, U., Karatepe, O. M., & Avci, T. (2003). The effect of management commitment to service quality on employees' affective and performance outcomes. *Journal of the Academy of Marketing Science*, 31(3), 272-286.
- Bello, K. B., Jusoh, A., & Md Nor, K. (2021). Relationships and impacts of perceived CSR, service quality, customer satisfaction and consumer rights awareness. *Social responsibility journal*, 17(8), 1116-1130.
- Chou, H. H., Huang, C. C., & Tu, P. Y. (2023). Towards becoming a service-dominant enterprise: an actor engagement perspective. *Service Business*, 1-26.
- Essardi, N. I., Mardikaningsih, R., & Darmawan, D. (2022). Service Quality, Product Diversity, Store Atmosphere, and Price Perception: Determinants of Purchase Decisions for Consumers at Jumbo Supermarket. *Journal of Marketing and Business Research (MARK)*, 2(2), 95-104.
- Fida, B. A., Ahmed, U., Al-Balushi, Y., & Singh, D. (2020). Impact of service quality on customer loyalty and customer satisfaction in Islamic banks in the Sultanate of Oman. *Sage Open*, 10(2), 2158244020919517.
- Gandhi, S., Sachdeva, A., & Gupta, A. (2018). Impact of service quality and satisfaction on employee loyalty: An empirical investigation in Indian SMEs. *Management Science Letters*, 8(10), 991-1014.
- Gwadabe, U. M., & Amirah, N. A. (2017). Entrepreneurial competencies: SMES performance factor in the challenging Nigerian economy. *Academic Journal of Economic Studies*, 3(4), 55-61.
- Harahap, D. A., Hurriyati, R., & Amanah, D. (2020). Conceptual Model of E-Service Quality at Branchless Banking in Indonesia. *Journal of Internet Banking and Commerce*, 25(2), 1-11.
- Hyunmin, O. H. (2021). A Study on Cross-Border e-commerce with Logistics Service Quality Impact on Customer Satisfaction Using AHP Technique. *Journal of Korean Society of Transportation*, 39(2), 204-219.

- Mannan, M., Chowdhury, N., Sarker, P., & Amir, R. (2019). Modeling customer satisfaction and revisit intention in Bangladeshi dining restaurants. *Journal of Modelling in Management*, 14(4), 922-947.
- Mohammad, H. I. (2015). 7PS marketing mix and retail bank customer satisfaction in northeast Nigeria. *British journal of marketing studies*, 3(3), 71-88.
- Ndofirepi, T. M. (2020). Relationship between entrepreneurship education and entrepreneurial goal intentions: psychological traits as mediators. *Journal of Innovation and Entrepreneurship*, 9(1), 1-20.
- Nguyen, D. T., Pham, V. T., Tran, D. M., & Pham, D. B. T. (2020). Impact of service quality, customer satisfaction and switching costs on customer loyalty. *The Journal of Asian Finance, Economics and Business*, 7(8), 395-405.
- Otto, A. S., Szymanski, D. M., & Varadarajan, R. (2020). Customer satisfaction and firm performance: insights from over a quarter century of empirical research. *Journal of the Academy of Marketing science*, 48, 543-564.
- Potluri, R. M., & Angiating, G. (2018). A study on service quality and customer satisfaction in Nigerian healthcare sector. *산경연구논집 (JIDB)*, 9(12), 7-14.
- Prentice, C., Dominique Lopes, S., & Wang, X. (2020). The impact of artificial intelligence and employee service quality on customer satisfaction and loyalty. *Journal of Hospitality Marketing & Management*, 29(7), 739-756.
- Rajić, T., Nikolić, I., & Milošević, I. (2016). The antecedents of SMEs' customer loyalty: Examining the role of service quality, satisfaction and trust. *Industrija*, 44(3), 97-116.
- Sambo, E., Danladi, A. A., & Danjuma, A. (2021). Management and Sustainable Development of Service Quality and Customer Satisfaction in Listed Deposit Money Banks In Nigeria. *Nigerian Journal of Accounting and Finance*, 13(1), 2021.
- Sanny, L., Marselli, D., Effandi, R., & Simek, L. (2021, August). The Impact of Instagram E-Marketing in SME Fashion Industry on Customer Satisfaction. In *2021 International Conference on Software Engineering & Computer Systems and 4th International Conference on Computational Science and Information Management (ICSECS-ICOCSIM)* (pp. 43-46). IEEE.
- Zakari, A. A., & Ibrahim, U. A. (2021). Impact of customer satisfaction on business performance of SME's in Nigeria. *International Journal of Research in Business and Social Science* (2147-4478), 10(5), 46-51.
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2018). *Services marketing: Integrating customer focus across the firm*. McGraw-Hill.
- Zibarzani, M., Abumalloh, R. A., Nilashi, M., Samad, S., Alghamdi, O. A., Nayer, F. K., ... & Akib, N. A. M. (2022). Customer satisfaction with Restaurants Service Quality during COVID-19 outbreak: A two-stage methodology. *Technology in Society*, 70, 101977.

Organizational Factors as Predictor for Motivation to Use Library Management Software among Librarians in South West University Libraries, Nigeria.

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Abstract

Libraries like every other profession has been obstructed by technological innovations like Integrated Library Management Software (ILMS). ILMS offers numerous benefits and serves as a powerful tool for libraries to efficiently manage their resources, operations and services. Koha as an example of open-source integrated library management software has gained popularity among academic libraries all over the world, Nigeria not left behind. However, with the numerous advantages, low or partial automation was found, of which several studies have been done to delineate the reasons. The study, adopting descriptive survey research design, investigated organizational factors as predictor for motivation to use Koha Integrated Library Management Software in Southwest Universities, Nigeria. The population for this study consists of all the three hundred and eight (308) librarians from all the 22 libraries of universities in Southwest Nigeria that use Koha library management software. From the study population, 175 were sampled using Krejcie and Morgan sampling table with an approximate 70% response rate. The study found that organizational factors have significant influence on motivation to use Koha ILMS (Adj. $R^2 = 0.254$, $F(1,118) = 41.429$, $p = 0.000$). The study concluded that Koha ILMS is compatible with library operations. Therefore, the study suggests that both library management and the university management should ensure adequate availability of infrastructures that allow for effective utilization of library oriented technological innovations like ILMS.

keywords: Integrated Library Management Software, Library Management System, Koha, Library Automation

Introduction

Libraries occupy a crucial position in the dynamic realm of information management, serving as key facilitators in enabling individuals to obtain knowledge and fostering a commitment to continuous learning throughout one's lifetime (Corrall, 2022). The incorporation of technology, specifically Library Management Software (LMS), has become a crucial element in contemporary library operations in recent times (Ayo, Jotic, Raqueño, Loresca, Mendoza, & Baroña, 2023). The Library Management System (LMS) optimizes a range of activities, including cataloging, circulation, acquisitions, and patron administration, so allowing librarians to dedicate additional time and resources to services that prioritize the needs of users (Mandal, 2019). The effective implementation and utilization of Library Management System (LMS) are contingent upon not only the technical attributes of the software but also the motivation and engagement exhibited by librarians who regularly interact with it.

The effective utilization of a Library Management System (LMS) by librarians is highly dependent on their intrinsic motivation, as it plays a critical role in ensuring its seamless integration into their professional workflows (Tahar, Riyadh, Sofyani, & Purnomo, 2020). In order to have a thorough understanding of the determinants that impact this motivation, it is important to conduct a detailed analysis of the organizational elements present inside libraries. The impact of organizational characteristics on employee motivation and engagement has been widely recognized across several areas (Ajibade, 2018). These elements include leadership support, training opportunities, job satisfaction, and perceived usefulness. When examining the relationship between library professionals and LMS, exploring these organizational aspects has the potential to reveal valuable insights that can support the effective implementation and long-term utilization of technology-enhanced library systems.

The primary objective of this research is to investigate the correlation between organizational characteristics and the desire of librarians to utilize Library Management Software. Through an examination of the intricate relationship between these variables, the research endeavors to offer a comprehensive comprehension of how organizational environments influence the attitudes and actions of librarians towards Library Management Systems (LMS). These findings have the potential to provide guidance to library administrators, policy makers, and software developers when developing strategies that promote a favorable climate for increased utilization of Learning Management Systems (LMS). Ultimately, this can result in enhanced library services and improved user experiences.

Moreover, extant literature have revealed that a substantial number of libraries in the developed world have automated virtually all their services, however only few libraries in developing countries have fully taken the huge benefits of using library management systems to the fullest (Nayama, 2019). This low level of use can affect the effectiveness of the library and its ability to achieve their stated objectives. As a result of this, researchers are interested in factors that may be responsible for low level of Koha ILMS usage in academic libraries, South west, Nigeria.

The objectives are to:

- i. identify the motivation to use (perceived usefulness, perceived ease of use and purpose of use of Koha Integrated Library Management Software) among Librarians in Southwest University Libraries
- ii. examine the organizational factors (management support, staff training and available infrastructure) in the use of Koha Integrated Library Management Software among Librarians in Southwest University Libraries

- iii. ascertain the influence of organizational factors on the motivation to use Koha Integrated Library Management Software among Librarians in Southwest University Libraries

Research Questions

- i. what is the motivation to use (perceived usefulness, perceived ease of use and purpose of use) of Koha Integrated Library Management Software among Librarians in Southwest University Libraries?
- ii. what are the Organizational factors (management support, staff training and available infrastructure) in the use of Koha Integrated Library Management Software among Librarians in Southwest University Libraries?

Research Hypothesis

H₀₁. There is no significant influence of organizational factors on the motivation to use Koha Integrated library software among Librarians in University libraries of Southwest Nigeria.

Literature Review

The emergence of information and communication technology has resulted in terms and concepts like automation, computerization, digitization and so on. The impact of ICT is enormous and its influences have cut across all aspects of life. Its emergence obstructed the old manual system with its several disadvantages by creating an avenue for efficiency and effectiveness in the library's staff performance and service delivery (Bello, & Chioma, 2020). Libraries as early adopters of technology require cutting-edge technological innovations to work successfully, effectively, and efficiently in the face of information explosion and a wide range of media, as well as to serve an ever-increasing number of users. Library automation and

electronic library services, such as database subscriptions, e-books and e-journal collections, open educational resources, open access collections, institutional repositories, and so on, were concepts and phenomena born as a result of the adoption and application of technological innovations in library operations (Lund, Oname, & Agbaji, 2020).

Moreover, the quest for efficiency and rationality in the overall management of library's human, physical, and information resources is at the root of libraries' increasing adoption and use of information technology. More so, traditional or paper-based libraries have been shown to have significant limitations, necessitating the use of an automated library system. It is a strictly localized medium, for example, because the resources and users must be in the same location at the same time, and only one person can utilize a single paper document at a time. As a result, several copies of books for multiple users would be purchased which will automatically create space and storage problems. Secondly, a book is a somewhat inflexible medium because it cannot be reformatted like the electronic resources, and finally, collections on paper are heavy and require storage facilities that occupy useful space. All these are some other factors that necessitated the use of an automated system in libraries, especially academic libraries (Uzomba, Jesudunni, & Chukwuma, 2015).

Koha being a foremost library automation software aside the fact that is open and free, the advantages of open source is numerous compared with proprietary software. This explains the reasons for the wide adoption in both developed and developing countries of the world. These advantages are philosophical, ethical and practical especially in the field of librarianship (Ajani & Olayinka, 2022). For example, it enhances community participation. It is reliable because of the access to source code, flexible for modification to suit specific needs, it involves little or minimal expenses and so no (Aliyu, & Dutse, 2019). Open source library management software is adopted and reportedly used by libraries especially in developing countries where the cost of proprietary software is too exuberant to acquire. Studies has shown that the most

widely used open source library management software in Nigeria Academic libraries is Koha and the adoption is largely motivated by the fact that it is free, aside its functionalities which is highly library compliant (Lai, 2017; Ayira, 2020 and Jasimudeen, & Kumar, 2012).

Different factors have been found to influence Koha integrated library management software among which organizational factors is ranked highest. In a study on integrated library systems in use in university libraries in Osun state, Nigeria, from the 7 university libraries surveyed, all making 100 percent asserted that organizational factors such as Lack of constant power supply, high cost of training, inadequate management support for the project, poor IT facilities in the academic community, poor awareness of training opportunity in academic community were their major challenges encountered (Oyekale, 2018).

However, this was not the case in a study on Evaluation of Automated Cataloguing System in Academic Libraries in Oyo State Nigeria, using 39 respondents, where it was found that 77% agreed that there is availability of functional personal computer and a commensurable internet bandwidth while 23 % disagreed more so, all the respondents (100%) agreed that there is internet connection, however, power outage is the problem all (100%) complained about (Odunola, Tella, Oyewumi, Ogunmodede, & Oyetola, 2019).

In a study on adoption factors of integrated Library management systems (ILMS) In selected Nigerian university Libraries, using library factors in place of organizational factors, 100% of the respondents revealed that the Libraries relied on Management's awareness of the benefits that can be achieved with the use of ILMS, Management's support and encouragement for the use of information systems for job-related work, Management's provision of most of the necessary help and resources to enable people to use the system and Management's provision of good access to hardware and software resources when people need them as indications of top management support for the eventual adoption and continuous use of ILMS (Adegboye,

2018). This means that maximum support is need from the organization for effective and smooth running of the project.

Methodology

The study is a descriptive survey, the population for the study consists of all the three hundred and eight (308) librarians from all the 22 libraries of universities in Southwest Nigeria that uses Koha library management software. From the study population, 175 was sampled using Krejcie and Morgan sampling table. Adapted questionnaire from related studies was used proportionally to the number of staff in each university library to gather data. Data was analyzed using SPSS software and the hypothesis was tested via linear regression analysis.

Analysis and Discussion of findings

Demographic analysis showed that majority of the respondents (52.5%) were female. Majority (28.3%) are within age range 35-39. The age group "35-39" with 28.3%. Majority of the staff cadre are Librarian II with 30.8% of the population.

Table 1: Perceived Usefulness, Perceived Ease of Use and Purpose of Use of Koha ILMS

Motivation to Use Koha ILMS Perceived Usefulness	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
Using Koha ILMS for my job would enable me to accomplish tasks more quickly."	85 (70.8%)	35 (29.2%)	-	-	3.71
Using Koha ILMS improve my job performance	67 (55.8%)	53 (44.2%)	-	-	3.56
Using Koha would make it easier to do my job.	73 (60.8%)	46 (38.3%)	1 (.8%)	-	3.60
Koha ILMS is useful for my job	72 (60.0%)	48 (40.0%)	-	-	3.60
Weighted Mean					3.6

Perceived Ease of Use					
I believed that interaction with Koha ILMS would be clear and understandable	59 (49.2%)	61 (50.8%)	-	-	3.49
I believed navigation of Koha ILMS would be easy.	69 (57.5%)	51 (42.5%)	-	-	3.57
Learning to use Koha ILMS would be easy for me	62 (51.7%)	58 (48.3%)	-	-	3.52
It would be easy for me to become skillful at using Koha ILMS	59 (49.2%)	61 (50.8%)	-	-	3.49
Weighted Mean					3.5
Purpose of Use of Koha ILMS					
My Library uses Koha ILMS Cataloguing and Classification module for copy-cataloguing and classification	70 (58.3%)	36 (30.0%)	13 (10.8%)	1 (.8%)	3.46
My Library uses Koha ILMS for Online public Access Catalogue (OPAC).	62 (51.7%)	48 (40.0%)	9 (7.5%)	1 (.8%)	3.43
My Library uses Koha ILMS Acquisition Module for acquiring library resources	53 (44.2%)	37 (30.8%)	25 (20.8%)	5 (4.2%)	3.15
My Library uses the Serial module of Koha ILMS for serial management	43 (35.8%)	58 (48.3%)	14 (11.7%)	5 (4.2%)	3.21
In my library, we make use of the Circulation module of Koha ILMS for charging, discharging and so other circulation related functions	56 (46.7%)	41 (34.2%)	20 (16.7%)	3 (2.5%)	3.25
In my library we make use of the Patron registration module of Koha ILMS	50 (41.7%)	48 (40.0%)	20 (16.7%)	2 (1.7%)	3.22
Weighted Mean					3.3
Grand Mean					3.5

Source; Field work, 2023

From the table above, librarians' responses indicate that they perceive Koha ILMS as both useful and relatively easy to use, with a grand mean of 3.5. They view the system as beneficial for task accomplishment and job performance, and they generally find its navigation and usage to be clear and understandable. The purpose of use for various modules within Koha ILMS also receives a positive perception, with the highest mean for the Cataloguing and

Classification module. These findings suggest a favorable attitude towards the perceived utility, ease of use, and specific functionalities of Koha ILMS among the librarians surveyed.

Table 2: Organizational factors (Management support, Staff training and Availability of Infrastructure)

Management Support	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
Koha ILMS project is important to top management	39 (32.5%)	63 (52.5%)	18 (15.0%)	-	3.18
The Koha ILMS project was shouldered by the institution's management	43 (35.8%)	63 (52.5%)	12 (10.0%)	2 (1.7%)	3.23
Management is doing a helpful job by providing necessary infrastructures as regards the use of Koha ILMS	36 (30.0%)	60 (50.0%)	19 (15.8%)	5 (4.2%)	3.06
Weighted Mean					3.4
Staff Training					
I've undergone the training that I needed to be able to understand and use Koha ILMS	44 (36.7%)	57 (47.5%)	18 (15.0%)	1 (.8%)	3.20
Koha ILMS training makes it more useful to me	40 (33.3%)	63 (52.5%)	15 (12.5%)	2 (1.7%)	3.18
The management funded my Koha ILMS training seminar	32 (26.7%)	48 (40.0%)	38 (31.7%)	2 (1.7%)	2.92
Weighted Mean					2.9
Available Infrastructures					
There is reliable and uninterrupted internet connection in the library	25 (20.8%)	56 (46.7%)	37 (30.8%)	2 (1.7%)	2.87
There is reliable and uninterrupted power supply in the library	21 (17.5%)	48 (40.0%)	49 (40.8%)	2 (1.7%)	2.73
Hardware infrastructure (e.g. Computers, printers, scanners etc.) are made available	45 (37.5%)	54 (45.0%)	18 (15.0%)	3 (2.5%)	3.18
Weighted Mean					2.9
Grand Mean					3.1

Source: Field Work, 2023

As observed from Table 2, the librarians' responses indicate that they perceived relatively higher levels of management support and availability of hardware infrastructure for using Koha ILMS. However, staff training and available infrastructures such as reliable internet and power supply received lower mean scores of 2.9 indicating potential areas for improvement. The grand mean of 3.1 suggests a generally positive perception of the organizational factors studied in relation to librarians' motivation to use Koha ILMS.

Discussion of Findings

Findings on the question, “what are the Organizational factors (management support, staff training and available infrastructure) in the use of Koha Integrated Library Management Software among Librarians in Southwest University Libraries”, showed that organizational factors in the use of Koha ILMS is high with a grand mean of 3.1. However, aside management support as a sub-construct of organization factors which has an average mean of 3.6, both staff training and availability of infrastructural facilities were found fairly high with an average mean of 2.9 each which according to the decision rule is fairly high. A study negated this finding with respect to management support where it was found that approval from the library's parent body poses a great problem to the adoption, implementation and use of Koha ILMS (Asim, & Mairaj, 2019). Lack of support from parent body can reflect on staff training which is believed to be an indispensable strategy for motivating librarians since library is a service rendering organization (Tella, Ayeni, & Popoola, 2007). The findings of a study in Zambia revealed that the major challenge was the inability of librarians to effectively use all the modules in Koha because of a lack of skills (Bwalya, & Akakandelwa, 2021).

More so, according to the available search results, there is limited information on the influence of organizational factors on the use of Koha integrated library management software. However, some studies have examined the adoption and diffusion of open-source integrated library

systems (ILS) in academic libraries in Africa, including Koha (Ponelis, & Adoma, 2018). The study found that Koha is the most adopted open-source ILS and is being considered by all libraries without any ILMS or a proprietary ILMS. The research also identified barriers to use of Koha ILMS, including ICT infrastructure, organizational procurement policies and national procurement legislation, human resource capacity, and limited finances (Reddy, 2013). Another study compared the features of Koha, Newgenlib, and e-Granthalaya, and found that Koha and Newgenlib have more advanced and varied features than e-Granthalaya. However, few studies specifically address the influence of organizational factors on the use of Koha. Moreover, a study in Malawi found that the main challenges faced in the use of Koha ILMS included lack of information and communication technology infrastructure, unreliable Internet connectivity and limited finances all of which are captured in the organizational factors that influence motivation to use Koha in this study (Chaputula, & Kanyundo, 2019). Specifically, in Nigeria, a descriptive survey study on the factors affecting the effective utilization of KOHA by librarians in Nigerian academic and research libraries found that lack of institutional support was a major challenge. Challenges of infrastructural facilities like poor internet connectivity, poor Internet connectivity, lack of technical support, and difficulties upgrading and backing up the Koha database was found in a study in Zambia (Bwalya, & Akakandelwa, 2021).

Hypothesis testing

There is no significant influence of Organizational factors on the motivation to use Koha Integrated library software among Librarians in University libraries of Southwest Nigeria.

Table 4.3 (a-c) Influence of Organizational factors on the Motivation to use Koha ILMS among Librarians in University Libraries in south west

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.510 ^a	.260	.254	4.85075

a. Predictors: (Constant), Organizational Factors

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	974.816	1	974.816	41.429	.000 ^b
	Residual	2776.509	118	23.530		
	Total	3751.325	119			

a. Dependent Variable: Motivation to Use Koha ILMS

a. Predictors: (Constant), Organizational Factors b.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.921	2.411		13.655	.000
	Organization	.554	.086	.510	6.437	.000

a. Dependent Variable: Motivation to Use Koha ILMS

The ANOVA F-test is significant (Adj. $R^2 = 0.254$, $F(1,118) = 41.429$, $p = 0.000$) indicating that the regression model is statistically significant in predicting the motivation to use Koha ILMS among librarians. Also, the coefficients table indicate a positive and significant relationship between organizational factor and motivation to use Koha ILMS ($B = 0.554$, $p < 0.05$). Therefore, the null hypothesis is rejected as there was a significant influence of organizational factors on motivation to use Koha ILMS.

In summary, the study found that there is high level perception of librarians as regards the availability of organization factors in the use of Koha ILMS. However, the place of staff training and available infrastructure is fairly high. This means that staff training and infrastructural facilities needed for use of Koha ILMS are not adequate

Conclusion

Overall, using an ILM software helps librarians to provide better services to their users, optimize the use of library resources, and streamline workflows. As it has been proven by several studies, librarians and libraries should consider their options as regards the type of integrated library management they adopt and use. This could be based on the purpose, capabilities and compatibility with the library house-keeping activities, and its relative advantages to the manual system. It is expected that this would motivate a perception, which could be perceived ease of use or perceived usefulness, that can in turn inform the librarians' decision to adopt and use Koha ILMs.

Recommendations

1. More effort should be made by the parent body in terms of training and retraining of library staff in the use of Koha ILMs, this will solve the problems of the perception that Koha is complex.
2. More so, organizations should ensure that librarians and libraries are equipped with adequate infrastructural facilities.
3. Organizations should also provide funds for training and make sure there is adequate provision of infrastructure facilities like high bandwidth internet connectivity, stable electric power supply and computer hardware.

References

- Adegboro A. M.,(2018). Adoption factors of integrated library management systems (ILMS) in selected Nigerian university libraries. *Library philosophy & practice*.
- Ajani F O. & Olayinka B., *Perceived Impact of Automation on University Library Services by Library Personnel in South West, Nigeria. Information Development* 38, no. 2, 2022. 179-191.

- Ajibade, P. (2018). Technology acceptance model limitations and criticisms: Exploring the practical applications and use in technology-related studies, mixed-method, and qualitative research. *Library Philosophy and Practice*, 9.
- Aliyu S. Y., & Dutse A. Y.. Effect of Perceived Ease of Use and Perceived Usefulness on Adoption of Automation System in Academic Libraries (2019). *Nigerian Academy of Management Journal* 14(1):pp. 22-33.
- Anyira E. (2020).Need for Adoption of Koha Integrated Library Management Software in Nigerian Academic Libraries. *Library Philosophy and Practice* (e-journal) 4140.
- Asim M., & Mairaj M.I.,(2019). Librarians' perceptions about adoption and uses of the Koha integrated library software in Punjab, Pakistan. *The Electronic Library*, Vol. 37 No. 4, pp. 624-635.
- Ayo, E. B., Jotic, R. N., Raqueño, A., Loresca, J. V. G., Mendoza, I. F., & Baroña, P. V. M. (2023). Development of an Integrated Library Management System (ILMS). *International Journal of Interactive Mobile Technologies*, 17(10).
- Bello S.A., & Chioma N.E., Globalization of library and information services: An assessment of the level of ICT deployment in academic libraries in Oyo State, Nigeria. *Library Philosophy and Practice*, 3881, pp.1-19.
- Bwalya T., & Akakandelwa A., *Challenges of Using Koha as a Library Management System among Libraries in Higher Education Institutions in Zambia*. **DESIDOC Journal of Library & Information Technology**, 41(2). 2021.
- Chaputula A. , & Kanyundo A. , *Use of Koha-integrated library system by higher education institutions in Malawi*, **Digital Library Perspectives**, Vol. 35 No. 3/4, 2019. pp. 117-141.
- Corrall, S. (2022). Key Concepts in the Social Development of Higher Education: A Biblio-Glossary for the Social Future of Academic Libraries.
- Jasimudeen S., & Kumar V., *Adoption and user's perception of KOHA library management system in India*. **Annals of Library and Information Studies**, Vol. 59. 2012, Pp. 223-230
- Lai P. C., *The Literature Review of Technology Adoption Models and Theories for the novelty Technology*. **JISTEM-Journal of Information Systems and Technology Management** 14, 2017. 21-38.
- Lund B.D., Oname T. I. S., & Agbaji D., *Perceptions toward artificial intelligence among academic library employees and alignment with the diffusion of innovations' adopter categories*. **College & Research Libraries**, 81(5), 2020.p.865.
- Mandal, S. (2019). Design of theoretical framework: global and local parameters requirements for libraries. *Library Philosophy and Practice*, 1-51.

- Nayana, J. (2019) A study on Library automation status among the aided College Libraries in Bengaluru. *Library Philosophy and Practice* (e-journal) 3048
- Odunola O. A., Tella A., Oyewumi O O., Ogunmodede T A., & Oyetola S. O., *Evaluation of Automated Cataloguing System in Academic Libraries in Oyo State Nigeria* (2019). **Library Philosophy and Practice (e-journal)**. 2152.
- Oyekale J.O., *An Investigation on Integrated Library Systems (ILS) in Use in University Libraries in Osun State, Nigeria*. **Open Access Library Journal**, (2018) 5: e4915.
- Ponelis S.R., & Adoma P., *Diffusion of open source integrated library systems in academic libraries in Africa: The case of Uganda*. **Library Management**, 39(6-7), 2018. pp.430-448.
- Reddy C.V., *Comparative study of free/open source integrated library management systems (fossilms) with reference to koha, newgenlib and E-granthalaya*. **E-Library Science Research Journal**, 1(12), 2013. pp.1-10
- Tahar, A., Riyadh, H. A., Sofyani, H., & Purnomo, W. E. (2020). Perceived ease of use, perceived usefulness, perceived security and intention to use e-filing: The role of technology readiness. *The Journal of Asian Finance, Economics and Business* (JAFEB), 7(9), 537-547.
- Tella A., Ayeni C.O., & Popoola S.O., *Work motivation, job satisfaction, and organisational commitment of library personnel in academic and research libraries in Oyo State, Nigeria*. **Library philosophy and practice**, 9(2). 2007.
- Uzomba E. C., Jesudunni O. O., & Chukwuma A. I., *The Use and Application of Open Source Integrated Library System in Academic Libraries in Nigeria: Koha example*." 2015.

**Awareness and Use of Institutional Repository by Academic Staff in Nigerian
Universities: A Survey of Universities in Oyo and Osun States.**

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Abstract

Institutional repositories offer numerous advantages to academic staff as it provides access to local contents capable of enhancing their research and also offer the opportunity to make research works available to the global community. However, available evidence suggests a low level of institutional repository use among academic staff in Nigerian universities. This study examines the role of multidimensional awareness on the use of institutional repositories. The study adopts a survey research method. The study population is made up of academic staff from Universities in Oyo and Osun state. A multistage sampling procedure is adopted to select 235 lecturers. The research instrument is a structured questionnaire adapted from the Endsley's Situational Awareness Theory (SAT). Data collected was analysed using both descriptive and inferential statistics. The results showed that while there is a high level of perception among the respondents, majority of the respondents' demonstrated low level comprehension and projection two elements critical to the understanding of the true essence of institutional repositories. In addition, the test of hypothesis revealed that awareness has a significant influence on the use of institutional repositories among the respondents. The study concluded that, without raising full awareness about the mission and functions of institutional repositories, Nigerian tertiary institution and their staff will continue to miss out on the benefits of using institutional repositories. It was therefore recommended that institutional repository awareness programs should be practical oriented.

Keywords: Academic Staff, Institutional Repository, Library Automation, Scholarly communication, Situational Awareness,

Introduction

A functioning institutional repository offers several advantages to academic staff of tertiary institutions globally. It creates wider access for their research outputs while also serving as an indispensable source of information, especially in developing countries such as Nigeria where there is limited access to scholarly databases subscription. Regular use of institutional repository by academic staff of universities means that they consistently consult the repositories to access information sources for their academic works. In addition, academic staff of universities should also be ready to deposit all relevant research output except where constrained by relevant laws. They should also be willing to deposit these resources in a timely manner so that users can benefit from them. Doing this is important for the relevance of the institutional repository and the only way the advantages of establishing the repository can be enjoyed (Kayungi, Ndenje-Sichalwe, & Manda, 2021).

However, in spite of all the benefits of using institutional repositories, one of the persistent challenges for institutional repositories globally is, the low rate of institutional repository use among academic staff of universities who are the major stakeholders (Gunasekera, 2017). The low use of institutional repositories may also have some implications on academic staff of universities as it may lead to poor quality research output, lack of innovative research idea, low visibility, and citation for their research works. Mindful of these consequences, researchers have examined various factors that may be responsible for low or non-use of institutional repositories by academic staff of universities. Factors such as ICT skills, attitude, and copyright law among others have been considered. However, factors such as awareness that may influence the use of institutional repositories by academic staff of universities have not been comprehensively examined (Kayungi, Ndenje-Sichalwe, & Manda, 2021).

Statement of the Problem

The use of institutional repositories offers a lot of benefits for academic staff of universities, their institutions, and the entire academic community. Academic staff of universities are mainly involved in teaching, research and community services all of which demand the use of quality information resources. When academic staff of universities are able to access relevant and quality information resources, it impacts positively on their quality of teaching, research productivity, and their overall ability to contribute to the development of the society. This is why institutional repositories that collate research works together, providing a central platform for related research findings are so essential for academic staff of universities. However, it has

been observed that academic staff of universities are often reluctant to deposit their research works in or seek search for information resources from their institutional repositories. This non-use of institutional repository has negative implications which include low awareness of research trends, poor quality of course materials and lack of visibility for academic staff of universities and their institutions.

Various reasons have been identified for this low use of institutional repositories among academic staff of universities. However, the problem persists. Some of the factors that have not been extensively researched in relation to institutional repositories are; level of awareness. Examining these factors could lead to the development of more effective strategies to promote the use of institutional repositories for self-archiving among academic staff of universities. This study, therefore, examines the influence of awareness on the use of institutional repositories for self-archiving among academic staff of universities in Oyo and Osun states.

Research Questions

The following questions will guide the study

1. What is the level of institutional repository use among academic staff of universities in Oyo and Osun state?
2. What is the level of awareness of institutional repositories among academic staff of universities in Oyo and Osun states?

Hypothesis

The following null hypothesis will be tested at 0.05 level of significance:

H₀1: There will be no significant influence of awareness (perception, comprehension and projection) on the use of institutional repositories by academic staff of universities in Oyo and Osun states.

Literature Review

Available literature has shown that awareness is one of the earliest factors to be considered in the use of institutional repository. As an innovation, institutional repositories are often virtually unknown to many, including lecturers, which means that they are not likely to consider it as a source of information or a tool they can use for the dissemination of their own research outputs

(Bamigbola, 2014; Nunda, & Elia, 2019). As a result, there are quite a body of literature on the subject of awareness of institutional repositories and how it influences the use of institutional repositories. The available literature on the awareness of institutional repositories also shows the multidimensional nature of the concept of awareness.

A study conducted in Texas to assess the degree of awareness on institutional repository at Texas A&M University (TAMU) revealed that the level of awareness was quite low. The result showed that only 27 percent of the respondents surveyed from 10 faculties of the institution were aware of the existence of the institutional repository, and only 7% had submitted, at least, a published research to the repository (Yang & Li, 2015). This finding, coming from an institution in America, a country with the highest number of institutional repositories in the world is surprising and one may think it is an exception to the rule. However, another study conducted three years later also showed that the awareness was still an issue which affect the use institutional repositories by lecturers.

The seeming lack of awareness and its influence on the use of institutional repositories in developed nations can however be excused on the availability of several databases and ability of the institutions to subscribe to a large number of journals in each field. This is not so in Africa and other developing countries (Bamigbola & Adetimirin, 2017). It would be expected that information users in countries such as Nigeria would make large scale use of institutional repositories. However, available literature also suggests that awareness is a significant factor in the use of institutional repositories in these countries as well.

In India, researchers found that about 33% of academic staff use institutional repositories. Furthermore, it was found that higher level of awareness such as comprehension and projection achieved through participation in workshops/seminars have an impact on the use of institutional repositories (Kampa & Patra, 2020). This finding is highly instructive as it specifically supports the theory of awareness. When users attained the highest level of awareness, they would make use of the institutional repository frequently and for many purposes. The global situation in the use of institutional repositories also applies to the African continent.

Researchers in Kenya who observed that content recruitment is an important aspect of institutional repositories development conducted a study to ascertain how awareness affect the readiness of lecturers to submit their research outputs to institutional repositories. The findings of the study indicated that majority of the respondents complained about low level of user

awareness creation about the institutional repositories in their institutions. This low level of awareness was reported to affect the use of institutional repository as 63%, of the librarians interviewed reported that content recruitment for the institutional repository is a big challenge as they always find it difficult to convince researchers to deposit their research in the repositories (Njagi & Namande, 2018) . Another study conducted a few years later in Kenya however indicated an improvement.

Scholars investigated the awareness and attitude of lecturers in selected Kenyan universities found that 59% of the lecturers are ‘fully aware’ of the institutional repository which means that they have attained the three levels of perception, comprehension, and projection. This full awareness was achieved through interaction with Librarians, colleagues, workshop and seminars and Internet tutorials. This awareness influenced the use of institutional repository as it was reported that 69% of the lecturers prefer to use institutional repositories while 85% of them use the repository weekly to meet various information needs (Waithaka & Onyancha, 2021).

In the Nigerian context, Okhakhu (2015) examined the influence of awareness and knowledge on the attitude of users towards the institutional repository. The study found that majority of the respondents reported that they are aware of the existence of institutional repository. In addition, it was shown that a significant part of the respondent also understands the benefits in the use of institutional repository. It was also found that the respondents claimed to be familiar with the content of their universities’ institutional repository (IR), as well as been aware of their universities’ IR policy, and the relevance copyright issues relating to open access publishing. There are various aspects of the study which makes it relevant to the current study. The measure of awareness in this study is comprehensive as it was not just limited to having knowledge of the existence of institutional repositories. Most importantly, the study examined the sources from where the lecturers get to know about the institutional repository.

In contrast, Nunda and Elia (2019) reported that while Tanzanian lecturers demonstrated positive perception about institutional repositories, many of them lack the actual knowledge about the use of institutional repositories. Only 17% of the lecturers rated their knowledge of the use of institutional repositories as highly adequate while 34% rated their knowledge level ‘averagely adequate’. About 27% of the lecturers rated themselves ‘barely adequate while 22% reported that their knowledge of institutional repository was ‘not adequate’. This was reflected

in their use of institutional repositories as it was found that the library often found it difficult to convince the lecturers to deposit their research in institutional repositories.

A related study conducted by Jabbar, Saqib, and Muhammad (2020) found that majority of the academic staff in an Indian university were aware of the existence, the benefits of using IRs, and the content expected to be in the IR in their universities. However, majority of the lecturers were not aware of university IR policy, publishers' policy on open access or the processes of depositing research into the IR. As a result of which the researchers reported that awareness is high but also admitted that they do not fully understand how to deposit information resources into the institutional repository. In addition, lecturers were not fully aware of the policies guiding the use of IR. This is reflected in the use of IR among the lecturers. The study found that, although the lecturers use the institutional repository to access published articles and conference papers but they do not access the repository regularly (Jabbar, Saqib, & Muhammad, 2020).

Given that there may be institutional dynamics and peculiarities that determine level of awareness and use of institutional repositories especially in a multicultural society such as Nigeria, Okiki, Osedo, and Okpah (2020) examined the awareness and use of institutional repositories by lecturers at University of Lagos, Nigeria. The study found that majority of respondents form their perception of the institutional repository through various communication channel such as the university circular, other accidentally stumbled on the information while visiting the University/Library website. It was also found that the respondents understand the benefits of using institutional repositories as majority agreed that submitting research to the IR is a means of preserving scholarly works, achieve recognition and promotion, earn recognition for the university, and expose lecturers to global recognition. This moderate high level of awareness affected the use of institutional repositories.

The study found that majority of the respondents were willing to submit their research and other intellectual output to the repository, and they would recommend the repository to their colleagues. However, due to lack of comprehension about the total essence of institutional repository, majority of the respondents expressed fear about copyright infringement of their intellectual properties. This study further validates the importance of all round awareness to the use of institutional repositories. The effort of the library in creating liaison officers generated significant awareness among the lecturers which makes them willing to submit their research.

Methodology

The research design used in this study was the descriptive research of the survey type. There are about fourteen Universities in Oyo and Osun state. However, only four of them possess functioning institutional repositories which is the inclusion criteria for this study. The population for this research includes 1,009 lecturers from the universities that meet this criterion namely, Ajayi Crowther University, Oyo State, University of Ibadan, Oyo state, Obafemi Awolowo University, Ife and Adeleke University, Ede, Osun state. The sampling procedure went through various stages before the sample size was determined. The first stage was the determination of the population from each institution. Stage two, The Taro-Yamane sample size formula was used to determine the sample size which is 286. The third stage involves the use of stratified sampling technique to determine the sample from each stratum (Universities).

The instrument used in collecting data for this study was a structured questionnaire. The questionnaire was divided into three distinct sections; Section A: Demographic information; Section B: Use of Institutional Repository Scale and Section C: Awareness of Institutional Repository Scale. All of the items are measured using a 4-point Likert scale such as 4= Strongly agreed; 3= Agreed; 2 = Disagree; 1= Strongly disagree

Results

Demographic Analysis

Table 1 Demographic Analysis

		Frequency	Percent
Institution	University of Ibadan	76	35.8
	Obafemi Awolowo University	57	26.9
	Ajayi Crowther Univeristy	40	18.9
	Redeemers University	39	18.4
	Total	212	100.0
Sex	Male	107	50.5
	Female	105	49.5
	Total	212	100.0
Age	25-29	74	34.9
	30-39	70	33.0
	40-49	47	22.2
	50-59	12	5.7

	60 and Above	9	4.2
	Total	212	100.0
Rank/Designation	Professor/University Librarian	2	0.9
	Associate Prof/Deputy UL	10	4.7
	Senior Lecturer/Principal Librarian	15	7.1
	Lecturer I/Senior Librarian	30	14.2
	Lecturer II/Librarian1	49	23.1
	Assistant Lecturer/ Librarian II	78	36.8
	Graduate Assistant	28	13.2
	Total	212	100.0

Source: Fieldwork 2023

Table 1 presents the demographic distribution of the respondent. The table shows that the 57 (26.9%) respondents were from the universities of Ibadan, 57 (26.9%) of the respondents were Obafemi Awolowo University, Ile-Ife, while 40 (18.9%) were from Ajayi Crowther University, Oyo and 39 (18.4%) were from Redeemers University, Ede. This shows that majority of the respondents were from the university of Ibadan. Gender wise, there were 107 (50.5%) male respondents compared to 105 (49.5%) female respondents meaning that male respondents are in the majority. In term of age distribution, 74 (34.9%) of the respondents are between the age 25 to 29, 70(33%) are in the 30-39 years age bracket, 47(22.2%) are aged between 40 to 49years while 12(5.7%) are aged between 50 to 59 years while 9 (4.2%) are in the bracket 60 years and above.

The data presented in Table 4.2 also shows the rank/designation of the respondents. There are 2 respondents with the rank of Professor/University Librarian which constitute 0.9% of the total respondents. Also, 1(4.7%) of the respondents indicated that they are either Associate Professor or Deputy University Librarian. In addition, 15 (7.1%) are Senior Lecturer or Principal Librarian, 30 (14.2%) are Lecturer I or Senior Librarian; 49 (23.1%) Lecturer II or Librarian1; 78 (36.8%) are either Assistant Lecturer or Librarian II while 28 (13.2%) indicated that they are Graduate Assistants. The age and rank of the respondents show a youthful population balanced with age and experienced.

Table 2: Institutional Repository Use among Academic Staff of Universities in Oyo and Osun State

Statements	Always	Often	Rarely	Never	Mean
To make access to my works cheaper for others	97 (45.8%)	65 (30.7%)	45 (21.2%)	5 (2.4%)	53.20

To gather information for personal research	74 (34.9%)	98 (46.2%)	31 (14.6%)	93.12 (4.2%)
my scholarly work is disseminated more quickly	66 (31.1%)	103 (48.6%)	36 (17.0%)	73.08 (3.3%)
For guidelines on how to write research/review articles	60 (28.3%)	108 (50.9%)	34 (16.0%)	103.03 (4.7%)
To ensure that my published material is easy to find	48 (22.6%)	126 (59.4%)	23 (10.8%)	152.98 (7.1%)
depositing my work in the repository protects it from plagiarism	58 (27.4%)	94 (44.3%)	36 (17.0%)	242.88 (11.3%)
Weighted mean				3.04

Source: Fieldwork 2023

Table 2 presented data on institutional repositories use among the respondents. The data shows that use of institutional repositories in order of frequency of use is to make access to my works cheaper for others information users (Mean = 3.20); gather information for personal research (Mean = 3.12); for quick dissemination of research works (Mean = 3.08); to find guidelines on how to write research/review articles (Mean = 3.03); to ensure that published material is easy to find (Mean = 2.98) while others also use the repository to protect their scholarly work from plagiarism (Mean = 2.88). Overall, the average mean of all the items comprising the use of institutional repositories is 3.04 which means a high level of institutional repository use. This result is unique because previous studies have reported low use of institutional repositories (Bonsu, Essel, & Ofori, 2018; Eromosele, 2019).

What is the level of awareness of institutional repositories among academic staff of universities in Oyo and Osun states?

Table 3 Awareness of Institutional Repositories among Academic Staff of Universities in Oyo and Osun States

Perception	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
I have come across it and know quite a bit about it	88 (41.5%)	96 (45.3%)	23 (10.8%)	5 (2.4%)	3.26
I have heard about institutional repositories	73 (34.4%)	118 (55.7%)	19 (9.0%)	02 (0.9%)	3.24
I have come across institutional repositories but know just a little about (R)	65 (30.7%)	89 (42.0%)	53 (25.0%)	5 (2.4%)	1.99
I have heard about institutional repositories but know nothing about it (R)	100 (47.2%)	64 (30.2%)	35 (16.5%)	13 (6.1%)	1.81
Weighted mean					2.58

Comprehension	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
I am aware of the content of my university's IR	75 (35.4%)	95 (44.8%)	38 (17.9%)	4 (1.9%)	3.14
I am aware of the processes of depositing my work into IR	67 (31.6%)	105 (49.5%)	24 (11.3%)	16 (7.5%)	3.05
I am aware of my university's IR policy	52 (24.5%)	111 (52.4%)	42 (19.8%)	7 (3.3%)	2.98
I am aware of journal publishers' policy on OA	68 (32.1%)	89 (42.0%)	30 (14.2%)	25 (11.8%)	2.94
Weighted mean					3.03
Projection	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
Institutional repositories will provide me access to scholarly works easily	82 (38.7%)	94 (44.3%)	33 (15.6%)	3 (1.4%)	3.20
I would find institutional repositories useful in my career	52 (24.5%)	127 (59.9%)	29 (13.7%)	4 (1.9%)	3.07
Using institutional repositories allow my students to find my research output in one place	70 (33.0%)	93 (43.9%)	30 (14.2%)	19 (9.0%)	3.01
Using institutional repositories can boost the number of citations of my research work	51 (24.1%)	108 (50.9%)	42 (19.8%)	11 (5.2%)	2.94
Weighted mean					3.06
Aggregate Mean					2.89

Decision rule 1.00 – 1.49= very low, 1.50 – 2.49= low, 2.50 – 3.49 = high, 3.50-4.00= very high

Source: Fieldwork 2023

Table 3 presents the data on the level of awareness of institutional repositories among academic staff. Awareness of institutional repositories was examined under three sub-metrics, namely; perception, comprehension, and projection. Under perception, the responses showed that most of the have come across institutional repositories and know quite a bit about them (Mean = 3.26). this is followed by the who have merely heard about institutional repositories (Mean = 3.24). However, majority have come across institutional repositories but know just a little about (Mean = 1.99) while only a minority reported that they have heard about institutional repositories and know what it stands for (Mean = 1.81) which shows low level of awareness in that aspect Overall, the average mean score for the perception dimension of awareness is 2.58 which indicates a moderate level of positive perception.

The second dimension of awareness is comprehension which measures the understanding of the workings of institutional repositories among the respondents. The responses indicates that

a high number of the respondents are aware of the content of my university's IR (Mean = 3.14); aware of the processes of depositing their research works into institutional repositories (Mean = 3.05) and my university's IR policy (mean = 2.98). In addition, the respondents are also aware of journal publishers' policy on OA (Mean = 2.94). Overall, the comprehension dimension of awareness has an average mean score of 3.03 indicating a high level of comprehension.

This level of comprehension dovetails into the third dimension of awareness which is projection.

Projection as a dimension of awareness means the level of understanding of the respondents regarding the potential benefits or harms of using institutional repositories. The responses shows that majority of the respondents also perceive that institutional repositories will provide them access to scholarly works easily (mean = 3.20). Furthermore, majority of the respondents strongly agreed would find institutional repositories useful in their careers (Mean = 3.07). Also, majority agreed that using institutional repositories allow students to find their research output in one place (mean = 3.01). In addition, many of them also agreed that using institutional repositories can boost the number of citations of their research works (Mean = 2.94). Overall, the average mean score of projection as a dimension of awareness of institutional repositories among the respondents is 3.06.

To answer the research question on the level of awareness of institutional repository among the respondent, the aggregate mean score of the three dimensions is considered. This is perception (2.58), comprehension (3.03), and projection (3.06). Aggregate mean score is 2.89 indicating a high level of multidimensional awareness of institutional repos among the respondents. This result is also unique because previous studies have merely focused only on one dimension of awareness which is perception

Hypothesis

There will be no significant influence of awareness (perception, comprehension and projection) on the use of institutional repositories by academic staff of universities in Oyo and Osun states.

Table 4 Influence of Awareness on the Use of Institutional Repositories by Academic Staff of Universities in Oyo and Osun States.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
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1	.390 ^a	.152	.148	.54128
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a. Predictors: (Constant), Awareness of IR

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.058	1	11.058	37.743	.000 ^b
	Residual	61.528	210	.293		
	Total	72.586	211			

a. Dependent Variable: Use of IR

b. Predictors: (Constant), Awareness of IR

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.436	.271		5.297	.000
Awareness of IR	.036	.006	.390	6.144	.000

a. Dependent Variable: Use of IR

Table 4. presents the results of the linear regression analysis for the influence of awareness on the use of institutional repositories by university academic staff in Oyo and Osun State of Nigeria. From the results in Table 4a, awareness of institutional repositories has a positive correlation with the use of institutional repositories by university academic staff in Oyo and Osun State of Nigeria, Nigeria ($R = 0.390$, $p < 0.05$). The coefficient of determination (Adj. R^2) of 0.152 shows that awareness of institutional repositories explains 15.2% of the use of institutional repositories by university academic staff in Oyo and Osun State of Nigeria.

Furthermore, Table 4b presents the results of ANOVA of regression test which revealed that awareness of institutional repositories has a significant influence on the use of institutional repositories by university academic staff in Oyo and Osun State of Nigeria. This can be explained by the F-value (37.743) and low p-value (0.000) which is statistically significant at 95% confidence interval. Hence, the result posited that the use of institutional repositories is influenced by the level of awareness of institutional repositories among the respondents.

In addition, the results of regression coefficients in table 4c, revealed that at 95% confidence level, a unit change in awareness of institutional repositories will lead to a 0.036 increase in the use of institutional repositories by university academic staff in Oyo and Osun State of Nigeria, given that all other factors are held constant. On the strength of this result (Adj. $R^2 = 0.152$, $F(1, 210) = 37.743$, $p = 0.000$), the null hypothesis one (H_01) which states that there will

be no significant influence of awareness (perception, comprehension and projection) on the use of institutional repositories by academic staff of universities in Oyo and Osun states is thus rejected.

Discussion of Findings

The aim of the study was to determine the influence of awareness on the use of institutional repositories by academic staff of universities in Oyo and Osun State of Nigeria. The study found that both the level of awareness and institutional repositories use among the respondents was high. This finding is in line with several similar studies while also contradicting other studies on the use of institutional repositories. For instance, a study conducted on the use of institutional repository for self-archiving by lecturers in Africa found that many of them do not share or disseminate their research after it has been published through the peer-review system because, in most cases, they were unaware of the benefits of informal networks or how to use them to promote their study (Bamigbola, 2021). Although many academic libraries across the world have successfully implemented IRs, several studies indicate scholar's reluctance to archive their work in IRs. In fact, the current IR deposition estimates indicate that only 15 to 30% of eligible scholars and researchers deposit their work in institutional repositories (Peechapol, Na-Songkhla, Sujiva, & Luangsodsai, 2018)

There are however findings that agrees with the current study. Bonsu, Essel, and Ofori, (2018).reported that the majority of lecturers in Ghana, used the institutional repository for depositing and retrieving scholarly resources while others used the repository for information retrieval only. In the same vein Eromosele (2019) who examined the use of institutional repositories in Covenant University and University of Ilorin found that there was a higher level of IR resources at Covenant University while the University of Ilorin recorded low usage by lecturers. The frequency of use of the repositories was also found to be different. It was found that the frequency of usage of institutional repository is higher in Covenant University when compared to UNILORIN.

The second research question of this study examined the level of awareness of institutional repositories among the respondents. The study found a high level of awareness among the respondents. Most importantly, the awareness is multidimensional as it covers the perception, comprehension and projection of the relevance of institutional repositories. The findings showed that the respondents scored high on all of the dimensions. However, perception was the lowest among the three dimensions which indicated some gaps to be filled. There are

several studies that support this finding although most of the studies focused on one or two dimensions to the exclusion of others. For instance, Olayinka, Ogheneruemu, and Oluwayemisi (2021) reported that lecturers were aware of the benefit of institutional repositories such as; wider communication of research outcome; increased personal prestige in one's field; increase institutional prestige; protection of research from plagiarism; increase the citation impact. Similarly, Jabbar, Saqib, and Muhammad, (2020) found that majority of the respondents were aware of the existence of; the benefits of using IRs and the content expected to be in the IR in their universities. However, majority of the lecturers were not aware of university IR policy, publishers' policy on open access or the processes of depositing research into the in IR. As a result, while the researchers reported that awareness is high, the fact that knowing how to deposit information resources into the institutional repository is the lowest and that lecturers are not fully aware of the policies guiding the use of IR shows that more effort is still required to improve the level of awareness among the academic staff.

The test of hypothesis on the influence of awareness on the use of institutional repositories shows that awareness has a significant influence on the use of institutional repositories among academic staff of universities in Oyo and Osun states. The finding indicates that, the more fully aware users were about institutional repositories, the more likely they would be to make use of it. As shown in the study by Nunda and Elia (2019) who reported that majority of the respondents in their study were aware of the existence of; the benefits of using IRs; and the content expected to be in the IR in their universities. However, majority of the lecturers were not aware of; university IR policy, publishers' policy on open access or the processes of depositing research into the in IR. As a result, there was limited use of institutional repository among the respondents.

This is also supported by a study of Kampa and Patra (2020) in which the researchers found that a higher level of awareness such as comprehension and projection achieved through participation in workshops/seminars had an impact on the use of institutional repositories. In the same vein, researchers in Kenya by Njagi and Namande (2018) found that there was low level of user awareness about institutional repositories in their institutions which means that majority of the lecturers were simply informed about the existence of the institutional repository (perception) without in depth training on the use of institutional repositories and continuous advocacy on the use of institutional repositories to create higher level of awareness (i.e; comprehension and projection). This low level of awareness was reported to affect the use

of institutional repository as majority of the librarians interviewed reported that content recruitment for the institutional repository was a big challenge as they always found it difficult to convince researchers to deposit their research in the repositories.

Conclusion

Research and scholarly activities that constitute the major preoccupation of academic staff in universities thrive on the availability and accessibility of quality information resources. In the same vein, the research output of scholars need to be disseminated as quickly and widely as possible. Effective use of institutional repositories, both as tool for scholarly communication and as information systems provide a holistic solution to achieve these objectives. In an era where Nigerian lecturers have better access to research conducted abroad than local research due to poor scholarly communication infrastructure, institutional repositories offer an opportunity to promote local content in research and so its use should be widely promoted. It is therefore important that academic staff are enlightened about the relevance, workings and advantages of institutional repositories. Doing this will ensure that they will be willing and able not only to promote local research outputs but also enhance the quality and impact of research conducted in Nigeria.

Recommendations

Based on the findings as presented in this chapter and the conclusion reached in this study, the following recommendations are considered relevant:

- i. There is a need for academic institutions in Nigeria to develop more institutional repositories to meet the information needs of academic staff and encourage more researchers to access institutional repositories.
- ii. There is a need for more publicity and marketing activities on the part of universities that have developed institutional repositories to ensure that their staff do not depend on second hand information about institutional repositories.
- iii. Given the significance of awareness to the use of institutional repositories by academic staff of universities, it is important to enrich any awareness programme with monitoring and evaluation procedures to ensure that they continue to contribute to improved use of institutional repositories.

References

- Bamigbola, A. A. (2014). Surveying attitude and use of institutional repositories (IRs) by faculty in agriculture disciplines: A case study. *Procedia-Social and Behavioral Sciences*, 147, 505-509.
- Bamigbola, A. A. (2021). Awareness, anchor and adjustment factors in the use of institutional repositories by Nigerian lecturers. *IFLA journal*, 47(2), 182-195.
- Bamigbola, A. A., & Adetimirin, A. E. (2017). Evaluating use of institutional repositories by lecturers in Nigerian universities. *Information Impact: Journal of Information and Knowledge Management*, 8(3), 83-102.
- Bonsu, F. M., Essel, H. B., & Ofori, E. R (2018). Evaluating the Reasons for The Non-Participation of Kwame Nkrumah University of Science and Technology Institutional Repository by Academic Staff. *Journal of Basic and Applied Research International*, 24(2), 58-64.
- Eromosele, G. (2019). Information and Communication Technology skills as determinants of utilizations of institutional repositories by lecturers in two Universities in Nigeria. *Library philosophy and practice (e-journal)* Available at ProQuest, <https://search.proquest.com/docview/2234441845>.
- Gunasekera, C. (2017). Social science scholars perception towards open access and institutional repositories. *International Journal of Social Sciences*, 3(2), 2244-2259.
- Jabbar, A., Saqib, U. R., & Muhammad, A. H. (2020). Accessibility and Use of Institutional Repository among Research Scholars: A Case of COMSATS Institute of Information Technology, Lahore. *Library Philosophy and Practice*, 1-18.
- Kampa, R. K., & Patra, N. K. (2020). Determining the factors influencing the level of awareness and usage of open source digital repository software by academic librarians in India. *Digital Library Perspectives*, 36(3), 303-317.
- Kayungi, P. N., Ndenje-Sichalwe, E., & Manda, P. A. (2021). Academic staff awareness of institutional repositories (IRs) in Tanzania universities. *University of Dar es Salaam Library Journal*, 16(1), 67-83.
- Njagi, P. R., & Namande, B. (2018). The status of the implementation of institutional repositories in selected newly established universities in Kenya. *Regional Journal of Information and knowledge management*, 3(1), 30-40.
- Nunda, I., & Elia, E. (2019). Institutional repositories adoption and use in selected Tanzanian higher learning institutions. *International Journal of Education and Development using ICT*, 15(1).
- Okhakhu, D. (2015). Librarians' perception of lecturers' awareness as a factor influencing the development of institutional repository in public universities in South-West Nigeria. Available at SSRN 2659199.
- Okiki, O. C., Osedo, O. A., & Okpah, B. (2020). Stakeholders Awareness and Willingness to Submit Scholarly Works to Institutional Repository Towards Research Visibility: A Case of University of Lagos.

- Olayinka, A. T., Ogheneruemu, O. G., & Oluwayemisi, A. A. (2021). Academic Staff Perceptions of Institutional Repository and Academic Staff Productivity in South-West Universities, Nigeria. *International Journal of Research in Library Science (IJRLS)* 7(4), 179-190.
- Onyebinama, C. O., Anunobi, C. V., & Uzochukwu, A. U. O. (2020). Effect of gender on lecturers' submission and retrieval of research output in institutional repositories in Private Universities in Southern Nigeria. *Library Philosophy and Practice (e-journal)*.
- Orsu, N. E. (2019). Utilization of open access repositories for visibility of academic publications by lecturers in South-East, Nigeria. *International Journal of Knowledge Content Development & Technology*, 9(4).
- Peechapol, C., Na-Songkhla, J., Sujiva, S., & Luangsodsai, A. (2018). An exploration of factors influencing self-efficacy in online learning: A systematic review. *International Journal of Emerging Technologies in Learning (Online)*, 13(9), 64.
- Qazi, A., Qazi, J., Naseer, K., Zeeshan, M., Hardaker, G., Maitama, J. Z., & Haruna, K. (2020). Analyzing situational awareness through public opinion to predict adoption of social distancing amid pandemic COVID-19. *Journal of medical virology*, 92(7), 849-855.
- Waithaka, M. W., & Onyancha, O. B. (2021). Use of open access channels for scholarly publishing in Kenyan universities. *Publishing Research Quarterly*, 37, 293-306.
- Yang, Z. Y. L., & Li, Y. (2015). University faculty awareness and attitudes towards open access publishing and the institutional repository: A case study. *Journal of Librarianship and Scholarly Communication*, 3(1).

**Influence of Institutional Support on Preservation and Conservation Practices of
Information Resources by Library Personnel in University Libraries, Lagos State,
Nigeria**

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Abstract

The 21st century has witnessed the influx of information in electronic format which has increased library's responsibility of embracing digital preservation. Failure of which is liable to be the cause of the deterioration observed. The aim of the study is to, among several other reasons, explore, the influence of institutional support and digital competence on preservation and conservation practices among library personnel. The descriptive survey research design was adopted for the study. Questionnaire with 0.73, 0.68 and 0.82 Cronbach alpha reliability rate was used for data collection. The study population is made up of One hundred and Ninety library personnel. The data collected was analysed using both descriptive and inferential statistics. The study found that preservation is highly practiced (Mean = 3.4), institutional support was found to be high (Mean = 3.1). However, the study found deficiencies in the areas of automation/maintenances and provision of infrastructural facilities with a moderate mean score of 2.61 and 2.3. The test of hypotheses further revealed that institutional support has significant influence on digital preservation (Adj. $R^2=0.076$, $F(1,164)=15.219$, $p=0.000^b$). The study confirmed a commendable level of institutional support within academic libraries. However, a notable gap was identified in the automation of processes and the provision of necessary technological infrastructure. This gap represents an area where further attention and

investment are needed to fully harness the potential of digital preservation and conservation efforts. The study recommends that Academic institutions should prioritize the preservation and conservation of digital resources as well as physical resources.

Keywords: Preservation, Digital Preservation, Conservation, Digital competence, Automation.

Introduction

The library has the primary role of acquiring, processing, organizing, preserving, and conserving printed and non-printed information resources or materials for its clientele. Library information resources refer to all those media for storing information, such as textbooks, journals, newspapers, magazines, patents and standards, handbooks and manuals, directories, gazetteers, encyclopaedias, atlases and maps, calendars and diaries, vertical files, theses and dissertations, tapes, videos, films, optical discs, cassettes, magnetic tapes, microforms, etc. Similarly, library information resources can be defined as book materials, microforms, and electronic information materials capable of meeting the information needs of the users.

The systematic and planned human management of resource and activities aimed at minimizing physical and chemical deterioration of library items is what preservation of library resources implies. Environmental precautions, preventive cleaning, encapsulation, and digital preservation are all examples of preservation efforts. Conservation, on the other hand, refers to steps made to resuscitate decaying resources or the maintenance operations carried out to extend the life of information resources by delaying the decay process in order to restore or preserve them in usable form. When these operations are not in place or well-coordinated, degradation is not only unavoidable, but also imminent — a phenomena that could result in catastrophic library material destruction. Moreover, the emergence of information and communication technology has added to the preservation and conservation responsibilities of the library to include digital preservation.

Over the years, several factors have been understudied to understand the factors that influence proper preservation and conservation of library among the factors are fund, attitude and expertise of librarians and library personnel, availability of infrastructures and so on. However, little attention is given to factors like institutional support and digital competence which is a

necessary competence in this digital age. Institutional support in this context refers to active organizational encouragement through policies, regulations, and monetary and non-monetary help that propel employees to perform their responsibilities effectively and effectively. It is noted that the universities in Nigeria need to equip and provide institutional support in research grants, conference sponsorship, publication support, international linkages, and collaboration to enhance research skills among librarians. Some of the institutional support institutions of higher learning can provide includes research support in the form of conference sponsorship, research grants, publication support, and technical support, particularly in a knowledge-based economy. Institutional support that can enhance the quality of research and teaching quality in the form of knowledge sharing includes research support, technical support, and pedagogical support. The technical support provided by the institutions will make the faculty more effective and efficient, particularly when they receive prompt responses to any technical issues while carrying out their responsibilities.

Institutional support can be in form of financial support, technical support, and research support. Financial support is an essential aspect of institutional support for the preservation of library resources. It refers to the provision of funds for the acquisition, maintenance, and preservation of library resources. Financial support enables libraries to purchase new materials, upgrade existing resources, and maintain their collections over time.

Every institution with enduring value collections should have a preservation strategy that balances the need for the collections against institutional resources and outlines a number of priority preservation initiatives. Setting priorities will allow the institution to see the needs and identify the activities required to complete the required preservation and conservation practices (Valverde & Rodriguez, 2002). However, reports, has affirmed that the major preservation challenges confronting most African higher institution libraries are institutional related factors like poor infrastructure, a lack of expertise in preservation and conservation, poor storage facilities, poor environmental control, a lack of proper preservation policies and strategies, and a lack of funding which has been identified as a major challenge (Ikegune; Masenya & Ngulube 2019)

Preservation and conservation of library resources is an ongoing concern for librarians and archivists. Library resources in all formats are subject to deterioration and damage over time, which can result to the loss of valuable information and cultural heritage. Moreso, preliminary investigation by researchers shows that there are new challenges in preservation and conserving

of electronic resources due to increased use of digital technologies, which are subject to technological obsolescence. In a bid to address the preservation and conservation challenges, libraries have device means like digitization, retrospective conversion and solicit for funds from parent bodies and donors. However, there is a missing link in implementation of effective preservation and conservation policies and practices of which it was found that many libraries do not have collection development policy which is a key document in interpreting the preservation and conservation policy. This deficiency could be attributed to several factors like lack of well-planned staff development programs, bureaucratic bottlenecks, weak library budget, institutional support and digital competences of librarians, archivists and curators. More so, there is a dearth of literature on influence of institutional support on the preservation and conservation of library materials.

Therefore, this study set out to investigate the influence of institutional support on preservation and conservation practices of Information Resources in Academic Libraries in Lagos State, Nigeria.

Research questions

Based on the stated objectives, the following research questions are to be answered in this study:

- i. What are the digital preservation and conservation practices available in University Libraries in Lagos State, Nigeria?
- ii. What are the institutional support practices in University Libraries in Lagos State, Nigeria?

Research Hypothesis

H₀₁: There will be no significant influence of institutional support on preservation and conservation in university libraries in Lagos State, Nigeria.

Literature Review

For digital materials, digital preservation has been recognized as one of the urgent challenges in our digital information society. It is the current trends in all modern libraries and is recognized as a vital part of managing information in digital format. A number of libraries have thus started to invest intensive research and development to provide solutions that allow us to maintain digital objects accessible. Most of these solutions, however, are aimed at larger

institutions who have a dedicated mandate, and thus can build up expertise, resources and systems. Yet, we increasingly find that many libraries are faced with the challenge to preserve their materials. The major challenge of rapid obsolescence of the hardware and software required to interpret and present digital documents has been widely discussed. Ensuring continued access to digital information necessarily involves copying or transforming digital documents to run on current media, software, hardware and operating systems. The challenges that necessitate digital preparation are frequent change in software and hardware which has made copying a problem, loss of document and data, viruses capable of corrupting system and so on.

However, in this study preservation and conservation being is measured using the Davies Strategy, policy and Resources popularly known as troika model. The Davis Policy, Strategy and Resources (PSR) troika model is a framework for understanding the key elements that contribute to sustainable digital preservation and conservation. It consists of three components: policy, strategy and resources. Policy refers to the goals, principles and guidelines for digital preservation and conservation. Library policy encompasses collection development policy and so on. They contain the guidelines based on which decisions as regards library growth and development is concerned.

Strategy refers to the plans, methods and actions for achieving the policy objectives. Example of strategies includes having security cameras in place, insertion of Radio Frequency Identification Device (RFID) in books to curb thefts and so on. Resources refer to the human, financial and material assets that are needed to implement the strategy (Davies 2000). Resource includes human hands, well trained and equipped with necessary techniques involved in digital preservation and conservation of library information resources. For instance, librarians should be trained on how to use fire extinguishers in case of fire outbreak. It includes creating backups, migration, storage media refreshing, formats normalization, emulating environment, encapsulating essential information to contents, developing dark archives, developing trusted digital repositories, diffusing the backups through distributed preservation network, and performing digital archaeology and so on (Shimray & Ramaiah 2018). Strategies encompasses everything done by the library to make sure information resources are kept in good shape and protected from agents of deterioration.

The strategy deals with the strategic plans and approaches for preservation. The strategy is in tandem with the policy with the aim of translating policies into actionable strategies. For instance, the Strategy might design a comprehensive plan for digitizing and archiving historical

documents and ensuring that digital resources are migrated on a regular interval into newer technological innovations to ensure their long-term availability.

According to (National Library of Australia on Preservation Policy), The Policy deals with the overarching guidelines and principles for preservation and conservation efforts. They are formulated regulations, laws, and guidelines that ensure the proper preservation of valuable resources of the library. In the context of cultural heritage, for example, the policy might establish regulations that require the protection of historical buildings and artefacts. The library's collection development policy is a key document in interpreting the preservation policy. It includes more detailed policy information on what the library will collect and retain. policy documents which operate under the preservation policy includes collection disaster plan, digital preservation policy, related policy documents are, collection development policy, collection digitisation policy, conditions of loan (for exhibitions), information technology strategic plan and interlibrary loans policy.

The resource handles the practical aspects of preservation and conservation of digital resources, including budget allocation, financial allocation, and some other necessary things that must be on ground. For instance, the need for close circuit cameras, the availability of fire extinguishers and some other disaster management resources would be ensured available. Resources aspects ensure that the necessary funds, personnel, and technology are in place to execute the preservation strategies. For example, the resource Manager might allocate funds to establish preservation facilities and hire skilled professionals for artefact restoration (Davies 2000). It is however clear that preservation is a project with heavy financial implications which therefore places the library at the mercy of the organization or institution it serves. Much more is the need for digital competence which is regarded as the survival skill of the 21st century needed to manage digital resources.

In a study on Preservation and Conservation of Library Resources as Correlates of Service Delivery Effectiveness in Universities in South-South, Nigeria. One of the hypotheses is that there is no significant relationship between library resources conservation and service delivery effectiveness in academic libraries in federal universities in South-South Nigeria. It was found that the relationship between library resources conservation and service delivery status in academic libraries in federal universities in South-South, Nigeria was strong and positive (Beta=.241). The R-squared value of .058 in part A showed roughly a 5.8% contribution of conservation to library service delivery effectiveness. The regression equation shows that any increase in effective conservation will lead to an increase in library service delivery

effectiveness in academic libraries in federal universities in South-South, Nigeria. When put to statistical test, the result of the F-statistic shows that there is significant relationship between library resources conservation and service delivery status in academic libraries in federal universities in South-South, Nigeria ($F_{1, 295}=18.139, p<.05$). This led to the rejection of the hypothesis at 0.05 alpha level (Alex-Nmecha & Okoro 2020). This means that conservation of library resources have direct significance to library service delivery. Libraries in good condition have a way of triggering effective service delivery.

A scholar study on Preservation and conservation of information resources in special libraries: a peep into selected law libraries in Nigeria using a survey design with 113 respondents (with 93% return rate), found that law libraries like were found not to be insured (48%), a phenomenon common in academic institutions in Nigeria. The lack of financial support from parent bodies or independent means of generating revenue may have led to the unavailability of smoke detectors (51%), and fire detectors (59%) which are technology based appliances. Pipe sprinklers were also not installed in the libraries (Okpidi-Urhibo 2020). All these are institutional issues that can only be handled by the organizations management by providing adequate fund for insurance, and acquisition of smoke and fire detectors and pipe sprinklers.

Research Methodology

The descriptive survey research design was adopted for the study. The population for this study consist of one hundred and ninety (190) library personnel in public universities in Lagos State. The study make use of total enumeration technique, such that all the One hundred and ninety library personnel that make up the total population of the study were used for the study. The instrument used in the study is a standardized scale based on each variable of the study. Data was analysed using descriptive and inferential statistics.

Analysis

Majority of the respondents are female 89 (53.6%). Majority of are within age range 41– 50 years 73 (44.0%), the majority has Masters of Library Science 72(43.4%). Majority 48(28.9%) have 6- 10 has 6-10 years work experience.

Research Question One: What are the preservation and conservation practices available in University Libraries in Lagos State, Nigeria?

Table 4.2. Preservation and conservation practices in university libraries in Lagos State.

Policy	S.A (%)	A (%)	D (%)	S.D (%)	Mean
My library has a preservation & conservation policy	80 (48.2%)	86 (51.8%)	0 (0%)	0 (0%)	3.48
The preservation & conservation policy is strictly adhered to in my library	80 (48.2%)	86 (51.8%)	0 (0%)	0 (0%)	3.48
Adherence to the policy has enhanced preservation and conservation positively in my library	92 (55.4%)	73 (44.0%)	1 (0.6%)	(0%)	3.54
The preservation & conservation policy contains punishment for library offenders when caught	78 (47.0%)	88 (53.0%)	(0%)	(0%)	3.47
The library is insured against unforeseen disaster	59 (35.5%)	89 (53.6%)	17 (10.2%)	(0%)	3.15
Weighted Mean					3.4
Strategy	S.A (%)	A (%)	D (%)	S.D (%)	Mean
My Library subscribe to cloud-storage for digital resources	75 (45.2%)	88 (53.0%)	3 (1.8%)	(0%)	3.42
We do regularly carry out Migration (transfer of digital materials from one generation of computer technology to a subsequent generation) in the library	69 (41.6%)	92 (55.4%)	5 (3.0%)	(0%)	3.36
Library cleaners ensures regularly that computers, and other accessories are clean	88 (53.0)	78 (47.0)	(0%)	(0%)	3.53
We carry out emulation (preserving the original application program) in the library	62 (37.3%)	101 (60.8%)	3 (1.8%)	(0%)	3.34
Regular back-up of digital collections and upgrading of old Software to newer ones are done in the library	69 (41.6%)	94 (56.6%)	3 (1.8%)	(0%)	3.38
Weighted Mean					3.4
Resources	S.A (%)	A (%)	D (%)	S.D (%)	Mean
CCTV cameras are installed in my library to curb theft, mutilation and other criminal activities	54 (32.5%)	56 (33.7%)	47 (28.3%)	9 (5.4%)	2.70

Fire extinguishers are in place in my library against fire outbreaks	63 (38.0%)	102 (61.4%)	1 (0.6%)	(0%)	3.37
Library patrons are educated about disaster preparedness and how they should respond in emergencies while in the library	71 (42.8%)	94 (56.6%)	1 (0.6%)	(0%)	3.42
Regularly fumigation is done in my library against rodents	65 (39.2%)	100 (60.2%)	1 (0.6%)	(0%)	3.39
Library staff are trained on emergency procedures, how to use facilities like fire extinguishers, fire alarm systems and so on.	79 (47.6%)	85 (51.2%)	2 (1.2%)	(0%)	3.45
Weighted Mean					3.3
Grand Mean					3.4

Source: Field Survey, (2023)

Decision rule: 1.0-1.99 = very low, 2.00-2.50 = low, 2.51-2.99 = Moderate, 3.00-3.49 = High, 3.50-4.00 = Very High

The table 4.2 above represent a survey of various policies, strategies, and resources related to library preservation and conservation practices. The table is structured into three main sections: Policy, Strategy, and Resources. Each section contains specific statements or questions, along with the respondents' ratings and mean scores. Below are the analysis of the findings: In the section for policy, various policies related to preservation and conservation in the library were highlighted. Each statement is rated by the respondents, and the results are presented in terms of the percentage of respondents selecting each rating option and the mean score. The statements include: "My library has a preservation & conservation policy" 80 respondents (48.2%) strongly agree, and 86 (51.8%) agree with this statement. No respondents disagree or strongly disagree. Secondly, 'The preservation & conservation policy is strictly adhered to in my library' Similar to the first statement, 80 respondents (48.2%) strongly agree, and 86 (51.8%) agree with this statement. No respondents disagree or strongly disagree. The third statement 'Adherence to the policy has enhanced preservation and conservation positively in my library' 92 respondents (55.4%) strongly agree, 73 (44%) agree, and 1 (0.6%) disagree. No respondents strongly disagree. Whereas, the statement 'preservation & conservation policy

contains punishment for library offenders when caught' 78 respondents (47%) strongly agree, and 88 (53%) agree. No respondents disagree or strongly disagree. The last statement which states that 'The library is insured against unforeseen disaster' 59 respondents (35.5%) strongly agree, 89 (53.6%) agree, 17 (10.2%) disagree, and no respondents strongly disagree. The mean score for this statement is 3.15. Overall, there is general acceptance that the libraries understudy has preservation and conservation policy and the policy is adhere to high degree.

For strategy, the section evaluates various strategies employed by the library. Each statement is rated by respondents, and the results are presented in a similar format as the Policy section. The statements include. 'My Library subscribes to cloud-storage for digital resources' 75 respondents (45.2%) strongly agree, 88 (53%) agree, and 3 (1.8%) disagree. No respondents strongly disagree. The mean score of 3.42 showed high agreement with this statement. This means that most of the library under study do cloud computing. More so the statement 'We do regularly carry out Migration in the library' 69 respondents (41.6%) strongly agree, 92 (55.4%) agree, and 5 (3%) disagree. No respondents strongly disagree. The mean score of 3.36 shows a level agreement with the question which depict that the library under study do carry out migration on a regular basis. More so, 88 respondents (53%) strongly agree, 78 (47%) agree, and no respondents disagree or strongly disagree that the library cleaners ensure regularly that computers and other accessories are clean. The mean score of 3.53 showed that on a regular basis, the libraries understudy do carry out cleaning of library electronic gadgets. More so, for the statement 'We carry out emulation in the library' 62 respondents (37.3%) strongly agree, 101 (60.8%) agree, and 3 (1.8%) disagree. No respondents strongly disagree. The mean score of 3.34 showed a moderate agreement. It shows that the library understudy do carry out emulation. However, as for the regular back-up of digital collections and upgrading of old software to newer ones are done in the library, 69 respondents (41.6%) strongly agree, 94 (56.6%) agree, and 3 (1.8%) disagree. No respondents strongly disagree. The mean score of 3.38 shows high agreement of librarians with regards to carrying out emulation.

The resources section evaluates the availability of various resources in the library. Each statement is rated by respondents, and the results are presented in a similar format as the previous sections. The statements include. 'CCTV cameras are installed in my library' 54 respondents (32.5%) strongly agree, 56 (33.7%) agree, 47 (28.3%) disagree, and 9 (5.4%) strongly disagree. The mean score is 2.70. This shows that there are reservations with regards to use of CCTV cameras in the library. More so, for the statement, 'Fire extinguishers are in place in my library against fire outbreaks' 63 respondents (38%) strongly agree, 102 (61.4%)

agree, and 1 (0.6%) disagree. No respondents strongly disagree. The mean score of 3.37 shows a high agreement. This shows that there are fire extinguishers in place. 'Library patrons are educated about disaster preparedness and how they should respond in emergencies while in the library' 71 respondents (42.8%) strongly agree, 94 (56.6%) agree, and 1 (0.6%) disagree. No respondents strongly disagree. The mean score of 3.42 showed that there is regular orientation with regards to disaster preparedness in the library. For the statement 'Regular fumigation is done in my library against rodents' 65 respondents (39.2%) strongly agree, 100 (60.2%) agree, and 1 (0.6%) disagree. No respondents strongly disagree. The mean score of 3.39 showed that fumigation is done on a regular basis. For staff training, the statement 'Library staff are trained on emergency procedures, how to use facilities like fire extinguishers, fire alarm systems, and so on' 79 respondents (47.6%) strongly agree, 85 (51.2%) agree, and 2 (1.2%) disagree. No respondents strongly disagree. The mean score of 3.45 shows higher agreement of the respondents to the fact that fire alarms are in place.

Overall, the grand mean of 3.4 shows that preservation and conservation of library resources is practices at a very high level in term of policies, strategies and resources used.

Research Question Two: What are the institutional support practices in University Libraries in Lagos State, Nigeria?

Table 4.3. Institutional support practices in University Libraries

Financial support	S.A (%)	A (%)	D (%)	S.D (%)	Mean
Adequate financial provision is made from parent bodies to the library.	69 (41.6%)	92 (55.4%)	3 (1.8%)	2 (1.2%)	3.37
The Library personnel receives grants from the parent body for staff training and development on evolving technologies and information resources	65 (39.2%)	90 (54.2%)	10 (6.0%)	1 (0.6%)	3.27
Library personnel get sponsorship for seminars, conferences and workshops	50 (30.1%)	105 (63.3%)	9 (5.4%)	2 (1.2%)	3.18
Library use funds to renovate and maintain the facilities regularly.	55 (33.1%)	105 (63.3%)	5 (3.0%)	1 (0.6%)	3.27

My library gives study leave with pay to library personnel	68 (41.0%)	94 (56.6%)	3 (1.8%)	1 (0.6%)	3.37
Weighted Mean	3.3				
Technical Support	S.A (%)	A (%)	D (%)	S.D (%)	Mean
There is regular updates of hardware, software and network connectivity.	51 (30.7%)	108 (65.1%)	7 (4.2%)	(0%)	3.22
There is adequate availability of technological infrastructure	41 (24.7%)	99 (59.6%)	26 (15.7%)	(0%)	2.93
Regular in-house training on digital preservation and conservation is conducted for library personnel	67 (40.4%)	90 (54.2%)	9 (5.4%)	(0%)	3.30
There is adequate provision of facilities like lighting and stable electricity	57 (34.3%)	101 (60.8%)	8 (4.8%)	(0%)	3.25
My library sets-up and maintain automation systems.	44 (26.5%)	54 (32.5%)	40 (24.1%)	28 (16.9%)	2.61
Weighted Mean	3.0				
Grand Mean	3.14				

Source: Field work, 2023

Decision rule: -1.0-1.99 = very low, 2.00-2.50 =low, 2.51-2.99= Moderated, 3.00-3.49.00= High, 3.50-4.00 = Very High

The table 4.3 above is a survey of various factors related to Institutional support which is made of financial support and technical support in a library setting. The table is structured into two main sections: Financial Support and Technical Support. Each section contains specific statements or questions, along with the respondents' ratings and mean scores.

Financial Support in this section evaluates various aspects of financial support in respect to the library. Each statement is rated by respondents, and the results are presented in terms of the percentage of respondents selecting each rating option and the mean score. The statements include, 'Adequate financial provision is made from parent bodies to the library' 69 respondents (41.6%) strongly agree, 92 (55.4%) agree, 3 (1.8%) disagree, and 2 (1.2%) strongly disagree. The mean score of 3.37 shows a high agreement in terms of financial provision. Secondly, 'The Library personnel receives grants from the parent body for staff training and development on evolving technologies and information resources' 65 respondents (39.2%) strongly agree, 90 (54.2%) agree, 10 (6%) disagree, and 1 (0.6%) strongly disagree.

The mean score of 3.27 showed a moderate agreement. Library personnel get sponsorship for seminars, conferences, and workshops: 50 respondents (30.1%) strongly agree, 105 (63.3%) agree, 9 (5.4%) disagree, and 2 (1.2%) strongly disagree. The mean score of 3.18 showed a high level agreement supporting the statement. 'Library uses funds to renovate and maintain the facilities regularly' 55 respondents (33.1%) strongly agree, 105 (63.3%) agree, 5 (3%) disagree, and 1 (0.6%) strongly disagree. The mean score of 3.27 shows a high level agreement of the respondents with the statement. For another statement 'My library gives study leave with pay to library personnel' 68 respondents (41%) strongly agree, 94 (56.6%) agree, 3 (1.8%) disagree, and 1 (0.6%) strongly disagree. The mean score of 3.37 also showed a strong agreement with the statement. This showed that the library gives grants for study leave. Overall, the summary of the descriptive showed that there is high level financial support among libraries under study.

Moreover, for technical Support the first statement, 'There is regular updates of hardware, software, and network connectivity' 51 respondents (30.7%) strongly agree, 108 (65.1%) agree, 7 (4.2%) disagree, and no respondents strongly disagree. The mean score of 3.22 showed a moderately high level agreement with the fact that there is regular update. For another statement 'There is adequate availability of technological infrastructure' 41 respondents (24.7%) strongly agree, 99 (59.6%) agree, 26 (15.7%) disagree, and no respondents strongly disagree. The mean score of 2.93 showed an average agreement with regards to adequacy of available technological infrastructure. This means at a significant level, the technological infrastructure available are not adequate. More so, for the statement 'Regular in-house training on digital preservation and conservation is conducted for library personnel' 67 respondents (40.4%) strongly agree, 90 (54.2%) agree, 9 (5.4%) disagree, and no respondents strongly disagree. The mean score of 3.30 showed there is regular in-house training on digital preservation and conservation of library resources. For the statement 'There is adequate provision of facilities like lighting and stable electricity' 57 respondents (34.3%) strongly agree, 101 (60.8%) agree, 8 (4.8%) disagree, and no respondents strongly disagree. The mean score of 3.25 showed fair agreement with the adequacy of provision of facilities. Finally, 44 respondents (26.5%) strongly agree, 54 (32.5%) agree, 40 (24.1%) disagree, and 28 (16.9%) strongly disagree that the library sets up and maintains automation systems. The mean score of 2.61 showed a fair agreement with the statement.

H₀₁: There will be no significant influence of institutional support on preservation and conservation in University libraries in Lagos State, Nigeria

Table 4.5a-c Influence of institutional support on preservation and conservation practices

a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.291 ^a	0.085	0.076	0.481

a: Predictors: (Constant), Institutional support

b: Dependent Variable: Preservation and conservation in University libraries in Lagos state, Nigeria

b. ANOVA^a

	Model	Sum of squares	Df	Mean square	F	Sig.
1.	Regression	3.520	1	3.520	15.219	0.000 ^b
	Residual	37.926	164	0.231		
	Total	41.446	165			

a. Dependent Variable: Preservation and conservation in University libraries in Lagos state, Nigeria

b. Predictors: (Constant), Institutional support

c. Coefficients^a

Model	Unstandardized B	Coefficients standard error	Standardized coefficients Beta	T	Sig.
1. (Constant)	2.670	0.211		12.633	0.000
Institutional support	0.241	0.062	0.291	3.901	0.000

a. Dependent Variable: Preservation and conservation in University libraries in Lagos state, Nigeria

Table 4.5a-c presents the results of the simple regression analysis for the relationship between institutional support on preservation and conservation in University libraries in Lagos State, Nigeria. From the results in Table 4.5a, institutional support has a significant relationship on the preservation and conservation in University libraries in Lagos State,

Nigeria. ($R = 0.291^a$, $p < 0.05$). The coefficient of determination (Adj. R^2) of 0.085 also shows that institutional support explains 8.5% of the preservation and conservation in University libraries in Lagos State, Nigeria while the remaining 91.5% discrepancy in the preservation and conservation in University libraries in Lagos State, Nigeria. is explained by other variables which are not considered in this study.

Table 4.5b presents the results of ANOVA (Overall Model Significance) of regression test which revealed that institutional support has significant relationship with preservation and conservation practices in University libraries in Lagos state, Nigeria. This can be explained by the F-value (15.219) and high p-value (0.000^b) which is statistically significant at 95% confidence interval. Hence, the result posited that institutional support has a weak significance influence on the preservation and conservation in University libraries in Lagos State, Nigeria. Furthermore, the results of regression coefficients in table 4.6c revealed that at 95% confidence level, a unit change in institutional support will lead to a 0.241 increases in the preservation and conservation practices in University libraries in Lagos State, Nigeria given that all other factors are held constant.

On the strength of this result (Adj. $R^2=0.076$, $F(1,164)= 15.219$, $p =0.000^b$), the null hypothesis one (H_01) which states that there will be no significant influence of institutional support on preservation and conservation practice in University libraries in Lagos State, Nigeria is hereby rejected.

Discussion of findings

From a grand mean of 3.4, the study found high preservation and conservation practices in the library. This mean that at a high level, the libraries under study practices preservation and conservation of their digital resources. It is revealed that the libraries has functional collection development policies. More so, considering the Strategies used for preservation, the libraries at a high level are strategical, well organized and prepared against disaster. However, looking at the availability of preservation and conservation resources, the libraries under study are moderately prepared. This finding tally with what has been reported by other studies conducted previously. For instance, the finding in this study shows there is an improvement in library preservation and conservation practices because its findings negates a long time ago, findings of a survey of preservation and conservation practices and techniques in Nigerian university libraries in 2008 where it was revealed that

preservation and conservation techniques, though adopted in the university libraries were not effectively in use even with preservation policies in the libraries. The study also revealed that cleaning and dusting of library materials is the most commonly used technique. The study established that there are indeed incidences of deterioration with the most prominent results being books becoming torn and cracking and scratching. Further results showed that though some of the libraries adopt and use some digital preservation techniques, they are still not effectively used (Olatokun 2008).

In a related study on Disaster Preparedness Plan and Response Strategy as a Panacea for Effective Information Resources Preservation in University Libraries in North East, Nigeria found that the types of disaster preparedness plan in university libraries in North East, Nigeria are; creating and updating contingency plans, insurance of library collections, identifying alternative storage sites and providing adequate fire protection apparatus (Abdullahi, Nwachukwu & Ahmad, 2023). This supports the findings of this study where it was found that most of the libraries under study are insured and have library policies which includes disaster management plans.

However, against the findings of this study is a study on disaster management in central library, Tezpur university where it was revealed that except as a part of institutional insurance policy for library print collection, there is no written disaster control plan and no disaster management team in the library, which are essential elements that must exist in the library to prevent, fight, and manage disasters³. More so Another study that tries to find out the challenging issues facing preservation and conservation of library information resources found that Lack of preservation and conservation policies ($M=3.35$, $SD=0.98$) was the biggest problem faced by academic libraries at federal universities in South-South Nigeria when it came to preserving and conserving library materials. Next was the lack of or inadequate equipment and materials for preserving library materials ($M=3.04$, $SD=0.92$), and last, the insufficient training of library employees on proper measures of preservation and conservation of library resources ($M=3.06$, $SD=0.85$). Worst of all was a lack of concern for long-term archival and conservation planning on the part of library administration ($M=2.63$, $SD=1.01$) (Alex-Nmecha & Okoro 2020)

Summary

The findings of this study which investigated the influence of institutional support and digital competence of librarians on digital preservation and conservation in libraries are as follows:

1. The study found that digital preservation and conservation in libraries was high with regards to availability of necessary policies, well-coordinated and regularly implemented strategies as well as provision of necessary resources.
2. The study reported a very high support from the library's parent's body both financially and technically. However, moderate perception were found with regards to adequacy of technological infrastructure and regular setting of automation systems.
3. The first hypothesis found that institutional support have significant positive influence on digital preservation and conservation practices among librarians.

Conclusion

The study confirmed a commendable level of institutional support within academic libraries. This support was evident in various aspects, including policies, budgets, and recognition of the importance of preserving and conserving digital resources. However, a notable gap was identified in the automation of processes and the provision of necessary technological infrastructure. This gap represents an area where further attention and investment are needed to fully harness the potential of digital preservation and conservation efforts.

Recommendation

1. Academic institutions should prioritize the automation of processes and provide the necessary technological infrastructure to support digital preservation efforts. This includes digitization, metadata management, and digital asset storage systems.
2. Librarians and library administrators should advocate for a sustained commitment from their respective institutions to prioritize digital preservation and conservation as integral components of their academic mission.

References

- Abdullahi S., Nwachukwu V.N., & Ahmad A.I., Disaster preparedness plan and response strategy as a panacea for effective information resources preservation in university libraries in north east, Nigeria. *Library Philosophy and Practice*, 2023. pp.1-22.
- Alex-Nmecha J.C., & Okoro O.M., Preservation and Conservation of Library Resources as Correlates of Service Delivery Effectiveness in Universities in South-South, Nigeria. *Library and Information Science Digest*, 13, 2020. pp.15-28.

Davies W., Understanding strategy. *Strategy & leadership*, 28(5), 2000. pp.25-30.

Digital Preservation Coalition. Retrieved on 2nd/March/2023 from [Home - Digital Preservation Handbook \(dpconline.org\)](https://www.dpconline.org/)

Gohain A., Tariang B.L., & Saikia M., Disaster Management in Central Library, Tezpur University: A Study. *Library Philosophy and Practice*, 2021. pp.0_1-9.

Ikegune D.O., Management and preservation of non-book materials in academic libraries: A case study of three university libraries in Nigeria. *Library Philosophy and Practice (e-journal)*. 1371. <http://digitalcommons.unl.edu/libphilprac/1371>.

Masanya T.M. & Ngulube P., 'Digital preservation practices in academic libraries in South Africa in the wake of the digital revolution', *South African Journal of Information Management*. 21(1), 2019, 1-9. a1011. <https://doi.org/10.4102/sajim.v21i1.1011>.

National Library of Australia. Preservation policy. Available at: <https://www.nla.gov.au/about-us/corporate-documents/policy-and-planning/preservation-policy>. Retrieved on 22/08/2023

Okpidi-Urhibo E., Preservation and Conservation of Information Resources in Special Libraries: A Peep into Selected Law Libraries in Nigeria. Available at SSRN 3814188. 2020.

Olatokun W.M., A survey of preservation and conservation practices and techniques in Nigerian university libraries. *LIBRES: Library & Information Science Research Electronic Journal*, 18(2). 2008.

Shimray S.R., & Ramaiah C.K., August. Digital preservation strategies: an overview. In 11th National Conference on Recent Advances in Information Technology-2018 2018, pp. 46-54.

Valverde M. R., Rodriguez R. C., Increasing Mexican American doctoral degrees: The role of institutions of higher education. *Journal of Hispanic Higher Education*, 1(1), 2002, 51–5. doi:10.1177/153819270200100

**Emotional Intelligence and Service Quality by Library Personnel in Colleges of
Agriculture in Oyo State, Nigeria**

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Abstract

The need to increase library use through effective service quality may be achieved through examining the interplay of emotional intelligence and service quality in libraries. It is against this backdrop that this study investigates the influence of emotional intelligence on service quality, especially in colleges of agriculture in Oyo State, Nigeria. The survey design of the correlational type was adopted. The population of this study was library personnel (27) and Higher National Diploma students (1,846) in colleges of agriculture in Oyo State. Total enumeration was used for the library personnel while 10% proportional sample size was used for the student (185). Questionnaire was the instrument used. The data were analyzed using descriptive statistics, Pearson product moment correlation and Multiple regression at 0.05 level of significance. The study found highly positive perspectives of levels of service quality ($\bar{x}=2.4$) among the indicators. There is high level of emotional intelligence of library personnel in colleges of agriculture in Oyo State, Nigeria and the prominent was Self-awareness ($\bar{x}=3.4$). The study however found that emotional intelligence ($r=.028$) demonstrated no significant impact on library service quality. It was concluded that library services in education requires some level of emotional intelligence even when this is not obvious to those concerned. Thus, the institution and library management should develop interventions to empower library personnel toward mastering self-awareness to enhance library service quality.

Keywords: Emotional Intelligence, Personality Traits, Service Quality, Library Personnel, College of Agriculture.

Introductions

Evaluation of emotional intelligence of library personnel is crucial in the assessment of the service quality provision in the colleges of agriculture libraries. This fact is even more crucial in the competitive atmosphere in information service provision as a result of advancement in information and communication technology like search engines and electronic databases that resulted in low usage of academic library. Several attempts have been made over the years to identify factors that could significantly influence service quality provision in service orientation industries like banks, telecommunication companies among other using SERVQUAL model (Gupta, Mezbah-ul-Islam, & Chandel, 2003). However, due to peculiar nature of library and information services, LibQUAL model was developed and some of these measures are affect of service, library as a place, information control. The LibQUAL model alone with other variables has been use in studies to examine low use of library. Some of the variables include: student trust, user loyalty, user satisfaction and big data among others. But beyond these, psychological factors such as emotional intelligence of library personnel could also be an impediment to service quality provision.

Emotional intelligence is the ability of library personnel to identifying and understanding their emotions and that of their patrons. Library personnel with high emotional intelligence is expected to provide quality service to patrons, meet their information needs, and be satisfied their jobs always. Such library personnel would encourage, motivate and entice more patrons to the library thus, there will be optimal use of the resources. However, extant literature report indicates low library uses and part of the reason maybe low emotional intelligence of the library personnel, therefore there is a need to investigate library personnel emotional intelligence measured through self-awareness, social-awareness and relationship management and its contributions to low library patronage by the academic communities.

However, literature search indicates that there is death of research into the aspect of emotional intelligence and service quality, especially in colleges of agriculture in Nigeria. This study, therefore, intends to fill this identified knowledge gap. Thus, it is against this backdrop that this study set out to investigate the influence of emotional intelligence on service quality, especially in colleges of agriculture in Oyo State, Nigeria with the intent of enhancing library service quality and attract more patrons into the library.

The aim of the study is to examine influence of emotional intelligence on service quality by library personnel in colleges of agriculture in Oyo State, Nigeria and the objectives are to:

- i. identify the level of service quality by library personnel in colleges of agriculture in Oyo State, Nigeria;
- ii. ascertain the level of emotional intelligence of library personnel in colleges of agriculture in Oyo State, Nigeria;
- iii. examine the combined influence of emotional intelligence on service quality of library personnel in colleges of agriculture in Oyo State, Nigeria;

The following research questions for the study were derived from the objectives of the study:

1. what are the levels of service quality by library personnel in colleges of agriculture in Oyo State, Nigeria?
2. what are the levels of emotional intelligence of library personnel in colleges of agriculture in Oyo State, Nigeria?

The following hypothesis for the study was tested at 0.05 level of significance:

- H₀₁: There will be no significant influence of emotional intelligence on service quality of library personnel in colleges of agriculture in Oyo State, Nigeria;

Literature Review

Good service is one of the requirements for organizational success. Service quality is seen as one component that needs to be realized because it has the influence to bring in new customers and can reduce the possibility of old customers to move to other companies. Service quality is defined as the customer's assessment of the overall superiority or privilege of a product or service. Quality is a dynamic condition related to products, services, people, processes and the environment that meets or exceeds expectations, it is an effort to meet the needs and desires of consumers and the accuracy of their delivery in balancing consumer expectations. This means that a good quality image is not based on the perspective or perception of the service provider but the perspective of assessing one's perception (Nguyen et al., 2020).

Libraries, regardless of their type (e.g., academic, public, special), provide many services to their users to meet their learning and research needs. These services usually refer to the local consultation to books and periodicals, to home loan of information materials, to consultation

book loan, to the loan of information material between libraries of the same system, to online reservation of information materials, online renovation of information materials held by the user, online access to the library's catalogue, online access to databases and periodicals signed by the libraries, and to the service of lockers.

Academic libraries are service-oriented institutions which are established for the provision of appropriate resources and quality services to meet the academic needs of their user community. The effectiveness of a university library generally refers to the library's collections, staff performance, services and facilities (Gupta, Mezbah-ul-Islam, & Chandel, 2003). Currently, university libraries are becoming more user-focused due to information availability, rising costs, competitive pressures and increasing awareness of their users. Globally, academic libraries are moving from manual to automated systems due to the effect of information and communications technologies (ICTs) and the changing needs of their users. Most of the university libraries are trying to enhance their tools and techniques to assist research, teaching and learning, as well as adjust the methods of sharing and providing information for their users through technology-driven services (Alam, & Mezbah-ul-Islam, 2019; Oladokun, Oyadeyi, & Iyoro, 2019).

To develop and maintain state-of-the-art library services, it is essential to assess the quality of the existing services, as well as evaluate what importance is given by users to the dimensions of service quality in the changing information environment. Many researchers have agreed that assessing service quality based on user responses is the easiest and most useful approach to determine the success of academic libraries (Gunasekera, 2010; Saunderson (2007).

The most commonly used model to measure library service quality is the Libqual model (Kumar, & Mahajan, 2019). This model was developed to make up for the shortcoming observed in the SERVQUAL model which was adopted from the business world. The libqual identified three dimensions under which library service can be measured. These are affect of service, library as a place, and information control (Ip & Wagner, 2020).

Affect of Service focuses on the interaction responsiveness between library users and staff services, tangibles and empathy. The libqual metrics for affect of services focuses on how librarians instil confidence in users; readiness to respond to users' questions; willingness to help users; dependability in handling users' service problems; giving users individual attention; having the knowledge to answer user questions; being consistently courteous; dealing with users in a caring fashion; and understand the need of their users by employees.

The “Library as Place” focuses on the library building and facilities. The dimensions examine metrics such as whether the library has; a quiet space for individual activities; a comfortable and inviting location; library space that inspires study and learning; community space for group learning and group study; and a getaway for study, learning or research.

The “Information Control” refers to the extent to which the library has empowered users to be able to search, access and retrieve information on their own. It focuses on metrics such as the availability of print and/or electronic journal collections; easy-to-use access tools that allow patrons to find things on their own; a library Web site enabling patrons to locate information; modern equipment that lets patrons easily access needed information; making information easily accessible for independent use; and electronic resources accessible from home or office (Ip & Wagner, 2020; Kumar, & Mahajan, 2019).

Emotional Intelligence and Service Quality in Libraries

Using emotional intelligence skills in the library service industry has increasingly been considered as a strategy to satisfy and retain users. Although a borrowed concept from the service industry, scholars in library and information science have embraced the concept of emotional intelligence as a means of improving overall performance of libraries and library personnel (Khan, Masrek, & Nadzar, 2017; Villagran & Martin, 2022; Williams-Ilemobola, et al., 2021). This is no doubt due to the perceived contributions of emotional intelligence to the overall effectiveness of service providers.

Empirical studies have also been conducted in the field of librarianship on the role of emotional intelligence on library service quality. Maukar (2015) found that emotional intelligence, is one of the key factors that influence the service quality of high school libraries in Minahasa Regency, Indonesia. The research aim was to demonstrate the impact of emotional intelligence, creativity, and work ethic on the service quality of the high school library in the Minahasa Regency. The research sample consisted of 70 librarians who were selected using a technically straightforward random sampling method. The research findings and hypothesis testing indicate that there is a direct and positive correlation between emotional intelligence and the service quality of high school libraries in the Minahasa Regency. This finding is backed by Jafari (2018) who also reported that higher emotional intelligence among librarians is positively associated with increased user satisfaction in the libraries of the University of Guilan, Iran.

Furthermore, Singh, Gupta, and Bajaj (2015) found that emotional intelligence positively impacts team effectiveness in academic libraries, enhancing user satisfaction and overall efficiency. The researchers observed that information professionals possess a human services orientation that necessitates contact among employees, staff, and users. Users can only make efficient use of libraries if they are provided with both the required circumstances and facilities, as well as psychological tranquillity. Emotional intelligence is a highly reliable indicator of both teamwork and team performance.

In the Nigerian context, Williams-Ilemobola, et al. (2021) examined the impact of librarians' emotional intelligence on dispute resolution in private university libraries located in the South-West and South-South regions of Nigeria. The study which utilized a survey research design found that the conflict management abilities of librarians were influenced by their emotional intelligence. The study suggests that private University Libraries should address miscommunications among librarians while simultaneously prioritizing the development of their emotional intelligence. This is supported by Onwubiko (2020) whose study findings also indicate a strong positive correlation between librarians' emotional intelligence and the efficient administration of university libraries.

Furthermore, Oyeboade (2016) reported that emotional intelligence significantly enhances work productivity among librarians in selected academic libraries in Oyo State, Nigeria. The ANOVA showed that self-awareness, self-management, social awareness and relationship management jointly and significantly predict library work productivity by 52.1%. From another perspective, Igbinovia and Popoola (2016) reported a significant positive correlation between emotional intelligence and job performance of personnel in academic libraries in Edo State. The study concluded that, as emotional intelligence improves, job performance of library personnel also improves.

All these studies have established the importance of emotional intelligence in helping libraries and library personnel achieve individual and collective aims of meeting the needs of the users in a way satisfactory to all parties. However, what is missing in these study is how emotional intelligence directly contribute to service quality particularly in the dimensions outlined in the Libqual model of library service quality.

Methodology

The survey design of the correlational type was adopted. The population of this study was library personnel (27) and Higher National Diploma students (1,846) in colleges of agriculture in Oyo State. Total enumeration was used for the library personnel while 10% proportional sample size was used for the student (185). Questionnaire was the instrument used. The data were analyzed using descriptive statistics, Pearson product moment correlation and Multiple regression at 0.05 level of significance.

Results and Discussion

Research Question One: What are perspectives of student's levels of service quality offer in colleges of agriculture library in Oyo State, Nigeria?

Table 1: Perspectives of Students' Levels of Service Quality Offer in Colleges of Agriculture Library

Service Quality Dimensions	Mean
Affect of Service	3.00
Library as Place	2.90
Information Control	3.00
Aggregate Mean	2.97

Decision Rule: 1.00 – 1.49= very low, 1.50 – 2.49= low, 2.50 – 3.49 = high, 3.50-4.00= very high.

Table 1 reveals perspectives of students' levels of service quality in college of agriculture libraries in Oyo state. This data provides insights into students' perspectives on the level of service quality offered by the libraries in colleges of agriculture in Oyo State, Nigeria. The quality of service was measured under three dimensions namely, effect of service, library as a place, and information control. The mean scores indicates that the rated the library services high in all dimensions such as affect of services (Mean = 3.00), library as a place (Mean = 2.90), and information control (Mean = 3.00). Furthermore, the combination of these dimensions yielded an aggregate mean score of 2.97 which represents high level of service quality according to the decision rule.

Although positive response to service quality was reported in this study, this data underscores the importance of regularly seeking feedback from students. This can help in identifying areas

of strength and improvement, and guide efforts to enhance service quality. This is supported by Santoso (2020) who opined that ensuring service quality is the best way to ensure users satisfaction.

Nur and Fritantus (2021) also added that libraries have now means of knowing whether their services are satisfactory to the patrons unless they conduct library service quality surveys. In their survey, they found that library as a place is very important to patrons who seek conducive study atmosphere. This is supported by Hasugia and Lubis (2021) who found that quality library services is instrumental in winning the trust of students in Indonesia.

Research Question Two: What are the levels of emotional intelligence of library personnel in colleges of agriculture in Oyo state, Nigeria?

Table 2 Emotional intelligence of library personnel in colleges of agriculture in Oyo State, Nigeria

Service Quality Dimensions	Mean
Self-awareness	3.40
Self-Management	3.30
Social awareness	3.10
Relationship management	3.10
Aggregate Mean	3.20

Decision Rule: 1.00 – 1.49= very low, 1.50 – 2.49= low, 2.50 – 3.49 = high, 3.50-4.00= very high.

Table 2 presented the levels of emotional intelligence of library personnel in colleges of agriculture in Oyo State, Nigeria. Emotional intelligence is measured under four dimensions namely; self-awareness, self-management, social awareness, and relationship management. The summary of the responses shows that the ratings of emotional intelligence among the respondents include self-awareness (Mean = 3.40), self-management (Mean = 3.30, social awareness (Mean = 3.10) and relationship management (Mean = 3.10). The high mean scores in all aspects of emotional intelligence indicates that the library personnel surveyed have good understanding of their own strengths, limitations, emotions, and self-worth. It also suggests that they are flexible, proactive, and positive in their approach to tasks and opportunities. Social awareness also means that they are seen as attuned to group dynamics and patrons' needs. The high score in anticipating, recognizing, and meeting customers' needs is particularly significant.

It indicates that the library personnel prioritize understanding and serving the needs of their users. This is significant asset in providing effective library services and fostering a positive work environment. The grand mean of 3.2 affirms the high level of emotional intelligence observed in this group.

This finding is supported by Khan, Masrek, & Nadzar, (2017); Villagran & Martin, (2022); Williams-Ilemobola, et al., (2021) all of whom have examined emotional intelligence among different group of librarians across the world and found that majority of librarians possess high level of emotional intelligence. This is not to say that there are gaps to be filled through training and continuous development as each of these studies, like the current study found some aspect of emotional intelligence in which the librarians have to improve.

The high mean scores in all aspects of social awareness (above the criterion mean) indicate an overall positive perception of social awareness among library personnel. This suggests that they are seen as attuned to group dynamics and customer needs. The high score in anticipating, recognizing, and meeting customers' needs is particularly significant. It indicates that the library personnel prioritize understanding and serving the needs of their users. The high score in reading a group's emotional currents and power relationships suggests that library personnel are skilled in understanding the dynamics of group interactions.

However, in the study, social awareness and relationship management skills are high among the respondents but not as high as self-awareness or self-management. According to the reports of Mills and Lodge (2006), this should be improved. The scholars maintained that, to establish a stronger connection with their user communities, information professionals should contemplate the following: adopt the fundamental principles of emotional intelligence as effective strategies to assist users in their interactions with librarians. Recognize the significance of personal interaction for many users and acknowledge that it can provide valuable insights into their understanding of the library's role. Acknowledge that a library encompasses more than just access to resources. Recognize that not all users have the same perceptions as librarians regarding the informational value of tools like catalogues and databases. It is acknowledged that users see many functions for a library, and these perceptions are shaped by their previous encounters and current requirements. Expanding the library's reach into user communities is crucial for the library's growth and recognizing the significance of commercial retailers' marketing strategy to attract and retain customers is applicable in library settings.

Hypothesis: There will be no significant influence of emotional intelligence on service quality of library personnel in colleges of agriculture in Oyo State, Nigeria;

.Table 3: **Influence of Emotional intelligence on of library personnel service quality**

Variable	Mean	Std. Dev	N	R	p value	Remark
Emotional intelligence	57.7200	7.15029	25	.028	.895	Not significant
Service Quality	58.6816	11.06641	179			

According to the result of the finding presented in table 3, emotional intelligence ($r=.028$, $p>0.05$) has no significant influence on service of library personnel. Thus, the null hypothesis stating that there will be no significant influence of emotional intelligence on service quality of library personnel in colleges of agriculture in Oyo state, Nigeria is hereby accepted.

The mean emotional intelligence score is 57.72 with a standard deviation of 7.15, indicating that the emotional intelligence scores have some degree of variability in the sample. The mean service quality score is 58.68 with a higher standard deviation of 11.07, suggesting even greater variability in service quality scores. The correlation coefficient (r) between emotional intelligence and service quality is 0.028. This is very close to zero, indicating a very weak positive relationship between emotional intelligence and service quality. The p -value associated with this correlation is 0.895, which is much higher than the typical significance threshold of 0.05. This means that the correlation is not statistically significant.

In practical terms, this suggests that in the context of these agricultural colleges in Oyo state, other factors may have a stronger influence on the service quality provided by library personnel, and emotional intelligence may not be a critical factor to consider.

Conclusion

The study found no significant influence of emotional intelligence on the service quality of library personnel in colleges of agriculture in Oyo State, Nigeria. This implies that emotional intelligence may not be a critical factor in determining the service quality provided by library personnel in these specific institutions. However, this speaks more to a deficiency of emotional intelligence among the respondents. When employees who are deficient in emotional intelligence perform as expected, the cost is emotional labour as they are likely to be hiding

feelings of anger frustration, and resentment which may later boil over. The consequence is job burnout, absenteeism and employee turnover especially when the personnel are not enlightened on the importance of emotional intelligence.

Recommendations

Based on the study's findings, the following recommendations are made:

1. Given the high perspective of students regarding service quality, there is a need for library management to prioritize and enhance information control services in the agriculture college libraries. This could involve investing in resources, technologies, and strategies that facilitate easy access and management of information.
2. Since the levels of emotional intelligence among library personnel are already high, it's beneficial for the institution management to continue fostering and developing these skills. This can be achieved through targeted training programs that focus on aspects such as self-awareness, self-management, social awareness, and relationship management.
3. Acknowledging that library personnel exhibit a range of personality traits, it's important to recognize the prominence of extraversion and the lesser prominence of conscientiousness. Understanding and utilizing these traits can help tailor training, assignments, and team dynamics to maximize the strengths of individuals.
4. While the null hypotheses were accepted in this study, it's crucial to acknowledge that factors influencing service quality and delivery can be complex and multifaceted. Continuously monitoring and assessing the impact of emotional intelligence and personality traits on library service delivery can provide valuable insights for future improvements.

References

- Alam, M. J., &Mezbah-ul-Islam, M. (2019). Factors for adoption of OSILS in university libraries of Bangladesh. *IFLA journal*, 45(2), 127-139.
- Gunasekera, C. (2010). Students Usage of an academic Library: a user survey conducted at the Main Library University of Peradeniya. *Journal of the University Librarians Association of Sri Lanka*, 14(1).
- Gupta, S., Mezbah-ul-Islam, M., & Chandel, A. S. (2003). Use of resources by research scholars in university libraries with special reference to electronic media.

Hasugian, J., & Lubis, D. (2021). Library Service Quality and Student Trust a Case Study at the University of Sumatera Utara Library, Indonesia.

Igbinovia, M. O., & Popoola, S. O. (2016). Organizational culture and emotional intelligence as predictors of job performance among library personnel in academic libraries in Edo State, Nigeria. *Journal of Information Science Theory and Practice*, 4(2), 34-52.

Ip, R. K. F., & Wagner, C. (2020). LibQual+® as a predictor of library success: Extracting new meaning through structured equation modeling. *The Journal of Academic Librarianship*, 46(2), 102102.

Khan, A., Masrek, M. N., & Nadzar, F. M. (2017). Emotional intelligence and job satisfaction of academic librarians: An assessment of the relationship. *Journal of Librarianship and Information Science*, 49(2), 199-210.

Kumar, A., & Mahajan, P. (2019). Evaluating library service quality of University of Kashmir: aLibQUAL+ survey. *Performance Measurement and Metrics*, 20(1), 60-71.

Maukar, S. (2015). The Influence of Emotional Intelligence, Creativity, Work Ethic, to Service Quality of High School Library in the Minahasa Regency. *American Journal of Educational Research*, 3, 67-79. <https://doi.org/10.12691/EDUCATION-3-1-13>.

Mills, J., & Lodge, D. (2006). Affect, emotional intelligence and librarian-user interaction. *Library review*, 55(9), 587-597.

Nguyen, D. T., Pham, V. T., Tran, D. M., & Pham, D. B. T. (2020). Impact of service quality, customer satisfaction and switching costs on customer loyalty. *The Journal of Asian Finance, Economics and Business*, 7(8), 395-405.

Nur, M., & Fritantus, Y. (2021). Service Quality and User Satisfaction of Border Area Library Services. *Jurnal Ad'ministrare*, 8(1), 77-86.

Oladokun, T. A., Oyadeyi, A. E., & Iyoro, A. O. (2019). Retrospective Conversion of Bibliographic Records in Nigerian Academic Libraries: An Empirical Study of Libraries using KOHA ILS. *Cataloging & Classification Quarterly*, 57(6), 423-438.

Onwubiko, E. C. (2020). Librarians' emotional Intelligence as correlate of effective library management and performance. *Library Philosophy and Practice (e-journal)*, 4508.

Oyeboade, J. A. (2016). Emotional intelligence of library personnel and library work productivity in selected academic libraries in Oyo State, Nigeria. *Library Philosophy and Practice (e-journal)*, 1421.

Santoso, A. (2020). Determinants of satisfaction based on library service quality. *IJAL (Indonesian Journal of Academic Librarianship)*, 3(3), 11-19.

Saunders, E. S. (2007). The LibQUAL+ phenomenon: who judges quality?. *Reference & User Services Quarterly*, 47(1), 21-24.

Singh, R., Gupta, R., & Bajaj, B. (2015). Study of relationship between emotional intelligence and team effectiveness in academic libraries. *2015 4th International Symposium on Emerging Trends and Technologies in Libraries and Information Services*, 319-323. <https://doi.org/10.1109/ETTLIS.2015.7048219>.

Villagran, M. A., & Martin, L. (2022). Academic librarians: Their understanding and use of emotional intelligence and happiness. *The Journal of Academic Librarianship*, 48(1), 102466.

Williams-Ilemobola, O. B., Adetayo, A. J., Asiru, M. A., & Ajayi, J. L. (2021). Librarians' emotional intelligence and conflict management in private university libraries in south-west and south-south, Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 12(1), 33-46.

**Patients' Perception and Utilization of National Health Insurance Authority in Abuja
Municipal Area Council, Federal Capital Territory Abuja, Nigeria**

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Abstract

Access to quality healthcare can often be expensive even in advanced countries. That is why governments all over the world have introduced one form of health insurance or the other. However, there seems to be below par utilization of the National Health Insurance Scheme (NHIS) in Nigeria. This study seeks to examine the influence of patients' perception on utilization of National health insurance services in three selected (District hospitals) in AMAC, FCT, Abuja. This study adopts the descriptive survey research design. The population of this study comprised the enrollees of AMAC District hospitals, FCT, Abuja. A sample of three hundred and eight five (385) enrollees of the three district hospitals were selected using simple random sampling. A structured questionnaire was used to collect quantitative data which was analyzed using both descriptive and inferential statistics. Response rate = 79% and about 56.6% of the respondents were Females, ages 25-35 with 72.5% being married. The majority of respondents were Christians with 66.8%, 30% were Muslims and the remaining 2.9% were others. Most respondents were BSc/HND holders with 58.9%, MSc 6.6%, ND 24.75, and the remaining 9.9% were school cert holders. About 53% of respondents enjoy the health insurance because they enjoy medical care from well trained personnel. More than 50% of the respondents feel that the Nurses and Doctors do not treat patients with respect and they considered the waiting time very high. The majority of respondents also feel that they are not being treated according to NHIA operational guidelines, and that the cash paying patients are treated better. There was a significant influence of patients' perception on utilization of health insurance services. The Perception of health insurance among the enrollees of AMAC district hospitals varied while the utilization was fair enough.

Keywords: NHIA, Perception of health insurance, Patients, utilization.

Introduction

The perspective of patients about NHIA service encompasses the accuracy of medical diagnoses and treatments, adherence to professional specifications, compliance with delivery

standards, and the realization of expected advantages by patients. The proponents of the patients' approach advocate for the evaluation of healthcare quality from the perspective of users. Assessing user service contributes to the enhancement of service efficiency and effectiveness. There is a widely held belief that the viewpoints of service users regarding the quality of healthcare possess two distinct merits: serving as an indication for improved service delivery and facilitating performance monitoring. The achievement of universal healthcare coverage relies heavily on the provision of high-quality healthcare services through the National Health Insurance Authority (NHIA). This serves as an evaluative measure for both international and national governments to allocate supplementary resources in order to improve the quality of healthcare services.

In the contemporary globalized economy, the ability to provide high-quality services is of paramount importance for the achievement of success by service-oriented organizations. The evaluation of consumers' perception and understanding of an organization's service performance and delivery process is a valuable opportunity to critically analyze the quality of services obtained from such organization. This also holds relevance in the context of NHIA services, particularly when considering the aims of these services. There exist multiple indications that can be utilized to assess patients' perspective in the context of healthcare service delivery. The health sector pertains to patients' perspectives on the healthcare providers' capacity to execute healthcare-related tasks with precision, timeliness, and appropriateness. Consequently, the level of healthcare quality perceived by service users is contingent upon the extent to which services align with patients' expectations, thereby resulting in their satisfaction with the services received.

The measurement of patients' impression about service quality is of utmost importance, as derived from the Servqual Model. The anticipated level of excellence in healthcare services pertains to the extent to which the National Health Insurance Authority (NHIA) provides health services that enhance the probability of achieving quality of service involves the comparison between their expectations of services and the actual services provided by the service delivery facility. desirable health outcomes for both individuals and populations. The assessment of patients' perceived. The National Health Insurance Authority (NHIA) is an implemented idea of the Social Health Insurance Program (SHIP) which is targeted at reaching out to the poor, especially in developing countries. The NHIA is aimed at providing health insurance to individuals by ensuring a clear access to good quality and affordable healthcare services. The NHIA which was established in 1999 as a significant factor in the National Poverty Eradication

Efforts intends to improve the health situation in Nigeria. The scheme which was officially launched in 2005 has some of these objectives: to protect families from the financial hardship of huge medical bills, to ensure equitable distribution of healthcare costs among different income groups, to ensure high- standard and efficiency of healthcare delivery and services to Nigerians, and to ensure the availability of funds to the health sector for improved services. Indeed, with the advent of the NHIA in Nigeria, private involvement in healthcare service delivery is expected to grow which will in turn increase the level of competition. The private health insurance service providers are part of the Health Maintenance Organizations (HMOs) which has 76 accredited providers:

They are given the responsibility of ensuring that the goals of the NHIA are implemented by facilitating affordable and high-quality Medicare for Nigerians. From studies, it has been observed that the service providers deny the customers of their complete entitlements and charge them extra fees based on opinions that some other services were not included in the insurance plan. Apart from this problem, there have also been complaints that the service providers have poor or bad attitude towards the healthcare scheme. In view of the above discussion, this study intends to investigate the influence of campaign awareness and patients' perception on utilization of National Health Insurance Authority in AMAC District Hospitals, FCT, Abuja.

Methodology

A descriptive survey research was conducted. This study was conducted in Abuja Municipal Area Council, Federal Capital Territory. The AMAC has three District Hospitals namely; Asokoro, Wuse and Maitama District hospitals and some General hospitals. The sample size was three hundred and eight five (385) enrollees of the selected hospitals. The sample size was gotten from Raosoft (2004) sample size table. The selection of respondents was through simple random sampling. A structured questionnaire was used to collect quantitative data which was analyzed using both descriptive and inferential statistics.

Reliability test findings

Reliability means the consistency of the research instrument the researcher intends to use for the study. It also means the consistency of a measure (whether the results can be reproduced

under the same conditions). The reliability of the measuring instrument was done through a pilot study. The pilot study helps to ensure consistency and dependability of the scale and the ability to elicit data that answer the research question of the study. This was carried out by using 30 copies of the questionnaire which were administered to residence of Kwali Area Council who are outside the scope of the study.

Results and Discussion of Findings

This chapter dealt with data presentation, analysis and the interpretation of the results. The analysis is guided by the specific objectives and hypotheses that were formulated in the study. The first section shows the presentation of the descriptive analysis using tables showing percentages and interpretations below the tables. Section two presents inferential statistics and discussion of findings comes at the later end of the chapter. The results presented were based on the research questions and hypotheses, which the study set out to answer and understudy. The Decision rule: 1.0.-1.49 = very low, 1.50-2.49 – low, 2.50 -3.49 = High, 3.50-4.00 = Very high. Hypotheses were tested at 0.05 level of significance. Out of the 385-questionnaire administered, 304 were completed and returned. This represents 78.9% approximately 79 % return rate which is considered adequate for analysis and generalization.

Table 4.1: Demographic Distributions

DEMOGRAPHI CS	ITEMS	FREQUENCY	PERCENT
Gender	Male	132	43.4
	Female	172	56.6
	Total	304	100.0
Age	25-35	121	39.8
	36-45	102	33.6
	46-55	57	18.8
	56 And Above	24	7.9
	Total	304	100.0

Religion	Islam	92	30.3	Source:
Christianity		203	66.8	
Traditional		9	2.9	
Total		304	100.	
Educational Qualifications				
SSCE		30	9.9	
ND		75	24.7	
HND/BSc.		179	58.9	
MSc.		20	6.6	
Total		304	100.0	
Marital Status				
Married		221	72.7	
Single		83	27.3	
Total		304	100	

Fieldwork, 2023

The table 4.2 above presents a comprehensive overview of the demographics of a sample group consisting of 304 respondents. Firstly, when examining the gender distribution, it is evident that the sample is fairly balanced between males and females. Specifically, there are 132 males, accounting for 43.4% of the total, while females make up a slightly larger portion at 56.6%, with 172 respondents. Also, the Age distribution, shows that those within the 25-35 age group constitutes the largest segment with 121 respondents representing 39.8% of the total. The 36-45 Age Group follows closely behind, comprising 102 respondents or 33.6%. Meanwhile, the 46-55 Age Group consists of 57 respondents, making up 18.8% of the sample. Lastly, respondents aged 56 and above are the smallest group, with 24 respondents, accounting for 7.9% of the total. In terms of religion, the majority of the sample identifies as Christian, with 203 respondents, making up a substantial 66.8% of the total. Islam is the second most common religion, with 92 respondents, constituting 30.3%. A smaller minority follows traditional beliefs, comprising just 2.9% of the sample, or 9 respondents. Educational qualifications are also a key aspect of the demographic profile. The data reveals that HND/BSc. is the most prevalent educational qualification among the respondents, with 179 respondents, accounting for 58.9% of the total. ND follows with 75 respondents, representing 24.7%. A smaller number, 30 respondents, hold an SSCE qualification, making up 9.9%. Finally, there are 20 respondents with an M.Sc. degree, constituting 6.6% of the sample. Lastly, the marital status of the respondents shows that a substantial majority are married, with 221 respondents, making up 72.7% of the total. On the other hand, 83 respondents are single, comprising 27.3% of the sample.

What is the patients' perception on the use of National Health Insurance Authority in AMAC district hospital Abuja, Nigeria?

ITEMS PERCEIVED QUALITY	very High	High	Low	Very Low	Mean
The nurses and doctors treated patients with dignity and respect.	110 (36.2%)	129 (42.4%)	58 (19.1%)	2 (2.3%)	3.14
I consider the time interval (that is, waiting time) between arrival and departure from the hospital acceptable	92 (30.3%)	27.6 (27.6%)	89 (29.3%)	39 (12.8%)	2.75
Health professionals in NHIA accredited hospitals carry patients along in their management	85 (27.9%)	134 (44.1%)	72 (23.7%)	13 (4.3%)	2.95
Weighted mean					2.9
Expected quality					
The quality of service i receive as NHIA enrollees equal to what others who are not using the scheme receive	92 (30.3%)	95 (31.3%)	100 (32.9%)	17 (5.6%)	2.86
I do enjoy medical care from well-educated and assigned personnel	114 (37.5%)	163 (53.6%)	23 (7.6%)	4 (1.3%)	3.27

I do enjoy high level medical attention according to medical requirements and NHIA operational guidelines	109 (35.9%)	122 (40.1%)	62 (20.4%)	11 (3.6%)	3.08
WEIGHTED MEAN					3.07
GRAND MEAN					3.0

Field Work, 2023

The table 4.4 above is a summary of survey of responses related to the perceived and expected quality of healthcare services provided under the National Health Insurance Authority (NHIA). The first section focuses on perceived quality of health service. In this section, respondents were asked about their perceptions regarding the quality of healthcare services they have received under NHIA.

The first item assesses how nurses and doctors treat patients in terms of dignity and respect. Responses include 36.2% "Very High," 42.4% "High," 19.1% "Low," and 2.3% "Very Low." The weighted mean for this item is 3.14, indicating a moderate level of agreement that healthcare professionals treat patients with dignity and respect. The second item evaluates the acceptability of the time interval (waiting time) between arrival and departure from the hospital. Responses include 30.3% "Very High," 27.6% "High," 29.3% "Low," and 12.8% "Very Low." The weighted mean for this item is 2.75, suggesting that respondents have mixed opinions about waiting times. The third item assesses whether health professionals in NHIA-accredited hospitals involve patients in their management. Responses include 27.9% "Very High," 44.1% "High," 23.7% "Low," and 4.3% "Very Low." The weighted mean for this item is 2.95, indicating a moderate level of agreement that health professionals involve patients in their management.

This next section explores respondents' expectations regarding the quality of healthcare services they should receive as NHIA enrollees. The first item asks whether the quality of service received as an NHIA enrollee is equal to what others who are not using the scheme receive. Responses include 30.3% "Very High," 31.3% "High," 32.9% "Low," and 5.6% "Very

Low." The weighted mean for this item is 2.86, indicating a moderate level of agreement that NHIA service quality is comparable to that of non-enrollees. The second item in this section assesses whether respondents enjoy medical care from well-educated and assigned personnel. Responses include 37.5% "Very High," 53.6% "High," 7.6% "Low," and 1.3% "Very Low." The weighted mean for this item is 3.27, suggesting a strong level of agreement that respondents receive medical care from well-educated personnel. The third item evaluates whether respondents enjoy a high level of medical attention according to medical requirements and NHIA operational guidelines. Responses include 35.9% "Very High," 40.1% "High," 20.4% "Low," and 3.6% "Very Low." The weighted mean for this item is 3.08, indicating a moderate level of agreement that respondents receive a high level of medical attention as per guidelines.

The Grand Mean in this table is provided as 3.0, suggesting that, on average, respondents hold moderately positive views regarding both the perceived and expected quality of NHIA healthcare services. This indicates a general belief that NHIA services meet or exceed expectations. In summary, the table provides insights into how respondents perceive the quality of healthcare services provided under NHIA and what they expect from these services. The weighted means suggest that respondents generally have moderate to positive views regarding both perceived and expected quality. The Grand Mean of 3.0 reinforces this, indicating an overall positive perception of NHIA healthcare services.

Table 4.6 a-c Influence of Patients' Perception on Utilization of National Health Insurance Authority in AMAC District Hospitals, FCT Abuja, Nigeria.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.621 ^a	.386	.384	.39338

a. Predictors: (Constant), Patients Perception

ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
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1	Regression	29.377	1	29.377	189.843	.000 ^b
	Residual	46.733	302	.155		
	Total	76.110	303			

A. Dependent Variable: Utilization of NHIA

B. Predictors: (Constant), Patients Perception

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.797	.106		16.997	.000
	Patients Perception	.473	.034	.621	13.778	.000

a. Dependent Variable: Utilization Of NHIA

The tables 4.6 a-c above is the results of a regression analysis on the relationship between the Patients perception and the utilization of NHIA in AMAC District Hospitals, FCT Abuja, Nigeria

4.2.1. What is The Level of Utilization of National Health Insurance Authority in AMAC district hospitals, FCT, Abuja, Nigeria?

Table 4.2 Level of utilization of National Health Insurance Authority

Reuse Inclusion	Very high	High	Low	Very low	Mean
I have never been discriminated against by hospital workers who attend to NHIA enrollees.	129 (42.4%)	137 (45.1%)	30 (9.9%)	8 (2.6%)	3.27
All those known to me that use the NHIA are treated the same way	130 (42.8%)	144 (47.4%)	29 (9.5%)	1 (.3%)	3.33

Health insurance provides accessibility to quality health care	126 (41.4%)	133 (43.8%)	41 (13.5%)	4 (1.3%)	3.25
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Health insurance is beneficial and should be sustained	145 (47.7%)	126 (41.4%)	20 (6.6%)	13 (4.3%)	3.33
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Weighted Mean					3.30
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Expectation	Very high	High	Low	Very low	Mean
I consider the scheme's benefit package adequate	114 (37.5%)	141 (46.4%)	37 (12.2%)	12 (3.9%)	3.17
Since i have been using NHIA services, my medical bills have reduced	150 (49.3%)	110 (36.2%)	39 (12.8%)	5 (1.6%)	3.33
I do enjoy the services of NHIA	138 (45.4%)	128 (42.1%)	28 (9.2%)	10 (3.3%)	3.30
I am never reluctant in making use of NHIA	133 (43.8%)	118 (38.8%)	40 (13.2%)	13 (4.3%)	3.22
NHIA services are of international standards	69 (22.7%)	128 (42.1%)	62 (20.4%)	45 (14.8%)	2.73

Weighted Mean					3.8
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Satisfaction					
I am highly satisfied with service providers' attitude towards explaining my health problem through the NHIA scheme	118 (38.8%)	139 (45.7%)	43 (14.1%)	4 (1.3%)	3.22
I am highly satisfied with the level of services i have enjoyed so far through NHIA services	105 (34.5%)	150 (49.3%)	46 (15.1%)	3 (1.0%)	3.17

I am very much satisfied with the behavior of hospital staff.	101 (33.2%)	167 (54.9%)	30 (9.9%)	6 (2.0%)	3.19	
I prefer NHIA services than other forms of health services available in my country			152 (50.0%)	110 (36.2%)	28 (9.2%)	11 (3.6%)
Weighted Mean					3.2	
Grand Mean					3.4	

Source, 2023

The table 4.2.1 above is summary of survey responses, with respondents rating various aspects of the National Health Insurance Authority (NHIA) on a scale from "Very High" to "Very Low," with corresponding percentages and weighted means.

Reuse Inclusion: In this section, respondents are expressing their views on inclusion and discrimination within the NHIA. The first question relates to whether respondents have experienced discrimination by hospital staff when using NHIA services. It shows that 42.4% of respondents believe they have never been discriminated against (Very High), while 45.1% feel that discrimination is High, and smaller percentages believe it is Low (9.9%) or Very Low (2.6%). The second question asks if those known to the respondents who use NHIA are treated the same way. A similar pattern is observed, with 42.8% saying they are treated the same way (Very High), while 47.4% think it is high, and only 9.5% believe it's Low. Only a tiny fraction (0.3%) considers it Very Low. The third question addresses the accessibility of quality healthcare through health insurance. A substantial portion of respondents (43.8%) believes that health insurance provides such accessibility (High), while 41.4% think it is Very High. A smaller percentage considers it Low (13.5%), and only 1.3% consider it Very Low. The fourth question explores the perceived benefits and sustainability of health insurance. A majority (47.7%) believe that health insurance is beneficial and should be sustained (Very High), while 41.4% think it's High. Only 6.6% consider it Low, and 4.3% find it Very Low.

The next dimension focuses on the respondents' expectations and experiences with NHIA services. The first question examines whether respondents find the scheme's benefit package adequate. A significant portion (46.4%) thinks it is High, while 37.5% believe it is Very High. Smaller percentages consider it Low (12.2%) or Very Low (3.9%). The second question explores whether medical bills have reduced since using NHIA services. A majority (49.3%)

believes their bills have reduced (Very High), while 36.2% think it's high. A smaller fraction sees it as Low (12.8%), and only 1.6% found it Very Low. The third and fourth questions gauge respondents' satisfaction and reluctance in using NHIA services. Generally, respondents' express satisfaction (High or Very High) with both the services and staff behavior. A majority of respondents (50.0%) prefer NHIA services to other healthcare options in their country (Very High), while smaller percentages think it is high (36.2%), Low (9.2%), or Very Low (3.6%).

On the level of respondents' satisfaction with NHIA services, the first question evaluates satisfaction with service providers' attitudes in explaining health problems. A substantial portion (45.7%) is highly satisfied (High), while 38.8% find it Very High. Smaller percentages consider it Low (14.1%) or Very Low (1.3%). The second question assesses overall satisfaction with the level of services provided through NHIA. A majority (49.3%) expresses high satisfaction (High), while 34.5% find it Very High. Some think it is Low (15.1%), and only 1.0% rate it as Very Low. The third question examines satisfaction with the behavior of hospital staff, with 54.9% rating it as High and 33.2% as Very High. Fewer respondents find it Low (9.9%) or Very Low (2.0%). The final question asks about the preference for NHIA services over other forms of healthcare available in the country. A majority (50.0%) prefers NHIA services (Very High), while 36.2% think it is high. Some consider it Low (9.2%), and a small portion rate it as Very Low (3.6%).

The table concludes with a Grand Mean of 3.4, which represents the overall average rating of respondents' perceptions and experiences with NHIA services. A Grand Mean of 3.4 suggests that, on average, respondents hold positive views and experiences with the NHIA, as the mean score falls above the midpoint of decision rule.

Conclusion

Access to quality healthcare is a fundamental human right that every human being must enjoy irrespective of their status in life. However, the cost of quality healthcare has meant that many individuals may not have access to the kind of healthcare they need without insurance.

References

Al-Daoar, R. M. A., & Munusamy, S. Effect of Personnel Care Quality of Private Healthcare Providers on Arab Patients' Satisfaction and Word-Of-Mouth Communication: An Empirical

Research in India'. International Journal of Engineering and Advanced Technology, 9(1), 2019. 5374-5383.

Amedari, M. I., & Ejidike, I. C. Improving Access, Quality and Efficiency in Health Care Delivery in Nigeria: A Perspective. PAMJ-One Health, 5(3). 2021.

Anabila, P., Kumi, D. K., & Anome, J. Patients' Perceptions of Healthcare Quality in Ghana: A Review of Public and Private Hospitals. International Journal of Health Care Quality Assurance, 32(1), 2019. 176-190.

Arshad, M. A., Omar, N., Amjad, Z., Bashir, K., Irfan, M., & Ullah, I. Perceptions and Practices Regarding the Process of Obtaining Informed Consent from Surgical Patients at a Tertiary Care Hospital. Annals Of Medicine and Surgery, 73, 2022.103195.

Azeez, Y., Babatunde, Y., Babatunde, D., Olasupo, J., Alabi, E., Bakare, P., & Oluwakorede, A. Towards Universal Health Coverage: An Analysis of The Health Insurance Coverage in Nigeria. International Journal of Health and Life Sciences. 2021.

<https://doi.org/10.5812/IJHLS.108727>.

Batbaatar, E., Dorjdagva, J., Luvsannyam, A., Savino, M.M. & Amenta, P., Determinants of Patient Satisfaction: A Systematic Review. Perspectives In Public Health, 137(2), 2017. Pp.89-101.

M. A., Arshad, N., Omar, Z., Amjad, K., Bashir, M., Irfan, & I. Ullah, Perceptions and Practices Regarding the Process of Obtaining Informed Consent from Surgical Patients at a Tertiary Care Hospital. Annals of Medicine and Surgery, 73, 2022.103195.

A., Kader Mohiuddin, Patient Satisfaction with Healthcare Services: Bangladesh Perspective. International Journal of Public Health, 9(1), 2020. Pp.34-45.

A. Irene A. Mariam & D. A. Emelia, Assessing the Role of Quality Service Delivery in Client Choice for Healthcare: A Case Study of Bechem Government Hospital and Green Hill Hospital. European Centre for Research Training and Development, Vol.2, No.3, 2014. 1-23.

R. J., Febres-Ramos, & M. R. Mercado-Rey, Patient Satisfaction and Quality of Care of the Internal Medicine Service of Hospital Daniel Alcides Carrión. Huancayo-Perú. Revista De La Facultad De Medicina Humana, 20(3), 2020. 397-403.

A., Singh, & A. Prasher, Measuring Healthcare Service Quality from Patients' Perspective: Using Fuzzy AHP Application. Total Quality Management & Business Excellence, 30(3-4), 2019. 284-300.

P., Anabila, D. K., Kumi, & J. Anome, Patients' Perceptions of Healthcare Quality in Ghana: A Review of Public and Private Hospitals. International Journal of Health Care Quality Assurance, 32(1), 2019. 176-190.

M. A., Arshad, N., Omar, Z., Amjad, K., Bashir, M., Irfan, & I. Ullah, Perceptions and Practices Regarding the Process of Obtaining Informed Consent from Surgical Patients at a Tertiary Care Hospital. Annals of Medicine and Surgery, 73, 2022.103195.

Job Satisfaction and Migration Intention of Health Information Managers in Nigerian Health Sector

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Abstract

A large scale migration of health practitioners was observed. Therefore, the study in bid to understand factors that causes this migration aimed at understanding the influence of job satisfaction on migration of health information managers in Nigeria. The survey research design was adopted, the population of the study consist of eighty (80) health information management professionals in the Lagos hospitals. Total enumeration was used for the study which make do for the sampling of all the eighty (80) health information managers. A structured questionnaire was adapted to gather data for the study. Descriptive and inferential statistics were used for analysis. The study found a moderately high level migration intention among health information management practitioners with financial, cultural and environmental consideration service as the push and pull factors for the health practitioners. The test of hypothesis revealed that Job satisfaction (($R = 0.955$, $p < 0.05$) have significant influence on migration intention of health information managers. The study concludes that emigration intention among health information manager is on the increase and it is mainly due to lack of job satisfaction. It is therefore recommended that hospital management in Nigeria pay attention to motivators and hygiene factors capable of contributing to the job satisfaction of health information management practitioners.

Keywords: Job Satisfaction, migration intention, health information managers

Introduction

Large-scale migration of health information managers first became an issue in 1940. That period saw the beginning of mass migration of health information managers from Europe to the United Kingdom and the United States of America. This trend continued and it became so rampant in the 1960s, that several European governments became alarmed and tried to stop it. The issue also caught global attention. The World Health Organization (WHO) published a detailed study spanning 40 countries in 1979 to highlight the importance and flow of health workers, with the findings indicating that nearly 90 percent of all migrating physicians were moving to just five countries: Australia, Canada, the Federal Republic of Germany, the United Kingdom, and the United States (Naqvi, Zehra, Naqvi, Ahmad, Ahmad, Usmani, Badar, Younus, & Khan, 2017).

The migration of health practitioners to these developed countries still continues. However, a significant portion of the current inflow of health practitioners is coming from Africa, particularly, Nigeria. Researchers have spoken about a culture of migration among Nigerian health practitioners (Muanya 2020). This is a situation in which students in medical, nursing and other health-related courses are indoctrinated right from schools by lecturers, parents and colleagues that the best path for them is to seek greener pastures after their education (Awire, 2017). While accurate statistics is difficult to obtain, available figures show that more than nine thousand Nigerian doctors are currently working outside the country. In addition, the Nursing and Midwifery Council of Britain reported that 3,782 Nigerian nurses trained by taxpayer fund in Nigeria are now practicing in England and Scotland (Tolu-Kolawole, 2020). These figures represent only those who are recognized as health practitioners by the countries they have migrated to. There are still several who have not secured employment as health practitioners or who are as working menial labourer and other jobs apart from the health sector.

Scholars on migration have identified various documented factors that influence the migration of healthcare professionals. The factors are categorized under “push” and “pull” factors as determinants of migration decisions. “Push factors” are those economic, cultural and environmental factors that exist within the country of origin, motivating professionals to leave. While ‘pull factors’ are the economic, cultural and environmental factors that attract health information managers originating from the recipient country’s policies and actions (Sasso, Bagnasco, Catania, Zanini & Aleo, 2019). The push factors are present in Nigeria as a country and it is driving the outward flow of health practitioners to other countries especially in Europe and America where there are also pull factors. According to Shirmohammadi, Beigi, & Stewart, (2019), the push and pull factors for Nigerian health information managers has been identified as an issue in their job satisfaction which is a factor that can determine emigration intention among them

Health information managers in Nigeria often complain about various aspects of their jobs that they considered unsatisfactory. This includes low remuneration, poor conditions of service, management shortcomings, overwork, and lack of the necessary facilities that enhance their job performance. In addition to these, they live in a society where security of life is not guaranteed and infrastructural facilities such as power supply, adequate housing and road networks that can make life convenient are not available (Ramalan, & Garba, 2021). When all these are contrasted against condition of work in other places such as Europe and America, a true picture of the push and pull factors that encourage health practitioners to migrate begin to emerge

While lack of satisfaction of health professional with several aspects of their jobs such as remuneration, working condition and opportunity for career advancement constitute the push factor that encourage migration, there are also pull factors that encourage them to migrate. These pull factors include higher remuneration, opportunity for advancement, and the prestige

associated with working abroad, especially among citizen of developing countries. Many health information managers in developing countries have reported having someone who encourage them to migrate in order to enjoy better working conditions. The migration of health information managers for better opportunities both within countries and across international borders is of growing concern worldwide because of its impact on health systems in developing countries. Moreover, preliminary investigation, close observation and review of related literature has shown about half of the 74,543 doctors on the register of the Medical and Dental Council of Nigeria (MDCN) have migrated and are now working in various hospitals around the world (Ezigbo, 2020). This is alarming considering the fact that Nigeria has a very low concentration of doctors with the World Health Organization projecting that the country needs more than 300,000 doctors in order to attain the global benchmark of recommended doctor-to-patient ratio of 1:600 (Muanya 2020).

The need for health information managers to migrate abroad to seek greener pastures may be logical on the individual level but it is detrimental to the society which trained and placed its hope on their expertise. This dictates that the factors that influence migration must be properly understood so that the appropriate strategy can be devised to ensure that the health sector does not collapse as a result of lack of the required skilled personnel. However, there is a dearth of literature on the influence of job satisfaction on the migration of health information managers, particularly in Lagos state Nigeria. In the light of this, it is considered relevant to examine job satisfaction and emigration intention among health information managers in Lagos State.

Research Questions

- 1 What is the level of migration intention among health information managers in Lagos state
- 2 What is the level of job satisfaction among health information managers in Lagos state

Hypothesis

There is no significant influence of job satisfaction on the emigration intention of health information managers in Lagos state

Literature Review

Migration is literally the act of conscious and deliberate movement from one geographical area to another for various purposes such as self-preservation or simply recreational purposes. Immigration refers to the process through which people move to a new country, either voluntarily or involuntarily, with the intention of establishing a permanent residence there for an extended length of time (Esses, Wright, Thomson, & Hamilton, 2017). Available literature suggests that health information managers have been moving from one country to another in search of greener pastures for many years now. It is only in the past two decades that migration has occurred in such a high proportion that it has attracted world attention, including that of international organizations such as the International Council of Health information managers (ICN) and the World Health Organization (WHO) in recent years, the migration of health information managers has been on the increase with majority of the movement emanating from developing countries to developed countries as increasing numbers of health information managers, midwives, and doctors seek employment across borders due to various factors (Fong, Verkuyten, & Choi; Cometto, Buchan, & Dussault, 2020).

Socioeconomic, political, professional and personal factors in their countries of origin have been identified as playing a major role as motivators for migration among the international nurse recruits. Labor migration has been facilitated by globalization, as a “set of processes involving increasing liquidity and the growing multi-directional flows of people, objects, places and information as well as the structures they encounter and create (Ritzer, & Dean, 2019).

The term "job satisfaction" has been defined in various manners by several scholars. One of the simplest definitions defined job satisfaction as a measure of a person's feelings toward their job position. Another definition posits that a worker's attitude toward his or her entire job structure is the measurement of his or her level of job satisfaction. In the same vein, another scholar defined job satisfaction as an employee's level of contentment with their work (Aslan, & Atesoglu, 2021). This is further supported by another author who viewed job satisfaction as an employee's overall impression of the job.

Another way to measure job satisfaction is to look at how well employees are able to express their emotions on the job (Rosdaniati, & Muafi, 2021). Job satisfaction can be defined as the level of contentment employees feel toward various aspects of their work lives (Khaskheli, Jiang, Raza, Qureshi, Khan, & Salam, 2020). Although there may be a variety of definitions of job satisfaction, there is a central theme of personalization of feelings by the employee that remains constant. Employees who perform at the top of their game are more likely to report feeling content in their work environments, even if job satisfaction is not a science (Qing, Asif, Hussain, & Jameel, 2020). These definitions view job satisfaction from the viewpoint of the emotion or attitude of employees towards their job. While this is accurate, they both neglect to account for what can be behind the emotions or attitudes. There is an attempt to rectify this by another scholar added that job satisfaction is influenced by both internal and external factors (Idiegbeyan-Ose, Opeke, Aregbesola, Owolabi, & Eyiolorunshe, 2019). This acknowledgment of factors that lead to job satisfaction was the bedrock of the most popular theory in the field of management and organizational behavior; Herzberg's two-factor dimensions of job satisfaction and dissatisfaction.

Empirical studies showing the interrelationships between job satisfaction and emigration has been carried out. For instance, a study found that 93 percent of the factors that influenced migration intentions among the health information managers were career-related, including

greater prospects for career advancement, an appropriate job match, job promotion, and independent control of practise. Some of the personal variables highlighted included self-actualization, social security, such as pensions, suitable equipment to use and desire to earn more money or get a raise as a reason in their decision to leave their current (Lowe & Chen, 2016). Furthermore, a total of 1003 surveys were examined (response rate: 38 percent). 4.5 percent of 273 doctors said they were "certainly" or "probably" going to migrate, while 22.7 percent said they were "probably" going to go. Work-life balance, greater wages, and better working circumstances all played a role in their decision to migrate to another country. The study found that, due to the perception of better conditions of service abroad, sixty-two percent of doctors in Poland plan to migrate for at least, a short-term stay in another country (Ullah, Sehrish, Anwar & Rana, 2018)

A descriptive examination of data received from African countries found that the application of financial incentives has had favorable results in some African nations. Botswana established significant overtime allowances of up to 30 percent of pay, part-time employment, flexible hours, and accommodation in an effort to retain nurses. In 2001, Zambia similarly quadrupled nurses' compensation. Donors provided Malawi with \$278 million in 2004 to strengthen the recruitment and retention of health information managers through compensation increases, better staff housing, and other incentives. The number of registered nurses leaving Malawi decreased from 111 in 2001 to six in the first half of 2008, yet enrollment at nursing schools doubled (Botezat, & Moraru, 2019)

A study in Nigeria highlighted the influence of intrinsic and extrinsic factors on job satisfaction among health information managers. The result indicated that there is a low level of job satisfaction among the respondents. The test of hypotheses also revealed a significant relationship between work environment and job satisfaction, supervision and job satisfaction, organisation and administrative policy, interpersonal relationship and job satisfaction and

between salary and job satisfaction. While all of these represents extrinsic factors, the intrinsic factors identified to influence nurses job satisfaction include: sense of achievement, recognition, responsibility, opportunity for advancement, work itself and communication (Lee, 2017)

When these nurses hear of fat pays and sophisticated equipment in foreign hospitals (Pull factors), their intention to migrate may become strengthened. That is why it has been suggested that adequate remuneration, creating healthy practicing environment and improve their staffing of nurses to retain the practicing nurses and attract younger generation into the profession.

Methodology

The survey research design was used in this study, the population of the study consist of eighty (80) health information management professionals in the hospitals. Total enumeration was used for the study which make do for the sampling of all the eighty (80) health information managers. A structured questionnaire was adapted to gather data for the study. Descriptive and inferential statistics were used for analysis.

Analysis

The study found that the gender distribution shows that female respondents 45 (56%) has a slight majority compared to male respondents who are 35 in number, representing 44% of the total respondents. Aged 45 years and above are in the majority as they are 23 (28%). Majority of respondents 25 (32%) have first degree in related disciplines. 21 (26%) making majority have between 6- 10 years work experience

Research Question One: what is the level of migration intention among health information managers in Lagos state;

Table 4.2: Level of Migration Intention Among Health information managers in Lagos State.

Items	SA	A	D	SD	Mean
Economic Factors					
I am always thinking of migrating abroad because my pay is too low	27 (32%)	19 (24%)	17 (22%)	17 (22%)	2.66
There is poor standard of living in my country	40 (50%)	40 (50%)	--	--	3.48
I intend to travel abroad because of lack of employment opportunities in my country	23 (28%)	23 (28%)	17 (22%)	17 (22%)	3.24
I intend to travel abroad in order to be able to take care of my family	40 (50%)	22 (26%)	18 (24%)	--	2.72
Weighted Mean					3.03
Cultural Factors					
People working abroad are more respected in my society	40 (50%)	18 (24%)	--	22 (26%)	2.58
Working abroad will make me more recognized in my field	22 (26%)	23 (28%)	18 (24%)	17 (22%)	3.22
Health information managers get better recognition in Nigeria if they have practiced overseas before	36 (48%)	22 (26%)	22 (26%)	--	3.22
My overall standing in my community will be improved if I practice abroad compared to practicing in Nigeria	40 (50%)	23 (28%)	17 (22%)	--	3.28
Weighted Mean					3.08
Environmental Factors					
I wish to travel abroad to escape insecurity in Nigeria	41 (52%)	22 (26%)	17 (22%)	--	3.30
I wish to travel abroad to because of the poor working environment in Nigeria	23 (28%)	23 (28%)	17 (22%)	17 (22%)	2.62
I wish to travel abroad because I am overworked in my present workplace	18 (24%)	40 (50%)	22 (26%)	--	2.98
I wish to travel abroad because of the mismanagement of the health sector in Nigeria	36 (48%)	36 (48%)	4 (2%)	4 (2%)	3.42
Weighted Mean					3.08
Grand Mean					3.06

Decision rule 1.00 – 1.49= very low, 1.50 – 2.49= low, 2.50 – 3.49 = high, 3.50-4.00= very high.

Note: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD).

Source: Field Survey Results (2022)

Table 4.2 showed a high level of migration intention among health information managers in Lagos State. Migration intention was measured with economic factors, cultural factor and environmental factors. Looking at the economic factor, on an average, the respondents indicated that they intend to travel abroad in order to be able to take care of the family has a mean of 2.72. Overall, the weighted mean for economic factor of migration is 3.03 which shows high intent.

Table 4.2, also shows the result of cultural factors of migration among the respondent. On average, the respondents indicated that they intend to travel abroad because their standing in the community will be improved if they practice abroad compared to practicing in Nigeria has a mean of 3.28. Overall, the weighted mean for cultural factor of migration is 3.08 which shows a high level.

The third construct of emigration intention is environmental factors. The responses in table 4.2 shows that on an average, the respondents indicated that they wish to travel abroad because of the mismanagement of the health sector in Nigeria has a mean of 3.42. Overall, the weighted mean for environmental factor of migration is high.

Given the weighted mean of economic factors is 3.03, it is considered high according to the decision. This mean that economic reasons is one of the major aspect of the intention to migrate among the respondents. Similarly, given that the weighted means for cultural faction is 3.08, it also indicates a high level of cultural factor that can raise the intention to migrate among the respondents. Also, the weighted mean of environmental factors is 3.08 indicating that there is a high level of environmental factor driving the intention to migrate among the respondent. Taken together, the grand mean derived from the three metric is 3.06 which shows that the intention to migrate among the respondents is high.

Question 2: What is the Level of Job Satisfaction among Health information managers in Lagos State?

Table 4.3: Level of Job Satisfaction among Health information managers in Lagos State

Items	SA	A	D	SD	Mean
Recognition					
My supervisor appreciates my input at work	18 (24%)	45 (54%)	17 (22%)	--	3.02
My employer does recognize my contribution to its success	17	45	18	--	2.98

	(22%)	(54%)	(24%)		
I have always received commendation for any extra effort I put into my work	17 (22%)	19 (26%)	40 (50%)	4 (2%)	2.68
Weighted Mean					2.89
Career Advancement					
My employer ensure that deserving employees are promoted in due time	17 (22%)	46 (56%)	17 (22%)	--	3.00
I am satisfied with the criteria for promotion in my place of work	18 (24%)	24 (30%)	18 (24%)	17 (22%)	2.56
I am satisfied with rate of advancement at my place of work	19 (24%)	23 (28%)	19 (24%)	19 (24%)	2.52
Weighted Mean					2.69
Personal Growth	SA	A	D	SD	Mean
Individual initiatives is encouraged at my current place of work	--	63 (78%)	17 (22%)	--	2.78
If I could choose the career again I would make the same decision	18 (24%)	23 (28%)	22 (26%)	17 (22%)	2.54
I am satisfied with my achievement at work	22 (26%)	40 (50%)	9 (12%)	9 (12%)	2.90
I have skills, knowledge and training required to do my job	36 (48%)	22 (26%)	22 (26%)	--	3.22
Weighted Mean					2.86
Working Conditions					
My work environment is very conducive with basic facilities	18 (24%)	22 (26%)	18 (24%)	22 (26%)	2.48
I am provided with necessary resources that make my work effective	17 (22%)	18 (24%)	22 (26%)	23 (28%)	2.38
My physical working condition are good	4 (2%)	22 (26%)	17 (22%)	40 (50%)	1.78
Weighted Mean					2.22
Salary	SA	A	D	SD	Mean

My salary is being paid as at when due	17	46	--	17	2.78
	(22%)	(56%)		(22%)	
My salary is adequate with the level of responsibilities I have in my workplace	17	22	24	17	2.48
	(22%)	(26%)	(30%)	(22%)	
My Salaries are adequate and commensurate with my level of competence	17	22	17	24	2.40
	(22%)	(26%)	(22%)	(28%)	
Weighted Mean					2.55
Grand Mean					2.64

Decision rule 1.00 – 1.49= very low, 1.50 – 2.49= low, 2.50 – 3.49 = high, 3.50-4.00= very high.

Note: Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD)

Source: Field Survey Results (2022)

Table 4.3 present the result of analysis of the level of Job Satisfaction among Health information managers in Lagos State. Job satisfaction was measured has two dimensions; motivators and hygiene factors. Motivators included in the study are recognition, personal growth and career advancement opportunities. On an average, the respondents indicated that they have always received commendation for any extra effort they put into their work has a mean of 3.35. The weighted mean of recognition is 2.68 which indicates that the level of recognition for health practitioners is average. On average, the respondents indicated that their employer ensure that deserving employees are promoted in due time has a mean of 3.00. On an average, the respondents indicated that they are satisfied with the criteria for promotion in their place of work has a mean of 2.56. Furthermore, on average, the respondents indicated that they are satisfied with rate of advancement at their place of work has a mean of 2.52. Overall, the weighted mean for career advancement is 2.69 which indicates a moderate level of career advancement opportunities for the respondents.

Table 4.3, also shows the result of personal growth as a motivator for employee satisfaction. On average, the respondents indicated that individual initiatives are encouraged in their current place of work has a mean of 2.78. On an average, the respondents indicated that if they could choose the career again, they would make the same decision has a mean of 2.54. More so, on average, the respondents indicated that they are satisfied with their achievement at work has a mean of 2.90. Furthermore, on average, the respondents indicated that they have skills, knowledge and training required to do their job has a mean of 3.22. Overall, the weighted mean

for personal growth is 2.86 which indicates a moderate level of personal growth opportunities for the respondents.

The second construct of job satisfaction is hygiene factors. Hygiene factors examined in this study include working conditions and salary/wages. For working condition, average respondents indicated that their work environment is very conducive with basic facilities has a mean of 2.48. More so an average of the respondents indicated that they are provided with necessary resources that make their work effective has a mean of 2.38. Furthermore, the average of the respondents indicated that their physical working condition are good has a mean of 1.78. Overall, the weighted mean for working is 2.22.

The table 4.3 also revealed that on the average, the respondents indicated that their salary is being paid as at when due has a mean score of 2.78 of average of the respondents indicated that their salary is adequate with the level of responsibilities they have has a mean score of 2.40. Overall. The grand mean for job satisfaction among the respondents is 2.64 which indicate a moderate level of job satisfaction.

Table 4.4 (a-c): Influence of Job satisfaction on the Emigration Intention of Health Information Managers in Lagos State

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.955 ^a	.913	.911	.25336

a. Predictors: (Constant), Job satisfaction

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.322	1	32.322	503.515	.000 ^b
	Residual	3.081	48	.064		
	Total	35.403	49			

a. Dependent Variable: Migration Intention

b. Predictors: (Constant), Job satisfaction

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.347	.126		2.749	.000
	Job satisfaction	1.020	.045	.955	22.439	.000

a. Dependent Variable: Emigration Intention

Table 4.4a-c presents the results of the simple regression analysis for the influence of job satisfaction on the emigration intention of health information managers in Lagos State, Nigeria. From the results in Table 4.4a, job satisfaction has a positive and significant relationship with the emigration intention of health information managers in Lagos State, Nigeria ($R = 0.955$, $p < 0.05$). The coefficient of determination (Adj. R^2) of 0.911 shows that job satisfaction explains 91.1% of the changes in emigration intention of health information managers in Lagos State, Nigeria, while the remaining 8.9% variation in emigration intention of health information managers in Lagos State, Nigeria is explained by other variables not considered in this study.

Discussion of Findings

The analysis research question one revealed that the level of migration intention among health information management practitioners in Lagos state is moderately high with financial, cultural and environmental consideration service as the push and pull factors for the health practitioners. This finding aligns with what has been reported in literature. The high intention to migrate among health information managers has been linked to a variety of socio-political factors. Scholars have found that health information managers migrate in search of a better quality of life even when there are no direct economic or professional incentives to do so (Al-Hamdan, Al-Nawafleh, Bawadi, James, Matiti, & Hagerty, 2015; Castro-Martín, & Cortina, 2015). Having a better quality of life isn't just about economics; it's also about living in a better and safer environment because their current living conditions were unmanageable and a threat

to their families. Some medical professionals moved to another country to open doors for family members to experience a different culture (Al-Hamdan et al, 2015), while others were prompted to do so by family members (Castro-Martín, & Cortina, 2015). Since the expansion of the European Union, there has been an increase in the number of health information managers moving between EU countries, and some of the most common social motivations include a desire for better living conditions (Galbany-Estragués & Nelson, 2016)

Some health information management practitioners migrated in search of security for themselves and their families; they left their countries due to political instability and violent conflict, particularly in countries like Lebanon and some of those in sub-Saharan Africa⁵⁹. As already stated above, this political instability can be directly linked to a poorly performing economy. Political factors are closely aligned with social and other factors as the political situation provides the context for the social and work environment. High levels of violence and crime in the country, a general sense of despondency and seeing no future motivated health information managers to move. For example, Lebanese health information managers wanted to raise their families in a politically safe environment that also showed signs of economic growth (Suciu, Popescu, Ciumageanu, & Buzoianu, 2017).

Motivations related to social and political factors have been seen to influence international nurse migration. Some serve as push factors while others take the form of ‘pulling’ health information managers to other countries. These economic, professional and socio-political factors were not the only motivations for health information managers. Linked with these factors were personal reasons to migrate (Oda, Tsujita, & Irudaya Rajan, 2018).

In response to the research question two the study found that the level of job satisfaction among health information managers in Lagos state is moderate with majority rating the working condition very low. In addition, other factors that determine employee satisfaction such as

salary and opportunity for personal growth rated just a little above average indicating that health practitioners are out rightly not satisfied with these. This finding is also reported in various related studies.

Scholars found that intrinsic satisfaction is a major challenge for health information managers as they often have to work in the direst of environments. Hospitals are not equipped with the right facilities, basic tools are often not provided, and there is the challenge of power supply which often affect major medical procedures and put patients' lives in jeopardy. In addition to this, there have been reports of overwork of health information managers with hospitals being grossly understaffed and bed spaces being at a premium(Musinguzi, Namale, Rutebemberwa, Dahal, Nahirya-Ntege, & Kekitiinwa, 2018) All of these are against the backdrop of endemic corruption on the part of the government with funds meant for the health sector being mismanaged by those in power.

One major source of dissatisfaction among health information managers, especially in Nigeria is the issue of salary and other emoluments. A study found that Health information managers in Nigeria believed they are overworked and grossly underpaid. This issue has led to numerous strike actions among various health personnel in Nigeria with an average of two strikes each year since the return to democratic governance in 1999(Lasebikan, Ede, Lasebikan, Anyaehie, Oguzie, & Chukwujindu, 2020)

Conclusion

The study revealed that the level of migration intention among health information management practitioners in Lagos state is moderately high with financial, cultural and environmental consideration service as the push and pull factors for the health practitioners. The study found that the level of job satisfaction among health information management practitioners in Lagos

state is moderate with majority rating the working condition very low. In addition, other factors that determine employee satisfaction such as salary and opportunity for personal growth rated just a little above average indicating that health practitioners are out rightly not satisfied with these. The study has found that emigration intention among health information manager is on the increase and it is mainly due to lack of job satisfaction. What is more worrisome is that this study found that the emigration intention is similar in both male and female. What this indicate is that the situation has deteriorated to the extent that even females who are usually reluctant to migrate are now being forced to look for greener pasture. Nigeria as a country cannot afford continue losing its skilled workers to other countries because of poor condition of work and lack of all indices that promote job satisfaction.

Recommendation

Based on the finding and conclusions reached in this study, the researcher considers the following recommendations as appropriate;

1. There is a need for the stakeholders in the Nigerian health sector to appeal to the spirit of patriotism among health information management practitioners in Lagos state to reduce the level of emigration intention.
2. It is important that hospital management in Nigeria pay attention to motivators and hygiene factors capable of contributing to the job satisfaction of health information management practitioners in Lagos state.

References

Al-Hamdan Z.M. Al-Nawafleh A.H. Bawadi H.A. James V. Matiti M., & Hagerty B.M., *Experiencing transformation: the case of Jordanian nurse immigrating to the UK. Journal of Clinical Nursing*, 24(15-16), 2015. pp.2305-2313.

Aslan M., & Atesoglu H., *The Effect Of Innovation And Participation As Workplace Values On Job Satisfaction And The Mediating Effect Of Psychological Ownership*. **Sage Open**, 11(4), 2021. P.21582440211061530

Awire E. I. , *Social and Structural Factors Affecting the Culture of Medical Migration In Nigeria: Insights From Four Public Medical Schools (Doctoral Dissertation)*. 2017.

Botezat A. , & Moraru A. , *Brain Drain from Romania: What Do We Know So Far About the Romanian Medical Diaspora?* **Eastern Journal of European Studies**, 11(1). 2020, Pp.80-87.

Castro-Martín T., & Cortina C. , *Demographic issues of intra-European migration: Destinations, family and settlement*. *European Journal of Population*, 31(2), 2015. pp.109-125.

Cometto G., Buchan J., & Dussault G., *Developing The Health Workforce For Universal Health Coverage*. **Bulletin Of The World Health Organization**, 98(2), 2020, 109.

Esses V. M. Wright J. D., Thomson C., & Hamilton L. K.. "Immigration." In *The Sage Encyclopedia Of Political Behavior*. **Thousand Oaks: Sage Publications**, 2017. Pdf. <http://dx.doi.org/10.4135/9781483391144.N177>.

Ezigbo O., *Population of Doctors in Nigeria Hits 74,543*. *This Day*, 2020, 4 March).. Retrieved From <https://www.thisdaylive.com/index.php/2020/03/04/population-of-doctors-in-nigeria-hits-74543/#>

Fong E. Verkuyten, M. & Choi, S.Y., *Migration And Identity: Perspectives From Asia, Europe, And North America*. **American Behavioral Scientist**, 60(5-6), 2016. Pp.559-564.

Galbany-Estragués P., & Nelson S. , *Migration of Spanish nurses 2009–2014. Underemployment and surplus production of Spanish nurses and mobility among Spanish registered nurses: A case study*. **International Journal of Nursing Studies**, 63, 2016.pp.112-123.

Idiegbeyan-Ose J., Opeke R., Aregbesola A., Owolabi S., & Eyiolorunshe T.A., *Relationship Between Motivation And Job Satisfaction Of Staff In Private University Libraries, Nigeria*. **Academy Of Strategic Management Journal**, 18(1).2019.

Khaskheli A., Jiang, Y., Raza, S. A., Qureshi, M. A., Khan, K. A., & Salam, J. *Do Csr Activities Increase Organizational Citizenship Behavior Among Employees? Mediating Role Of Affective Commitment And Job Satisfaction*. **Corporate Social Responsibility And Environmental Management**, 27(6), 2020, 2941-2955.

Lasebikan O.A. Ede O., Lasebikan N.N., Anyaehie U.E., Oguzie G.C., & Chukwujindu E.D., *Job satisfaction among health information managers in a federal tertiary hospital in Nigeria*. **Nigerian Journal of clinical practice**, 23(3), 2020.pp.371-375.

Lee T.J. , *Relationship Between Intrinsic Job Satisfaction, Extrinsic Job Satisfaction, And Turnover Intentions Among Internal Auditors (Doctoral Dissertation, Walden University)*. 2017.

Lowe M., & Chen D.R. , *Brain Drain Issue And Health Information Managers' Migration From West Africa*. **Journal Of Population Studies**, (53), 2016. Pp.61-96.

Muanya C., *Nigerian Medical Doctors Among Least Paid Globally*. **The Guardian**. (2020, 24 September). Retrieved From <https://Guardian.Ng/News/Nigerian-Medical-Doctors-Among-Least-Paid-Globally/>

Muanya C., *Nigerian Medical Doctors Among Least Paid Globally*. **The Guardian**. (2020, 24 September). Retrieved From <https://Guardian.Ng/News/Nigerian-Medical-Doctors-Among-Least-Paid-Globally/>

Musinguzi C., Namale L., Rutebemberwa, E., A., P. Dahal, Nahirya-Ntege, and Kekitiinwa, A. *The relationship between leadership style and health worker motivation, job satisfaction and teamwork in Uganda*. **Journal of healthcare leadership**, **10**, 2018. p.21.

Naqvi A. Zehra A., Naqvi F., Ahmad S.B.S., Ahmad R., Usmani N., Badar S., Younus S. I. & Khan, S.J.,. *Migration Trends Of Pharmacy Students Of Pakistan: A Study Investigating The Factors Behind Brain Drain Of Pharmacy Professionals From Pakistan*. **Indian Journal Of Pharmaceutical Education And Research**, 51(2), 2017, Pp.192-206.

Oda H. , Tsujita Y., & Irudaya Rajan S. , *An analysis of factors influencing the international migration of Indian nurses*. **Journal of International Migration and Integration**, 19(3), 2018. pp.607-624.

Qing M. Asif M. Hussain A., & Jameel, A., *Exploring The Impact of Ethical Leadership On Job Satisfaction And Organizational Commitment In Public Sector Organizations: The Mediating Role Of Psychological Empowerment*. **Review Of Managerial Science**, 14(6), 2020. Pp.1405-1432.

Ramalan, M.A. & Garba, R.M., *Determinants Of Nigerian Medical Doctors' Willingness To Practice In Foreign Countries*. **Nigerian Journal Of Medicine**, 30(5), 2021. P.543.

Ritzer G. & Dean P., *Globalization: The Essentials*. **Oxford, United Kingdom: John Wiley & Sons.**, 2019

Rosdaniati R., & Muafi M., *The Influence Of Workplace Happiness And Innovative Work Behavior On Job Satisfaction Mediated By Work Engagement*. **International Journal Of Research In Business And Social Science** (2147-4478), 10(7), 2021. Pp.186-198

Sasso L. Bagnasco A., Catania G. , Zanini M . Aleo G., & Watson R. , *Push And Pull Factors Of Nurses' Intention To Leave*. **Journal of Nursing Management**, 27(5), 2019, 946-954.

Shirmohammadi M., Beigi, M., & Stewart, J.,. *Understanding Skilled Migrants' Employment In The Host Country: A Multidisciplinary Review And A Conceptual Model*. **The International Journal of Human Resource Management**, 30(1), 2019 96-121.

Suciu Ş. M. , Popescu C. A., Ciumageanu M. D., & Buzoianu A.D. , *Physician migration at its roots: a study on the emigration preferences and plans among medical students in Romania*. **Human resources for health**, 15(1), 2017. pp.1-9.

Tolu-Kolawole D., "3,782 Nigerian Nurses Migrated To Uk In 2021 – Nmc." *The Punch* (Nigeria), January 25, 2022. <https://Punchng.Com/3782-Nigerian-Nurses-Migrated-To-Uk-In-2021-Nmc>

Ullah H. Sehrish A., Anwar C.H. & Rana S.M. *Factors Influencing Job Satisfaction Of Nurses In Public And Private Sector's Hospitals: A Cross-Sectional Study*. **Pakistan Journal of Public Health**, 8(3), 2018. Pp.147-151.

Influence of Research Self-efficacy on Research Productivity of Academic Staff in Private Universities in Oyo State, Nigeria.

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Abstract

Academic staff members of university are the key to productive research outcome in many nations of the world and they determine the outcome of research direction whether productive or not. It is in the light of this that this study therefore deems it fit to investigate the role of research self-efficacy on research productivity of Academic Staff in Private Universities in Oyo State. Descriptive research design of a correctional type was adopted. The population consists of 717 academic staff in private universities in Oyo state, Nigeria. Sample size of 255 academic staff was determined using Yamane table of sampling size, while validated questionnaire was used to collect data from the respondents. Data collected was analyzed using descriptive and inferential statistics. Findings revealed that research self-efficacy has significant influence on research productivity ($\text{Adj.}R^2 = 0.104$; $p = 0.000$). Jointly, Research self-efficacy was found to statistically significantly influence Research Productivity $\text{Adj.}F(2,252)=17.010$, $p < 0.05$. The study concluded that Research Self-efficacy influenced Research Productivity. The study recommended that academic staff in private universities should work and improve on their research skills such as identifying research gaps, reviewing literature extensively, following the ethical principles of research and many more.

Keywords: Research Self-efficacy, Research Productivity, Academic Staff

Introduction

The purpose of research is to address societal requirements and contribute to a country's development. In this context, it is possible to assert that a country's present condition is a reflection of the quality and amount of its research productivity. In other words, no society can really develop past the level and scope of its research. Therefore, it is possible to say that research distinguishes between the developed and developing countries of the world. This explains why research productivity and the many stakeholders engaged in the process are receiving renewed and increased attention (Adekunle & Madukoma 2022). It is well acknowledged that research plays a crucial role in the development of institutions, and its significance for the academic setting cannot be overestimated.

The total amount of research that is done over a given period of time is referred to as research productivity, and it includes things like delivering seminar talks, publishing books or chapters in books, and publishing articles in peer-reviewed journals (Gabbay & Shoham 2019). Additionally, research productivity encompasses intangible products like securing research grants, editorial responsibilities, participating in public discussions and opinions on public interest topics, supervising students' class projects and dissertations, teaching, and volunteer work (Smith, Kat, Philip & Carter 2018).

However, University research can help academic staff members make decisions and get them listed on international rankings lists. Research productivity is frequently regarded as a crucial component of success, which can result in a promotion, honors, and a good income. Academic staff at universities is very interested in how research has a real impact on scholarly advancements as well as a progressive stimulus on the world economy. This kind of influence is pretty intriguing, particularly when it can be demonstrated and supported by data (Jalal, 2020). The idea of research productivity is intricate, yet it may be quantified using concrete metrics like three themes based on individual, institutional, and academic leadership characteristics.

Thus, research self-efficacy is one of the factors that can influence research productivity of the academic staff members, an individual's self-efficacy relates to their confidence in their capacity to carry out particular actions or tasks successfully. Research self-efficacy in the context of University academic staff refers to academic staff confidence in carrying out

research-related responsibilities, such as assisting faculty research, offering education in information literacy, and supporting scholarly communication initiatives (Bandura 1997). Research self-efficacy is an individual's views in their ability to engage in the research process. A person's apparent confidence in their capacity to conduct research is known as research self-efficacy. This definition places a strong emphasis on the value of self-assurance and perceived competence in research. However, research self-efficacy will affect academic staff research productivity directly or indirectly. It is based on this premise that this study seeks to examine research self-efficacy on research productivity of Academic staff in private universities in Oyo State.

Objectives of the Study

The objectives of the study are to:

- i. identify the level of research productivity of academic staff in private universities, Oyo state;
- ii. examine the level of research self-efficacy of academic staff in private universities, Oyo State;
- iii. determine the influence of research self-efficacy on research productivity of academic staff in private universities, Oyo State;

Hypothesis

The hypothesis was tested at a 0.05 level of significance.

H₀1: There will be no significant influence of research self-efficacy on research productivity of academic staff in private universities, Oyo state.

Literature Review

Regardless of the fields of study, all professionals engage in research; it is not just something that students and academics undertake. Research, the two syllables that make up the word "research," stand for "again" or "a new" and search standing for "to notice closely, to test, or to query," respectively (Aithal, & Kumar 2020). Research productivity is the entire numbers of journal articles, books, monographs, conference proceedings, technical reports, chapters in

books, theses, dissertations, scientific peer reviews, co-authored textbooks, occasional papers, and patents produced by scholars within a specified timeframe (Simisaye & Popoola 2019).

Research productivity has concrete metrics like three themes based on individual, institutional, and academic leadership characteristics (Bland 20005). The characteristics of the individual researcher are one of the key elements affecting research productivity. There are a wide variety of academics' staff attributes that have been found to significantly impact their research engagement and productivity. Academic staff research productivity is influenced by their demographic, professional, psychological, and attitude characteristics. Although researchers have different methods for conducting research, their dedication to it usually determines how productive they are (Heng, Hamid & Khan 2022).

A terminal degree, early publication habits, publishing-inclined coworkers, academic journal subscriptions, a high academic rank, and effective time management abilities are further qualifications. The literature also implies that people with poor research output have low levels of the here stated distinctive characteristics (Bland 2005). Individual researcher traits offer only one, albeit important, aspect of research output, regardless of how eager they are to publish (Fraser, Harrison, Millar & Chutuape 2020).

The faculty's leadership abilities are another element that contributes to the conditions that academic staff members find to be productive. Due to the synergy a faculty leader cultivates between the academic staff, the research culture, and the institution, leadership is essential to the productivity of its research (Bland 2005). Leaders of successful research faculties are characterized as esteemed academics who are focused on research and have an authoritative personality well as participative leadership style. The leader carries out important research-related tasks like managing, raising money, and setting goals. In contrast, a lack of professional autonomy and an increase in management oversight and control have an adverse effect on a researcher's productivity (Fraser, Harrison, Millar & Chutuape 2020).

However, it is critical to include the institutional environment of research accomplishments as one of the primary elements when assessing research productivity. Key institutional characteristics that have been researched in the past include the availability of financing and resources, institutional research policies, institutional culture, institutional orientation, reward and incentive systems, leadership styles, and the accessibility of top researchers. Factors at the institutional level influence research engagement and productivity. Institutional research

policies, teaching loads, research funding availability, access to professional meetings, administrative staff's supportive attitude, institutional goals and missions, institutional support for research activity, research benefits and incentives, and a culture that values research are a few examples (Alemu 2023).

However, research self-efficacy is one of the characteristics that can influence academic staff members' research productivity, but, as it is well known that research is challenging and requires strong psychological and emotional conditions for sustainability and analytical skills (Adekunle & Madukoma 2022). One of the key elements determining the effective conduct of research is research self-efficacy. Self-efficacy beliefs can impact a person's functioning, his capacity for exerting effort in a difficult task, and his persistence in pursuing his goals (Jovelyn, Charity, & Manla 2021). Research the conviction that one can do research activities successfully is known as research self-efficacy. Self-efficacy can also be viewed as a generative skill that is used to effectively direct a person's cognitive, social, emotional, and behavioral sub aptitudes toward the accomplishment of particular goals. This implies that people's belief in becoming "proactive agents" to regain a sense of control in the face of failures also influences their ability to deal well with risk circumstances (Sagone & Indiana 2023).

A collection of "beliefs in one's abilities to organize and carry out the actions necessary to produce given attainments" is known as self-efficacy (Bandura 1977). Performance accomplishments (Enactive mastery experiences), vicarious experience, verbal persuasion, and emotional arousal are the four things Bandura names as causes of self-efficacy. According to Bandura, since it is founded on past achievements, personal accomplishment is the most significant source of self-efficacy. The ability to manage expectations can be improved by personal experience. One's perception of their skills is influenced by their experience of mastery. More self-efficacy is felt after successful experiences. Strong self-efficacy can be established by consistent behavior success. Self-efficacy can, however, be weakened or undermined if a task or challenge is not successfully completed.

The timing and complete repeat of experience have a role in the failure of self-efficacy. When academic staff members rely on indirect experience as their primary source of self-efficacy rather than past experience, this is known as vicarious experience (Bandura 1977). However, they can witness this second source of self-efficacy when they watch academic staff in their universities execute an activity or deal with a circumstance; this can help them complete the same task by imitation.

On the other hand, the verbal persuasion addressed can be summed up as individual being convinced that a proposal will enable them to effectively complete an activity or behavior. Verbal persuasion is not rooted in prior failures; rather, it is a weak inducer of self-efficacy that can be put out by ignoring them. Nevertheless, emotional arousal is the final source of self-efficacy that can be sparked by demanding and difficult circumstances that might have a positive value for self-ability; consequently, this affects the perceived self-efficacy in dealing with frightening situations. This indicates that the emotion felt following a stressful event may have an impact on how academic staff members feel about their individual abilities. If someone is confident, it will result in excitement without worry and eventually cultivate a strong sense of self-efficacy, however if someone is nervous, it may generate a lower sense of self-efficacy Bandura 1977. The way that people perceive and evaluate emotional arousal is crucial in helping them form their own self-efficacy beliefs. Thus, one's self-efficacy views are positively impacted by being able to control one's emotions.

Methodology

The study utilized a cross-sectional descriptive survey research approach. The population of the study consists of all academic staff in private universities. The sample size of this study is Two hundred and fifty-five (255). Specifically, the sample size was drawn from the total number of lecturers in two private universities that were purposively selected in Oyo State i.e., Lead City University, Ibadan and Ajayi Crowther University, Oyo. Taro Yamane (1967) published table was used to select the sample size for the study. The table at confidence level 95% with margin error of +5.0 was used to select sample size of 255 out of the total population of 717 academic staff identified for this study.

Findings and Discussion

The findings of this study in table 1 shows the demographic composition of the respondents. Gender wise, there are more females than male respondents. There are 152 female respondents which constituted 59.6% of the total respondents while there are 103 male respondents which means they constituted 40.4%. In term of institutional affiliation, majority of the respondents 161(%) were from Lead city, while the rest, 94(%) are from Ajayi Crowther University, the

finding show that Lead City University has more academic staff than Ajayi Crowther University.

Table 1 also, shows the distribution of the respondents according to their faculties. Majority of the respondents 33(13%) were from College of Medicine & Health Sciences followed by those in Natural & Applied Sciences 28(11%), 23(9%), Social & Management Sciences 28 (11%), 5(2%). In addition, here were 18(7%), 5(2%) respondents from Arts & Education, Communication & Infor. Science 15(6%), 5(2%), Humanities 15(6%), also, Engineering & Technology 13(5%), 8(3%), Environment Design & Mgt (Built Env.) 13(5%), 5(2%), while Law 8(3%), 8(3%), Agricultural Science 8(3%) while Management 7(3%) and were 5(2%) of the respondents from Medical Sciences and Pharmacy respectively.

In term of academic attainment, there are 101 (39.6%) Ph.D. holders, followed by 154(60.4) MPhil/ Masters and others 0(0%). This data shows a diverse blend of qualification and educational backgrounds. This diversity was also shown in the positions held by the respondents. Those in the Assistant Lecturer status which is 61 which means they constituted about (23.9%). Majority of the respondents 76 are Lecturer II which is (29.8%) of the total respondents, while those in the Lecturer I status 58 constitutes (22.7%) of the total respondents. There are 60 Senior Lecturers which represents (23.5%) and 0 respondents for professor status. The demographic distribution is very important because some of the factors that determine self-efficacy include gender, role played and experience (Lase & Hartijasti 2018).

Experience also has a role to play in the pressure or motivation of academic staff to conduct research. Among the study respondents, it can be seen that 77(30.2%) has between <1-5 years' experience; 88(34.5%) of them has between 6-10 years while 43(16.9%) have been lecturing for 11-15 years. Also, 35(13.7%) of the respondents has experience between 16-20 years while few who has experience between 21-25 years 5(2.0%), 26-30 years 0(0%) and 31and above years has 7(2.7%). The combination of academic attainment, work experience and gender are important in investigating the research self-efficacy of academic staff. In addition, the rank of academic staff may determine whether they would conduct more or less research (Emami, Rezaei, Sangani & Goh 2019).

Table 1: Distribution of respondents according to Demographics characteristics

Items		Frequency	Percent
Gender	Male	103	40.4

	Female	152	59.6
	Total	255	100.0
Institutions	Lead City University	161	
	Ajayi Crowther University	94	
	Total	255	

Faculties	Frequency	Percent
Lead City University		
College of Medicine & Health Sciences	33	13
Natural & Applied Sciences	28	11
Law	8	3
Social & Management Sciences	28	11
Environment Design & Mgt (Built Env.)	13	5
Arts & Education	18	7
Engineering & Technology	13	5
Communication & Infor. Science	15	6
Pharmacy	5	2
Ajayi Crowther University		
Natural & Applied Sciences	23	9
Law	8	3
Social & Management Sciences	5	2
Environment Design & Mgt (Built Env.)	5	2
Arts & Education	5	2
Engineering & Technology	8	3
Communication & Infor. Science	5	2
Humanities	15	6
Agricultural Science	8	3
Basic Medical Sciences	5	2
Management	7	3
Total	255	100

Status	Professors	0	0
	Senior Lecturer	60	23.5
	Lecturer I	58	22.7
	Lecturer II	76	29.8
	Ass. Lecturer	61	23.9
	Others	0	0
	Total	255	100

Academic Qualification	Ph.D	101	39.6
	M.Phil/Masters	154	60.4
Total		255	100

Work Experience	<1-5	77	30.2
	6-10	88	34.5
	11-15	43	16.9
	16-20	35	13.7
	21-25	5	2.0
	26-30	0	0
	31&above	7	2.7
Total		255	100

Source: Field survey 2023

Table 2 below shows how the research productivity is measured under various dimensions such as individual characteristics, institutional characteristics and leadership characteristics. The analysis shows that the dimension with highest means score of individual characteristics in academic staff research productivity is that the respondents find research activities stimulating (Mean = 3.30). This means that the academic staff find research activities stimulating is high. This dimension is followed by the respondents always ready to participate in research groups (Mean = 3.20) which means that most of the academic staff always ready to participate in research groups. However, the analysis also shows that while the editors/reviewers' comments does not discourage the academic staff (Mean = 3.03), and academic staff rarely miss deadline for paper submission (Mean = 3.02). The average mean score (3.14) shows that the respondents individual characteristics is high which it has really contribute to their research productivity.

However, the analysis also shows that, the highest mean score of institutional characteristics is there are research groups in my institution the respondents can join (Mean = 3.11) followed by their institution promotes a culture of research and innovation (Mean = 3.10). Additionally, the respondents' institutions ensure they have a enough time for research (Mean = 2.99) and also, their institution facilitates access to grant for research activities (Mean = 2.58). Thus, the average means score 2.95 shows that the institutional characteristics of the respondents is also high under decision rule and this has helped their research productivity. Furthermore, the highest (Mean = 3.12) of leadership characteristics is there are many proficient researchers around me. This revealed that the respondents have many proficient researchers around them which as really improve their research productivity. In addition, the respondents supervisor/HOD encourages them to conduct research (Mean = 2.98) and also, they have

access to mentoring that encourages research (Mean = 2.96). The supervisor/HOD encourages the respondents to see problems and challenges as opportunities to perform better (Mean = 2.85). However, the average mean score 2.97 which is also high under decision rule, reveal that the leadership characteristics have impact in research productivity of academic staff.

Individual characteristics have the highest average mean score 3.14 follows by leadership characteristics 2.97 while institutional characteristics is 2.95. These three measures fall under high under division of rule which is acceptable, this means that these three measures have great impact on academic staff research productivity.

Table 2: Distributions of the respondent according to research productivity of academic staff in private universities in Oyo State.

Statement	SA	A	DA	SDA	Mean	Std. Deviation
Research Productivity						
Individual Characteristics						
I find research activities stimulating	78 (30.6%)	177 (69.4%)	- -	- -	3.30	.461
I am always ready to participate in research groups	53 (20.8%)	202 (79.2%)	- -	- -	3.20	.406
Editors/ Reviewers comments does not discourage me	46 (18.0%)	172 (67.5%)	37 (14.5%)	- -	3.03	.570
I rarely miss deadline for paper submission	38 (14.9%)	185 (72.5%)	32 (12.5%)	- -	3.02	.524
Average Score	Mean				3.14	
Institutional Characteristics						
My institution facilitates access to grant for research activities	3 (1.2%)	145 (56.9%)	105 (41.2%)	2 (.8%)	2.58	.532
My institution ensures I have a enough time for research	3 (1.2%)	250 (98.0)	- -	2 (.8%)	2.99	.208

My institution promotes a culture of research and innovation	32 (12.5%)	221 (86.7%)	- -	2 (.8%)	3.10	.381
There are research groups in my institution I can join	38 (14.9%)	211 (82.7%)	4 (1.6%)	2 (.8%)	3.11	.427
Average Mean Score					2.95	
Leadership Characteristics						
I have access to mentoring that encourages research	17 (6.7%)	225 (88.2%)	- -	13 (5.1%)	2.96	.520
My supervisor/ HOD encourages me to conduct research	27 (10.6%)	197 (77.3%)	31 (12.2%)	- -	2.98	.477
There are many proficient researchers around me	39 (15.3%)	209 (82.0%)	7 (2.7%)	- -	3.12	.406
My supervisor/ HOD encourages me to see problems and challenges as opportunities to perform better	22 (8.6%)	175 (68.6%)	56 (22.0%)	2 (.8%)	2.85	.562
Average Mean Score					2.97	
Grand Mean					2.81	

Decision rule: 1.00 -1.49 = very low, 1.50 -2.49 =Low, 2.50 – 3.49 = High, 3.50 – 4.00 = Very high

Source: Field Survey Result (2023)

Table 3. Presents data on the research self-efficacy of the respondents, the research self-efficacy was measured by performance accomplishment, vicarious experience, verbal persuasion and emotional arousal. The data presented shows that the most prominent research self-efficacy of performance accomplishment by the respondents is identifying research gaps (mean = 3.16). This is followed by following the ethical principle of research (mean = 3.10). Other performance accomplishment include; working independently in a research work (mean = 2.89) and reviewing literature extensively (mean= 2.77). Over all, the respondents demonstrate the ability to identify to performance accomplishment as the average means 2.98 is high under decision rule. The table also shows the preferred vicarious experience among the respondents.

The most preferred vicarious experience according to the mean score of the responses include; witnesses scholars' academic presentations (mean=3.49); learn from academic mentors in research (mean= 3.28); gain much experience in seminar (mean = 3.26) and gain much experience in workshop (mean = 3.09). The average mean of 3.28 shows that the respondents have vicarious experience is high which it has really helped them in their research.

The data presented show that the respondents mostly in verbal persuasion discuss research with colleagues and hope for the best (mean = 3.44) followed by consult senior researchers for research ideas (mean = 3.35) and participate in generating collaborative research ideas (mean = 3.09). The lowest among is belong to a group of researchers on social media where I gain more experience (mean = 2.67). As a result, the average mean of verbal persuasion is 3.13 which is also high, this shows that verbal persuasion assists the respondents in their research activities.

The data shows that majority of the respondents usually remain calm when facing difficulties in research activities (mean =3 .03). The respondents also ensure that they handle whatever comes their way in research (means = 2.99) and always manage to solve difficult problems in research if they try hard enough (mean= 2.96). In addition to these, the result of the respondents shows that they can rely on their coping abilities while embarking on research (mean = 2.79) which is the lowest among. The average mean score for emotional arousal is 2.94 which is also high according to decision rule, this shows that emotional arousal in research self-efficacy help the respondents in their research activities.

However, vicarious experience has the highest average mean score 3.28 followed by verbal persuasion 3.14, performance accomplishment 2.98 and emotional arousal 2.94. They are all high and acceptable by the decision rule. This shows that these measures improve the research self-efficacy of academic staff in private universities.

Table 3: Distribution of respondents according to research self-efficacy of academic staff in Private Universities, Oyo state

Statement	TVHE	THE	TLE	TVLE	Mean	Std. Deviation
Performance Accomplishment						

I work independently in a research work	25 (9.8%)	179 (70.2%)	51 (20.0%)	- -	2.89	.537
I follow the ethical principles of research.	28 (11.0%)	227 (89.0%)	- -	- -	3.10	.313
I can identify research gaps	43 (16.9%)	212 (83.1%)	- -	- -	3.16	.375
I can review literature extensively	33 (12.9%)	131 (51.4%)	91 (35.7%)	- -	2.77	.660
Average Mean					2.98	
Vicarious Experience						
I gain much experience in Seminar	68 (26.7%)	187 (73.3%)	- -	- -	3.26	.443
I gain much experience in workshop	49 (19.2%)	182 (71.4%)	24 (9.4%)	-	3.09	.527
I learn from academic mentors in research	73 (28.6%)	182 (71.4%)	- -	- -	3.28	.452
I have witnessed scholars academic presentations	135 (52.9%)	112 (43.9%)	8 (3.1%)	- -	3.49	.560
Average Mean					3.28	
3.28						
Verbal Persuasion						
I discuss research with Colleagues	113 (44.3%)	142 (55.7%)	- -	- -	3.44	.497
I consult senior researchers for research ideas	93 (36.5%)	160 (62.7%)	2 (.8%)	- -	3.35	.496
I participate in generating collaborative research ideas	35 (13.5%)	209 (82.0%)	11 (4.3%)	- -	3.09	.414
I belong to a group of researchers on social medial where I gain more experience	179 (70.2%)	69 (27.1%)	- -	7 (2.7%)	2.67	.524
Average Mean					3.14	
Emotional Arousal						
I can usually handle whatever comes my way in research	9 (3.5%)	236 (92.5%)	10 (3.9%)	- -	2.99	.273
I can remain calm when facing	9	246	-	-	3.03	.184

Difficulties	(3.5%)	(96.5%)	-	-		
I can rely on my coping abilities while embarking on research	10 (3.9%)	182 (71.4%)	63 (24%)	- -	2.79	.494
I can always manage to solve difficult problems in research if I try hard enough	16 (6.3%)	214 (83.9%)	25 (9.8%)	- -	2.96	.400
Average Mean					2.94	
Grand Mean					3.09	

Decision rule: 1.00 -1.49 = very low, 1.50 -2.49 =Low, 2.50 – 3.49 = High, 3.50 – 4.00 = Very high

Source: Field Survey (2023).

Regression Analysis on influence of research self-efficacy on research productivity of academic staff in Private Universities, Oyo state.

Table 4 presents the results of the linear regression analysis on the influence of research self-efficacy on research productivity of academic staff in private university, Oyo state. From the data presented in the table, it can be seen that level of research self-efficacy of academic staff has a significant value which indicates that it has a positive influence on research productivity among respondents. In addition to this, the research model also shows an R^2 value 0.108 and adjusted R^2 value of 0.104. This means that the level of research self-efficacy of academic staff can lead to a 10.4% variation in the research productivity among the academic staff in the selected university.

Table presents the results of ANOVA (overall model significance) of the regression test which revealed that the level of research self-efficacy of academic staff has a significant influence on research productivity of academic staff in private university in Oyo state, Nigeria. This can be explained by the F-value (30.550) and low p-value (0.000) which is statistically significant at 95% confidence interval. Hence the result posited that the level of research self-efficacy of academic staff has a significant influence on research productivity of academic staff in private university in Oyo state, Nigeria.

In addition, the results of regression coefficient in table 4, revealed that the level of research self-efficacy of academic staff has a significant influence on research productivity of academic staff in private universities in Oyo state, Nigeria. Specifically, the analysis showed that at 95%

confidence level, a unit change in the level of research self-efficacy of academic staff will lead to 0.349 increase in research productivity of academic staff in private universities in Oyo state, Nigeria.

The null, hypothesis which states that there is no significant influence of level of research self-efficacy of academic staff on research productivity of academic staff in private universities, Oyo state, is therefore rejected.

Table 4: Summary of results of regression analysis showing significant influence of research self-efficacy on research productivity of academic staff in Private Universities, Oyo state

Model Summary				
Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.328 ^a	.108	.104	2.88383
Predictors: (Constant), Level of research self-efficacy of academic staff				

ANOVA ^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	254.068	1	254.068	30.550	.000 ^a
	Residual	2104.073	253	8.316		
	Total	2358.141	254			
a. Predictors: (Constant), Level of research self-efficacy of academic staff						
Dependent Variable: Level of research productivity of academic staff						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.035	3.130		6.082	.000
	Level of research self-efficacy of academic staff	.349	.063	.328	5.527	.000
a. Dependent Variable: Level of research productivity of academic staff						

Source: Fieldwork 2023.

Conclusion

The result of the study validated that Research Self-efficacy is an important skill required of academic staff to achieve a robust research productivity. Based on this study, it was identified that academic staff witnessed scholars' academic presentations mostly. It was found that research self-efficacy influenced research productivity of the academic staff members. Research self-efficacy such as performance accomplishment, verbal persuasions and emotional arousal could be predictors of research productivity of academic staff. Therefore, it is very important for academic staff members in private universities to acquire and incorporate research self-efficacy skill to enhance their research productivity.

Recommendations

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

1. Academic staff should work and improve on their research skills such as identifying research gaps, review literature extensively, follow the ethical principles of research and many more.
2. Private Universities need to improve in sponsoring their academic staff to workshops and seminars where they can hone their research skills and learn about the global best practices in research.

References

- Adekunle, A.P. & Madukoma, E. (2022). Research Self-Efficacy and Research Productivity of Doctoral Students in Universities in Ogun State. *Library Philosophy and Practice (e-journal)*, 7097.
- Adekunle, P.A. & Madukoma, E. (2022). Information Literacy, Critical Thinking and Research Productivity of Doctoral Students in Universities in Ogun State, Nigeria. *Library Philosophy and Practice (e-journal)*, 7050. <https://digitalcommons.inl.edu/libphilprac/7050>
- Aithal, P.S. & Kumar, P. M. Global ranking and its implications in higher education. *SCHOLEDGE, International Journal of Business Policy & Governance*, 7(3), 2020,25-47.
- Alemu, K. Factors determining research productivity in Ethiopian Universities. The case of MaddaWalabu University. *Social Science & Humanities* 8, 2023;100562. <https://doi.org/10.1016/j.ssaho.2023.100562>
- Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. W.H. Freeman and Company.

Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*, 84(2), 191-215. <https://doi.org/10.1037/0033-295X.8k.2.191>

Bland, C. J., Weber-Main, A., Lund, Marie, S. & Finstad, D.A. (2005). *The Research – Productive Department: Strategies from Departments That Excel*. Anker Publishing Company, Inc.

Emami, M., Rezaei, S., Sangani, B. & Goh, S.K. *Ethical Considerations in Quantitative Tourism and Hospitality Researches*. In *Quantitative Tourism Research in Asia*, Springer, Singapore. 2019, 311-322.

Fijeh, B. A. Ogbomo, M.O. & Ifijeh, G. (2018). Utilization of Academic Library Resources for Research Productivity among Lecturers in Private Universities in South South Nigeria. *Library Philosophy and Practice*, (e-journal), 2071 <http://digitalcommons.unl.edu/libphilprac/2071>.

Fraser, C., Harrison, L., Millar, J., & Chutuape, D. Incentivizing and rewarding research outputs Final Report 2020 <https://www.toiohomai.ac.nz/sites/default/files/inline-files/20.%20Fraser%20et%20al.p>

Gabbay, K. L. & Shoham, S. (2019). The Role of Academic Libraries in Research and Teaching. *Journal of Librarianship and Information Science*, 51(3), 721- 736.

Heng, K., Hamid, M.O. & Khan, A.. Research Engagement of Academics in the Global South: The Case of Cambodian Academics. **Globalisation, Societies and Education** 21(3)2022, 322-337 tandfonline.com/doi/abs/10.1080/

Jalal, A. (2020). Research Productivity in Higher Education Environment. *Journal of Higher Education Service Science and Management*. 3(1), <https://www.joherd.co/journals/index.php>

Jovelyn, G.D., Charity, R.A.P. & Manla, E.C. (2021). Research Self-Efficacy, Interest in Research and Research Knowledge of Graduate Students. *International Journal of Research and Innovation in Social Science (IJRISS)* 5(10).

Lase, E.P.S. & Hartijasti, Y. "The Effect of Individual and Leadership Characteristics Toward Research Productivity with Institutional Characteristics as a Mediator Variable: Analysis Toward Academic Lecturers in the Faculty of Economics and Faculty of Linguistic and Arts at University," *The South East Asian Journal of Management*, 12(1)2018, Article 2. DOI: 10.21002/seam.v12i1.9071

Sagone, E. & Indiana, M.L. The Roles of Academic Self-Efficacy and Intolerance of Uncertainty on Decisional Procrastination in University Students during the COVID-19 Pandemic. **Educ. Sci.** 13, 2023; 476. <https://doi.org/10.3390/educsci13050476>

Simisaye, O.A. & Popoola, S.O. (2019). Relationship Between Information Literacy Skills and Research Productivity of Researchers in Nigeria, and the Mediating Role of Socio-Economic Factors. *Libres*, 29(1), 51-76.

Smith, T. E., Kat, S. J., Philip, J. O. & Carter, T.E. (2018). Comparing the Research Productivity of Social Work Doctoral Programs Using the h-Index. *Scientometrics*, 116(3), 1513-1530.

**Information & Communication Technology Skills and Service Quality of Librarians in
Agricultural Research Institutes, Ibadan, Oyo State, Nigeria**

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Abstract

Like every other library, research libraries in Agriculture institutes are service rendering organizations with the sole aim of satisfying the researchers' information need through quality services. User's satisfaction is key to the usage of library and its resources. Like every other service rendering organizations, regular evaluation from user's perspective is inevitable especially in the face of obstructive nature of the technological innovation which has kept librarians on their toes thereby leaving them with no option but to be equipped with necessary Information and Communication Technology (ICT) skills for optimum and overall quality service. This study aimed at finding out influence of ICT skills of librarians on the quality of service rendered in Agriculture research institute, Ibadan, Oyo State. It's a descriptive study, which make use of mixed method. The population comprises of 101 librarians and 24 researchers. The instrument for data collection was questionnaire and a focus group discussion. The empirical data was analyzed using descriptive statistics, the hypothesis were tested using simple linear regression. The study found discrepancies in both librarians and researchers' response as regards service quality, Inadequacies of information resources was also found. The test of hypothesis revealed that ICT skills ((Adj.R²=0.205, F(1,79)=20.328, p=000)) have significant influence on service quality. The study recommends regular training and retraining in ICT by librarians.

Keywords: ICT skills, Service Quality, Librarian

Introduction

Research libraries are institutions that have a specialized focus on facilitating access to a wide range of research materials and resources, with the primary objective of supporting academic and scientific endeavors. Libraries of this nature generally house comprehensive assortments of books, journals, manuscripts, archives, maps, and other pertinent resources that are indispensable for scholarly investigation within a specific field or subject domain. Research libraries play a critical role in supporting academic research, teaching, and learning. They provide access to primary and secondary source materials, data sets, and other resources that are not readily available through other channels. Research libraries also offer a wide range of services and support to help scholars and researchers navigate the complex landscape of scholarly information and communication.

In addition to their traditional functions of collecting, cataloguing, and providing access to materials, research libraries are increasingly involved in the creation and dissemination of scholarly information. Many research libraries are actively engaged in digitization initiatives, scholarly publishing, and open access initiatives to make scholarly resources more widely available. Agricultural research institutes are specialized organizations dedicated to advancing knowledge and innovation in the field of agriculture. These institutes play a crucial role in improving agricultural practices, increasing crop yields, enhancing livestock production, and developing sustainable farming methods. Their primary mission is to address the challenges faced by the agriculture sector, promote food security, and contribute to the overall economic and environmental well-being of a region or country by providing high quality service (Spencer, & Eldredge, 2018).

Service quality refers to the perception of users regarding the excellence or superiority of the services provided by an organization. In the context of research libraries, service quality encompasses a wide range of factors such as accessibility, responsiveness, resource

availability, staff competence, and user satisfaction. Therefore, ensuring high service quality is crucial for maintaining user loyalty, attracting new users, and positioning research libraries as indispensable assets within the research community (Twum, & Peprah, 2020).

Professionally, LibQual as a measure of quality service has three dimensions from which library service quality can be understudied namely, library as a place, information control, and affect of service. Library as a place being the second dimension of libqual model refers to the appearance of the physical surroundings and facilities, equipment, professional and the way of communication as well as manner of approach and curtesy. In other words, the tangible dimension is about creating first hand impressions. A library and librarians should want all their users to get a unique positive and never forgetting first hand impression, this would make them more likely to return in the future. Library as a place refers to the physical traits, the physical environment, conduciveness, librarian's mannerism, ventilation, and some other tangibles of the library that is able to instill a sense of loyalty into the patron. Collectively, all the dimension plays a significant role in measuring service quality of libraries as a service-oriented institution. A study found that what the library has and how the library look affects customer satisfaction, followed by responsiveness and assurance moderately affect customer satisfaction which as generally agreed to be the yardstick for a quality service (Parasuraman, Zeithaml, & Berry, 1988). This means that library must pay attention to its look and aesthetic appearance inside and outside and even online in the wake of the obstructive nature of information and communication technology

Information and Communication Technology (ICT) skills with so many nomenclatures, like computer literacy skills, digital literacy skills, Information technology skills, media literacy skills and so on is one of the independent variables of this study and it has become increasingly important for librarians as technology continues to play a larger role in the field of library and information science. Librarians are now expected to have a basic understanding of various ICT

tools and technologies, as well as the ability to use them effectively in order to provide the best possible service to their patrons thereby enhancing and facilitating quality library services.

One of the most important ICT skills that librarians should possess is proficiency in the use of library management systems and the digital dynamics of both resources and services (Malik, & Ameen, 2021). These systems are used to catalogue, track, and manage the library's collection of books, periodicals, and other materials. Librarians need to be able to use these systems to search for and retrieve information, as well as to update and maintain the library's collection. Additionally, librarians should be able to use these systems to track the borrowing and returning of materials, as well as to generate reports on circulation statistics and reach out to various users who are scattered all over without a physical contact (Arshad, & Ameen, 2010). Another important ICT skill that librarians should possess is proficiency in the use of digital tools and resources. These include tools such as databases, e-books, and digital archives.

Agriculture Research Institutes are research based institutions that exist to meet the information needs of agricultural researchers. Their information needs are met basically by rendering service quality. Consequently, there is the need for a continuous check on how librarians are rendering quality service to these researchers to give them the gratifying experience they desire and to meet their information needs and expectations. However, extant literature reviewed revealed that there exists a deficiency of empirical studies on the usage of quality service assessment tools with which to ascertain how librarians in Agricultural Research Institute render service quality to their users.

Research Questions

The study provided answers to the following research questions

1. What is the level of service quality of librarians in agricultural research institutes, Ibadan, Oyo State, Nigeria?

2. What is the level of information and communication technology skills of librarians in agricultural research institutes, Ibadan, Oyo State, Nigeria?

Hypothesis

H₀₁: There will be no significant relationship between information and communication technology skill and service quality of librarians in agricultural research institutes, Oyo State, Nigeria.

Literature Review

One of the most commonly used tool as regards service quality in library is Libqual model, which measures service quality by comparing the library user's expectations with their perceptions of the service. The model involves collecting data from library user's using a questionnaire that measures the three dimension of service quality. The data collected is then used to calculate the gap between customer expectations and perceptions of the service. Strategies for Improving Service Quality Improving service quality is essential for businesses that want to remain competitive and retain their customers (Borishade, Ogunnaike, Salau, Motilewa, & Dirisu, 2021).

It was asserted that it is important to view quality assessment of library services as a management tool, used to learn whether or not the library is meeting the requirements and expectations of its patrons. Clearly, the quality and value of library services is a modern instrument used by librarians and library administration to learn about and improve the services they offer. These resources are extremely useful for modern libraries as they allow them to provide 21st-Century patrons with higher-quality services (Kiriri, 2018).

ICT skills is demonstrated by the ability of research libraries librarians to use general ICT-based devices, applications, software and services as required; use basic productivity software,

spreadsheets, and writing/presentation software; use a web browser and web services, use digital capture devices such as a camera, audio recorder and associated editing software; use institutional systems such as catalogues, data records, and use communication tools such as email, messaging, video, chat, sharing services. It also includes ability to learn from mistakes in the use of ICT, fix problems; stay up to date with ICT as it evolves; adopt new systems, applications and approaches into practice (Amanullah, Hasan, & Hafez, 2021). The combination of skills that make up Information and Communication Technology ICT skills set include, Digital literacy skills, information literacy skill, and media literacy skills. There have been little or no attempt by scholars to evaluate the level of these skills with respect to how it affects service quality of librarians in research libraries.

Digital literacy refers to an individual's ability to find, evaluate, and communicate information through typing and other media on various digital platforms. It is evaluated by an individual's grammar, composition, typing skills and ability to produce text, images, audio, video and designs using ICT innovations. Otherwise known as digital content creation is the ability to create, edit and improve digital content and abide by licensing and copyright, or to revise and integrate information and provide instructions to a computer system or device (Bajpai, & Madhusudhan, 2019).

Information literacy skill include the ability to find, evaluate, manage, create, organise and share digital information. It also involves the ability to map and evaluate the information landscape, select and use a wide range of resource discovery tools and approaches; identify and use specialist sources of information such as portals, catalogues, gateways, archives, datasets (Lua, 2017). Media literacy is more specific. It encompasses the ability to critically read, interpret and respond to messages in a range of digital media – text, graphical, video, animation and simulation, audio, data visualisation, presentations, wiki/blog articles. A media literate individual is also expected to be able to choose and use media resources to express ideas with

an awareness of design, audience, and impact. Media literacy also include being aware of and acknowledging the source of digital information retrieved from the internet in whatever medium it is communicated (Kluzer, & Priego, 2018). The combination of these three skills are a compression of the European Initiatives Digital Competence Framework which makes up Information and Communication Technology skills (ICT) as far as this study is concerned and they are all necessary in this information driven society for effective Professional practices as far as librarianship is concern(Kluzer, & Priego, 2018). Any shortcoming in these skills will result in a deficient librarian thus drastically and negatively influence the quality of services rendered to the digitally inclined library users.

For instance a study examined the ICT Skills and Competencies of 60 Library and Information Science Professionals working in College Libraries, University of Delhi. All the 60 filled in questionnaires (20 Librarians, 20 Professional Assistants, and 20 Semi-Professional Assistants) the study found that that only 13 per cent LIS respondents have added an academic degree in their profession, whereas, 88 per cent did not acquire any academic qualification in their career after joining the library (Vyas Kumar & Madhusudhan, 2019)

Looking at the influence of ICT skills on service quality, a study found that employees' ICT skills had a significant positive effect on service quality (Al-Fawaz, Al-Salti, & Eldabi, 2010). This means that the quality of services they rendered is a off-shoot of the various ICT skills acquired over time. More so, a study that investigated the relationship between ICT skills and service quality in the Iranian banking sector. The results showed that there was a positive and significant relationship between ICT skills and service quality (Khajeheian, & Karami, 2014). Another recent study that explored the impact of ICT skills on service quality in the hospitality industry in South Korea, found that ICT skills had a significant positive effect on service quality (Yoo, Lee, & Park, 2018). A study investigated the relationship between ICT skills and service quality in the Indian healthcare sector. The study found that there was a positive and

significant relationship between ICT skills and service quality. Overall, these studies suggest that ICT skills are an important factor in determining service quality in various industries. Having employees with strong ICT skills can lead to better customer service experiences and higher levels of satisfaction (Sahu, Sahoo, & Kumar, 2020). ICT skills is a survival skill of the 21st century, like every other professions, librarians cannot afford to lag behind, else they would look relevance and become obsolete.

Methodology

The study adopted a descriptive survey research design. Mixed method which is a combination of quantitative and qualitative was be adopted for this study. The population for the study consists of all the 101 librarians and 24 conveniently sampled researchers from all the (8) eight agricultural research institutes in Ibadan, Oyo State. A standard scale questionnaire was adapted for question of perceived service quality of librarians while a focus group was used to gather data from 24four researchers. Quantitative data collected was analysed via descriptive statistics while the qualitative data was analysed thematically. The hypothesis was tested using simple linear regression at 0.05 level of significance

Analysis

The demographic findings revealed that 23 respondents (28.4%) are male, while 58 respondents (71.6%) are female. The majority of the respondents are female, the largest age group is "40-44" years, with 23 respondents (28.4%) falling in this category. The predominant staff cadre is "Library Officer," with 21 respondents (25.9% of the total). For the researchers, majority of the respondents are male 16 and female 8.

Research Question One: What is the level of service quality of librarians in agriculture research institutes, Ibadan, Oyo State, Nigeria?

Table1. Level of service quality of librarians in agriculture research institutes, Ibadan, Oyo State, Nigeria

Options Information Control	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
Researchers can access the Library Portal from anywhere	42 (51.9%)	23 (28.4%)	8 (9.9%)	8 (9.9%)	3.22
Researchers can access Library Portal 24/7.	41 (50.6%)	26 (32.1%)	10 (12.3%)	4 (4.9%)	3.28
Library provide up to date information.	36 (44.4%)	33 (40.7%)	4 (4.9%)	8 (9.9%)	3.20
Library Portal is user friendly	33 (40.7%)	38 (46.9%)	8 (9.9%)	2 (2.5%)	3.26
Weighted Mean					3.2
Affect of Service					
Librarians provide an accurate answer to enquiry	38 (46.9%)	40 (49.4%)	3 (3.7%)		3.43
Librarians are proficient in information searching	41 (50.6%)	36 (44.4%)	4 (4.9%)		3.46
Librarians are user friendly	44 (54.3%)	37 (45.7%)			3.54
Librarians always Assists in finding the needed information	44 (54.3%)	37 (45.7%)			3.54
Weighted Mean					3.5
Library as a Place					
Books are arranged accordingly on the right shelf	64 (79.0%)	14 (17.3%)	3 (3.7%)		3.75
Materials are easy to retrieve	59 (72.8%)	20 (24.7%)		2 (2.5%)	3.68
Library collection is up to date	35 (43.2%)	29 (35.8%)	11 (13.6%)	6 (7.4%)	3.15
Library collection is adequate	31 (38.3%)	24 (29.6%)	20 (24.7%)	6 (7.4%)	2.99
Weighted Mean					3.4
Grand Mean					3.4

Decision rule 1.00 - 1.99 = very low, 2.00 - 2.50 = low, 2.51 – 2.99 = Moderate, 3.00 – 3.49 = high, 3.50-4.00= very high.

From table one above, the descriptive statistic showed an average (Weighted mean score) for statements on information control to be 3.26, indicating a generally positive perception of

librarians about their level of control that the library exercises. However, the discussion group responses as regards information control shows that many (18) of the respondents accepted that library in research institute provides up to date information resources and that the resources are adequate. They meant that the resources in the library are recent and that the library is easily accessible to them (6) of the respondents have reservations concerning the adequacy of the resources. The qualitative data collected however revealed some sort of disparity as regards the adequacy of the resource as the librarians believed that the resources provided are not adequate. The reason for this disparity could be attributed to several factors like librarian's believe that library supposed to be a growing organism and the fact that as professionals they understand what should be than the users.

For effect of service, the descriptive statistics showed a mean score of 3.54, indicated that there is a strong positive perception of librarians regarding their affective attitude towards users. This is supported by the qualitative responses where to a high degree, most of the respondents agreed that librarians always put a friendly countenance anytime they are approached for query and thus they always assists in finding the needed information physically and online. This therefore showed that librarians being the human face of the library can either make or mar library patronage with attitude but in this case they have been able to portray the library well.

For the third dimension, the descriptive statistics showed a mean score of 3.15, suggesting a moderate level of agreement with the recency of the library's collection. All the respondents agreed that the information resources in the library to their best of knowledge are arranged accordingly and this is because of the ease with which they get what they are looking for although mostly with the aid of a librarian. Many (16) of the respondents also have reservation with the library building and organization of the library resources as well as the sitting arrangement of the library. Three of the respondents clearly say they are not satisfied with the physical arrangement and settings of the library

Overall, the grand mean, calculated across all the three dimension is 3.4. This suggests that, on average, respondents (Librarians) have a positive perception of the library services and holdings. However, in a question that gives room for suggestion on the betterment of the library. All the respondents suggested that the library should get new information resources and go sophisticated with the integration of 21st century technological innovation that can foster

quality and viable research looking at the inevitable place research in agriculture plays in the national economy.

What is the information and communication technology skill of librarians in agriculture research institutes, Ibadan, Oyo State, Nigeria?

Table 2. Information and communication technology skill of librarians in agriculture research institutes, Ibadan, Oyo State, Nigeria

Options	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean
Digital Literacy					
I have the ability to create and edit digital content in different formats.	29 (35.8%)	44 (54.3%)	8 (9.9%)		3.26
I can express myself through digital means.	32 (39.5%)	45 (55.6%)	4 (4.9%)		3.35
I can modify, refine, improve and integrate information and content into an existing body of knowledge to create new, original and relevant content and knowledge.	33 (40.7%)	38 (46.9%)	10 (12.3%)		3.28
I understand how copyright and licenses apply to data, information and digital content.	30 (37.0%)	44 (54.3%)	7 (8.6%)		3.28
Weighted Mean					3.3
Media Literacy					
I can interact through a variety of digital technologies and to understand appropriate digital communication means for a given context.	33 (40.7%)	42 (51.9%)	6 (7.4%)		3.33
I can share data, information and digital content with others through appropriate digital technologies.	34 (42.0%)	41 (50.6%)	4 (4.9%)	2 (2.5%)	3.32
I can create and manage one or multiple digital identities, to be able to protect one's own reputation.	32 (39.5%)	41 (50.6%)	6 (7.4%)	2 (2.5%)	3.27
I understand the behavioural norms and know-how while using digital technologies and interacting in digital environments.	36 (44.4%)	34 (42.0%)	7 (8.6%)	4 (4.9%)	3.26
Weighted Mean					3.3
Information Literacy					

I can articulate information needs, search for data, information and content in digital environments.	40 (49.4%)	33 (40.7%)	6 (7.4%)	2 (2.5%)	3.37
I can create and update personal search strategies.	33 (40.7%)	36 (44.4%)	6 (7.4%)	6 (7.4%)	3.19
I can analyse, compare and critically evaluate the credibility and reliability of sources of data, information and digital content	35 (43.2%)	33 (40.7%)	9 (11.1%)	4 (4.9%)	3.22
I can organise, store and retrieve data, information and content in digital environments.	40 (49.4%)	37 (45.7%)	4 (4.9%)		3.44
Weighted Mean					3.3
Grand Mean					3.3

Decision rule 1.00 - 1.99 = very low, 2.00 - 2.50 = low, 2.51 – 2.99= Moderate, 3.00 – 3.49 = high, 3.50-4.00= very high.

The table 2 above provided an assessment of digital literacy, media literacy, and information literacy skills among respondents. The weighted means score of 3.3 indicated a high level digital literacy skill possessed by respondents.

For media literacy, the weighted means score of 3.3 showed a high level media literacy skill possessed by respondents

For Information Literacy, the mean score of 3.3 revealed that to a high extent information literacy skill is possessed by respondents. The grand mean, calculated across all the three measures is 3.3. This suggests an overall positive perception among respondents regarding their digital literacy, media literacy, and information literacy skills.

Hypothesis: There will be no significant influence of information and communication technology skill on service quality of librarians in agriculture research institutes, Oyo State, Nigeria.

Table 3. Significant influence of information and communication technology skills on service quality of librarians in agriculture research institutes.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.452 ^a	.205	.195	.47889

a. Predictors: (Constant), ICT skills

Table 3 above presents the results of the simple linear regression analysis for the influence of ICT skills on service quality of Librarians in Agriculture Research Institutes, Ibadan, Oyo State, Nigeria. From the results in Table 4.6a, ICT skills has a significant relationship on the service quality of Librarians in Agriculture Research Institutes, Ibadan, Oyo State, Nigeria ($R = 0.452^a$, $p < 0.05$). The coefficient of determination (Adj. R^2) of 0.195 also shows that ICT skills explains 19.5% of the service quality of Librarians in Agriculture Research Institutes, Ibadan, Oyo State, Nigeria while the remaining 79.5% discrepancy in the service quality of Librarians in Agriculture Research Institutes, Ibadan, Oyo State, Nigeria is explained by other variables which are not considered in this study.

Discussion of Findings

The research question which is based on the ICT literacy skills of librarians, the grand mean, calculated across all measures is 3.3. which suggests an overall positive perception among respondents regarding their digital literacy, media literacy, and information literacy skills. Negating this study, a survey revealed gaps in computer literacy among library staff and inadequacies in training programs. To sum it up, the study collectively emphasize the diverse and comprehensive training needs of librarians beyond ICT skills, encompassing management, communication, teaching, attitude development, and subject knowledge. They also underscore the importance of continuing education and training programs to enhance the professionalism of LIS practitioners (Akers, 2019). To support further, a scholar asserted that the incorporation of Information and Communication Technology (ICT) into library services has provided libraries with a great opportunity to satisfy their users' needs and wants. The study affirmed that the level of ICT use in library operations significantly influenced the level of library services delivered by both Jiangsu University (JU) library and University of Ghana (UG) library (Essien, Lu, Abredu, & Izotoo, 2022). This mean that ICT skill is a survival skill of the 21st century that every librarian must equip himself with for effectiveness and efficient library services.

To support further, a study that found that librarians had ICT skills like web applications skills, library networking skills, cloud technology skills, and that there is a significant relationship between web application skills, library networking skills and cloud technology skill, and effective library services delivery (Daniels, Wiche, & Nsirim, 2023). This means that librarians who has ICT skills will be effective in rendering services to users. Furthermore, negating this study, it was found in a study on the Influence of ICT skills on job performance of librarians in university libraries of South-South, Nigeria found that that the majority of the respondents were not skillful in system management, web application and tools such as system troubleshooting, webinar/digital conferencing tools, Web 2.0, website designing and digital communication (Oyovwe-Tinuoye, Omeluzor, & Patrick, 2021). All though the study recorded a high level ICT literacy skills among librarians, it must be noted that technology is evolving and further training and retraining is inevitable for continuous relevance.

Similarly, the test of hypothesis found that ICT skills is significantly associated with service quality. Therefore, on the strength of the result of the regression analysis ($\text{Adj.}R^2=0.205, F(1,79)=20.328, p=000$), the null hypothesis which states that there will be no significant influence of ICT skills on service quality of library in agricultural research institutes, Ibadan, Oyo State is hereby rejected. The regression model indicates that "ICT skills" is a significant predictor of "service quality," and the relationship is positive. In other words, an increase in ICT skills is associated with an increase in service quality. This finding is statistically significant and suggests that possessing ICT skills can lead to improved service quality.

In support of the findings of this study, a study examined the impact of ICT skills on service quality in the banking industry in Kuwait showed that there are significant differences between the perceptions of the customers of the three Islamic banks in relation to the technology

dimension. The statistical significance of the alternative hypothesis was seen in the P-value (P-value= .000). The alternative hypothesis is, therefore accepted, which implies that there are differences between the customers of KFH, KIB, and Boubyan Bank in regarding technology dimensions as indicators of service quality. The study found that employees' ICT skills had a significant positive effect on service quality. This means that the quality of services they rendered is an off-shoot of the various ICT skills acquired over time (Al-Fawaz, Al-Salti, & Eldabi, 2010).

Summary

The study found a high level perception of service quality. However, a somewhat lower level of agreement regarding the adequacy of the collection in agriculture research institute library, Ibadan, Oyo State was also found. The study found an overall positive perception among librarians in agricultural research institute in Ibadan, Oyo State regarding their digital literacy, media literacy, and information literacy skills.

Conclusion

The findings revealed a commendable high level of service quality, with an overall grand mean score of 3.4, reflecting the dedication and commitment of librarians in delivering quality services. However, the slightly lower mean score of 2.99 regarding the adequacy of the collection indicates a need for attention and improvement in this specific area.

Recommendations

1. A quality service can only be rendered using quality library resources, the library need to be well equipped with relevant and adequate information resources that best meet the need of researchers.

2. Information and Communication Skills is a necessary and survival skill of the 21st century that librarians must be equipped with to stay relevant.
3. ICT skills training should be prioritized while internally organized training programs should be highly encouraged in the research libraries. The management should make some financial commitment in support of research librarians for training and retraining on ICT skills for improved job

References

- Akers K.G., (2019). Report from the medical library association's insight initiative summit 2: meeting the evolving information needs of library stakeholders. *Journal of the Medical Library Association: JMLA*, 107(2), p.137.
- Al-Fawaz K., Al-Salti Z., & Eldabi T. (2010) The impact of ICT skills on service quality in the banking industry in Kuwait. *Journal of Enterprise Information Management*, 23(1), 52-69.
- Amanullah M., Hasan M., & Hafez M., (2021) The impact of service quality on user satisfaction: A case study of selected public libraries in Bangladesh. *EPRA International Journal of Multidisciplinary Research*, 7(1), pp.309-316.
- Arshad A., & Ameen K., (2010) Service quality of the university of the punjab's libraries: An exploration of users' perceptions." *Performance Measurement and Metrics* 11 (3):313-325.
- Bajpai V. K., & Madhusudhan M., (2019) ICT Skills and Competencies of Library and Information Science Professionals working in College Libraries, University of Delhi: A study, *Library Philosophy and Practice (e-journal)*. 2275.
- Borishade T.T., Ogunnaike O.O., Salau O., Motilewa B.D., & Dirisu J.I., (2021) Assessing the relationship among service quality, student satisfaction and loyalty: the Nigerian higher education experience. *Heliyon*, 7(7), p.e07590.
- Daniels G. N., Wiche H. I., & Nsirim O., (2023). Librarians 'ICT skills and effective library service delivery in university libraries in rivers state. *Library Philosophy and Practice*, 1-22.
- Essien F. K., Lu Z., Abredu P., & Zotoo I. K., (2022). Effect of ICT use on library service delivery: A comparative approach from two universities. *Open Access Library Journal*, 9(5), 1-22.
- Khajeheian D., & Karami A. (2014). The relationship between ICT skills and service quality in the Iranian banking sector. *Journal of Internet Banking and Commerce*, 19(1), p1-14.
- Kiriri P.N., (2018) Service delivery: the perceptions of users' of library services in a private university in Africa", *European Journal of Multidisciplinary Studies*, Vol. 3, No. 4, available at: <https://www.ejmds.kiriri.pdf>.
- Kluzer, S. & Priego, L.P., (2018) Digcomp into action: Get inspired, make it happen. a user guide to the european digital competence framework (No. JRC110624). Joint Research Centre (Seville site).

- Lua G., (2017) Critical Information Literacy in Practice: A Bibliographic Review Essay of Critical Information Literacy, Critical Library Pedagogy Handbook, and Critical Literacy for Information Professionals". *Communications in Information Literacy*. 11 (2), 390–403.
- Malik A., & Ameen K., (2021) Needed competencies for library and information faculty members in Pakistan. *Library Philosophy and Practice (e-Journal)*.
- Oyovwe-Tinuoye G. O., Omeluzor S. U., & Patrick I. O. (2021) Influence of ICT skills on job performance of librarians in university libraries of South-South, Nigeria. *Information Development*, 37(3), 345-358.
- Parasuraman A., Zeithaml V. A., & Berry L. L., (1988) Servqual: A multiple-item scale for measuring consumer perc. *Journal of retailing*, 64(1), 12.
- Sahu S. K., Sahoo C. K., & Kumar S. (2020). Impact of ICT skills on service quality in healthcare: A study of India. *Health Informatics Journal*, 26(2), p1277-1292.
- Spencer A.J., & Eldredge J.D., (2018) Roles for librarians in systematic reviews: a scoping review. *Journal of the Medical Library Association: JMLA*, 106(1), p.46.
- Twum F.O., & Peprah W.K., (2020) The impact of service quality on students' satisfaction. *International Journal of Academic Research in Business and Social Sciences*, 10(10), pp.169-181.
- Vyas Kumar B. & Madhusudhan M., (2019) ICT Skills and Competencies of Library and Information Science Professionals working in College Libraries, University of Delhi: A study *Library Philosophy and Practice (e-journal)*. 2275. <https://digitalcommons.unl.edu/libphilprac/2275>.
- Yoo J., Lee H., & Park J. (2018). The impact of ICT skills on service quality in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 30(2), p1097-1115.

The Effect of Social Media on Reading and Listening Habits of Polytechnic Students: A Case Study of The Polytechnic, Ibadan

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Abstract

Nowadays due to the advancement of technology students waste much of their study time in using social media rather than dealing with academic issues. As a result of this, the main objective of this study was to examine the effect of social media on reading and listening habits of polytechnic students, a case study of The Polytechnic, Ibadan. The descriptive research method was adopted for this study and five departments were sampled with the use of simple random sampling technique. A total number of 150 pupils were drawn from the total population of the sampled department. A total number of 150 copies of questionnaire were duly filled, retrieved and used for the study analysis. Descriptive statistics of simple percentage was adopted in the analysis of data of the study. Furthermore, the data output revealed that students spent an average of 6.10 hours and 7.24 hours per day in using different social media accounts than dealing with studying their academic subject matters.

Keywords: Polytechnic, Effects, Social Media, Reading, Listening, Habit, Students.

Introduction

Reading is considered the cornerstone of learning. It is an activity that is required by learners at all levels of education. It is a strategic activity meant to improve the knowledge of students. Reading is an essential tool for knowledge transfer. According to Olaofe (2013), reading is central to academic and intellectual development of learners at all levels. Sekara (1988) as cited in Rahman (2004) also asserts that one of the most important activities in tertiary education is reading, which is not for pleasure but for information that has been researched, organized and documented in accordance with the rules of academic discourse. It is therefore necessary for students at the college level to develop the habit of reading for their academic achievement. The ability to read is a critical factor in improving students' ability to learn at all stages of schooling and is an essential skill for accessing opportunities beyond school Igwe (2011).

In Nigeria where English Language is an official language, the ability to read equips learners at any level of education to read and understand other subjects in the school curriculum. Therefore, the habit of reading is an academic activity that increases the skills in reading for academic progress. Onwusu-Acheaw (2014) emphasizes that reading habits determine the academic achievements of students to a great extent. Achievement in the colleges requires awareness of facts and acquisition of skills in learner's field of study which is achieved through effective reading habit. Reading habits depicts the behavior which expresses the likeness of reading and tastes of reading, Chettri and Rout (2013). Reading habit is the use of reading as a regular activity. However, student ability to form the habit of reading can widen their academic horizon, and equally improve access to relevant information for their academic achievement. Nssien (2008) opines that reading habit is identified as the single most important determinant of a student's success in education and in our complex society.

While "to listen" is rooted in terms that connote attention and silent obedience, "to hear" has more to do with the perception of sound and the faculties of the ear, Lipari, 2010; and the response by Bodie & Crick, (2014). This distinction often helps separate the focus of work by audiologists who study the physiological components of hearing from those, like communication scholars, who study the individual and relational components of listening. Listening is an analysis of the impressions resulting from concentration where an effort of will is required, Jame (2002), it is the ability to understand a spoken language (Rankin 2013). Amad (2010) emphasize listening as the comprehension of expository materials presented orally in a classroom situation.

In this era of networking, the Internet has a tremendous influence on the social life of student. The need for and role of social media in the life of adolescent students cannot be overemphasized. As much as they enhance good relationships and communication among users, research has shown that there are high risk factors in the usage among various categories of students. The Internet offers a wide variety of communication tools. Billions of people use facilities like search engines, webpages, e-mails, Really Simple Syndication (RSS), e-journals, e-newspapers, Internet banking, Internet telephony, conferencing, multimedia sharing, online newsroom, social networking, etc. According to Syed (2011) Social media can be defined and refer to all inexpensive and widely accessible electronic tools that enable anyone to/publish and access information, collaborate on a common effort, or build relationships. Challenges tend to arise when social media are incorporated into an academic course despite the increase in learning that occurs through student interactions.

Statement of the Problem

The declining habit and interest in reading among students in Polytechnic is a challenge to education stakeholders, especially in Polytechnics that train teachers in different fields of education. Experience has shown that most students in Colleges of Education lack interest in reading which has contributed to their poor academic performance. Onwusu-Acheaw (2014) observes that the problem most students have that contributes to their poor performance in tests and examinations is lack of proper reading habit. Similarly, Paul, Baker and Cochran (2012) as cited in Kojo, Agyekun and Arthur (2018) discover that in most tertiary institutions, learners do not read, even the few that read only do so as a means of passing their examinations. Fatiloro, Oyekola, Hamid and Adewumi (2017) note that teaching and learning in tertiary polytechnic is faced with endless problems on the part of the learner due to their non-mastery of the skills implicit in reading. In relation to that, investigations reveal that most students who graduated from such institutions have inadequate reading ability which is attributed to poor habit of reading and listening during their school days. The situation has been made worse with the advent of social media as a means of communication among students. They spend more hours on electronic media where they browse, send text messages and chat via instant messaging applications with their friends using their handsets instead of reading their books on any other piece of written materials. Loving and Ochoa (2010) observe that social networking sites have proven to be universally addictive for tertiary institutions students who tend to spend

considerable amount of time maintaining social communications, making new acquaintances and a broad based of friends during their years of study. It is against this background that the present study investigates the effects of social media on the reading and listening habit of students in the Polytechnic with case study of the Polytechnic, Ibadan.

Objective of the study

The main objective of the study is to study the effect of social media on the reading and listening habit of polytechnic student. A case study of The Polytechnic, Ibadan. The specific objectives are to:

- i. Examine the effect of social media on reading and listening and reading habit of students at The Polytechnic, Ibadan.
- ii. Examine the types of social media frequently used by the students at The Polytechnic, Ibadan
- iii. Examine the benefit of social media usage in reading and listening habit of students at The Polytechnic, Ibadan.
- iv. Examine the time wasted and cost incurred by students in using social media at The Polytechnic, Ibadan.
- v. Examine the number of times students visit library to read books.

Research Questions

The following research questions were formulated to guide the study:

- i. What are the effects of social media on reading and listening habit of students at The Polytechnic, Ibadan?
- ii. What are the types of social media frequently used by students at The Polytechnic, Ibadan?
- iii. What are the benefits of social media usage in reading and listening habit of students at The Polytechnic, Ibadan?
- iv. How many hours do students waste in the using social media at The Polytechnic, Ibadan?
- v. How many times do students visit library to read books?

Literature Review

Reading is the ability to understand words contained in a document and make use of the knowledge for personal growth and development, Dadzie (2008). This implies making meaning out of recorded information either printed or non-printed in the life of an individual. People read for different reasons and purposes, some of which include for pleasure, leisure, relaxation, and information and for knowledge. Reading is the identification of the symbols and the association of appropriate meaning with them. It requires identification and comprehension. Comprehension skills help the learner to understand the meaning of words in isolation and in context Palani (2012). He believes reading is a process of thinking, evaluating, judging, imagining, reasoning and problem solving. Reading is an essential tool for knowledge transfer and the habit of reading is an academic activity that increases skills in reading strategies. To know about the world and its environment, a child helps himself through reading books, newspapers and other magazines. Once the child has been taught to read and has developed the love for books, he can explore for himself the wealth of human experiences and knowledge through reading. Children, who miss the opportunity of getting in touch with books in their early stages of life, find it hard to acquire good reading habits in their later years, Deavers (2000). Reading is an intellectual action which is possible only if a man forms a habit of reading and practices these from childhood. Reading habits, therefore, play a very crucial role in enabling a person to achieve practical efficiency. "Laws die but books never." Indeed, books are the most suitable medium through which knowledge is transmitted from generation to generation, Issa et al (2012).

Singh (2011) examined academic achievement and study habits of higher secondary students. The study was conducted on hundred (100) higher secondary students randomly from two higher secondary schools. The result indicates that girls and boys differ significantly in their study habits and academic achievement. The process of listening is often contrasted with hearing. Lundsteen considered hearing a physical act and listening a mental act. Hearing she said had to do with our physiological capacity to receive and process sounds Lunin (2005). Problems with our ability to hear could hinder our listening. Hence, it behoves each of us to have our hearing checked if we think it could be affecting our ability to listen. In contrast to hearing, listening has to do with assigning meaning to the stimuli received by our brain. To listen, according to Nichols and Lewis, is to attach "meaning to the aural symbols perceived" Amiri (2006).

We will maintain this defined distinction between hearing and listening, here, even though in our day-to-day usage the words may be used interchangeably. We may say “I did not hear you.” But we did hear, we just were not fully attending and hence were not listening. (Sometimes, if we quickly focus our mind on what was said we can still remember what was said? The words remain in short term memory for a brief period of time and can be recalled.) There is also confusion in our everyday usage because parents tell their children “you’re not listening.” What the parent often means is “you are not obeying.” In the Germanic roots of the Anglo-Saxon language there is a sense in which “to listen” means “to obey”. Hearing and listening will have precise meanings in this text.

Social media technology is now an essential requirement in people’s daily lives contributed by a combination of factors that include growth of affordability of mobile computing devices, improved internet wireless bandwidth, social media technologies and several other web 2.0 technologies, Lenhart, Purcell, Smith, & Zickuhr, (2010). The present day college students are exposed to existing, new and emerging technologies in many aspects of their lives, Browning, Gerlich, & Westermann, (2011). They use the following devices on daily basis: e-readers, tablets, desktop computers, laptops, and cell phones / mobile devices to actively engage in social networking, text messaging, blogging, content sharing, online learning, and much more, Cassidy, Griffin, Manolovitz, Shen, & Turney, (2011). Paliktzoglou and Suhonen (2014) argued that concept behind social media tools were not a new phenomenon as interfaces such as chat rooms, internet forums, message boards, web communities and blogs were being used since the revolution of internet.

In social media, people use the web based and mobile applications for social interaction. In addition, individuals and organizations can generate new content, share existing content in the cyberspace. A number of interfaces used for social media have increased with Twitter, Facebook, WhatsApp, MySpace, and Flickr being among the top. Davis, Deil-Amen, Rios-Aguilar & Gonzalez-Canchem, (2012); Junco, Heiberger, & Loken, (2010). The social media tools and networking sites enables students to engage with one another, express and share their creativity. There are drawbacks associated with social media technology especially when students develop a continuous usage of internet which encompasses reduction in higher-order reasoning processes. In addition, continuous internet use is likely to exposes students to

interactive, repetitive, and addictive stimuli that produce permanent changes in brain structure, WCER (2011). Polytechnic students are expected to read and keep abreast of what is happening around them. However, that apparently does not happen anymore, thanks to the advent of the social media. Many polytechnic students now spend quality time surfing the internet on gossips and other immaterial issues. Different studies have revealed that most individuals never finish reading a fiction book from cover to cover after leaving school, Brydolf (2007).

Also, there are distinct investigations which reveal that many students have graduated from polytechnic with inadequate reading abilities, attributing it to the weak culture developed during their university days (see Singh 2011). In most tertiary institutions, learners do not read, even the few who read, only do so as a means of passing their examinations (Paul et al. 2012). The libraries that are intended for reading have now been turned into browsing centres, points of reference and copying of lecture notes as only a few students are seen reading in the libraries most times. As Shabo and Usofia (2009) pointed out, the reading culture of learners has been washed down the drain as a consequence of the evolution of technology and advent of social media. Reading is the fundamental factor that determines the foundation of prominence in people's lives irrespective of status, gender, and age. It improves and develops an individual and is also essential when writing an examination. One of the principal causes for the dwindling speed at which students read is as a result of the invasion of social media as mentioned earlier.

Methodology

According to Saunders and Thorn Hill (2015) cited in Adefolarin (2017), research design means the plan and structure of investigation so conceived as to seek answers to questions for a research study. Moises and Heaton (2017) explained that survey research method is the collection of information from a sample of individuals through their response to questions. It is widely used method by scholars and researchers all over the world. Due to the fact that this study is based on educational research, the descriptive method of survey research was used because it is suitable and efficient for studying large population. The research work can best be described as a survey research. A survey research is one in which a group of people or items is studied by collecting and analyzing data from only a few people or the entire group. Indeed, in a more specific objective this research work is a comparative stand point of research study where it deals in survey research as only a sample of the population is studied.

The simple random sampling method was used in this research. Saul McLeod (2013) explained that Sample random sampling method is an unbiased surveying technique. It is also called probability sampling method such that each student of the faculty of science The Polytechnic, Ibadan has the same probability of being chosen at any stage during the sampling. The sampling fraction was 100% from the total population of the school. A total of 150 students.

The research instrument is divided into sections: Section A, B, C, D, E, and F. Section A consist of demographic information of respondents, Section B contains, the effect of social media on the reading and listening habit of polytechnic students, Section C contain details on the types of social media used by polytechnic students, Section D contains the benefit of social media to the polytechnic students, Section E contains details on the time wasted and cost incurred by polytechnic students in the usage of social media while Section F contains detail of how many number of time do students visit library to read books. The questionnaires were administered to the ND 1 and ND 2 students in faculty of science in The Polytechnic, Ibadan. In the course of data collection, the researcher went to the faculty environment to administer the questionnaire to the students. The researcher shared the questionnaire were collected from the respondents after it must have been filled.

Results, Findings and Conclusions

Results:

The result of the study that was conducted on the effect of social media on reading and listening habit of polytechnic students are presented in Table 1- 5. The analysis is presented after each table.

Table 1:

Effects of social media on reading and listening habit of students at The Polytechnic, Ibadan.

SN	ITEMS	Strongly Agree	Agree	Strongly Disagree	Disagree
1.	It causes distraction while listening during Lectures.	47 (35.6%)	35 (26.5%)	22 (16.7%)	28 (21.2%)
2.	It makes me become addictive	60 (45.5%)	42 (31.8%)	17 (12.8%)	13 (9.8%)
3.	It affects my communication skills	42 (31.8%)	56 (42.4%)	20 (15.1%)	14 (10.6%)

4.	It creates stress for me in time management	34 (25.8%)	43 (32.6%)	35 (26.5%)	20 (15.1%)
5.	It affects my daily reading routine activities	72 (54.5%)	33 (25%)	10 (7.6%)	17 (12.9%)

Table 4.6 shows the effect of social media on reading and listening habit of students at The Polytechnic, Ibadan. For the purpose of interpretation, the measurement scale which was Strongly agree, Agree, strongly disagree and disagree was combined into two parts with strongly agree and agree representing “Agreed”, strongly disagree and disagree representing “Disagreed”. 82 (62%) of the respondents agreed that social media causes distraction while listening during lectures while 50 (38%) disagreed. 102 (77.3%) of the respondents agreed that social media makes them become addictive while 30 (22.6%) disagreed. 98 (74.2%) of the respondents agreed that it affects their communication skills while 34 (25.7%) disagreed. 77 (58.4%) of the respondents agreed that it creates stress for them in time management while 55(41.6%) disagreed. 105 (79.5%) of the respondents agreed that it affects their daily reading routine activities while 27 (20.5%) disagreed.

Table 2:

Types of social media used by students at The Polytechnic, Ibadan.

SN	ITEMS	YES	NO
1.	Facebook	110 (83.3%)	22 (16.7%)
2.	Whatsapp	101 (76.5%)	31 (23.5%)
3.	Telegram	86 (65.2%)	46 (34.8%)
4.	Instagram	77 (58.3%)	55 (41.7%)
5.	TikTok	120 (90.9%)	12 (9.1%)

This table shows the types of social media used by students at The Polytechnic, Ibadan. 110 (83.3%) of the respondents said that Facebook is among the type of social media used by students while 22 of the respondents representing 16.7% disagree that Facebook is not used, 101 (76.5%) agreed that Whatsapp is used while 31 (23.5%) said Whatsapp is not used, 86 (65.2%) of the respondents agreed that Telegram is used, while 46 (34.8%) Telegram is not used, 77 (58.3%) of the respondents agree that Instagram is used, while 55 (41.7%) disagree that Instagram is not available, 120 (90.9%) of the respondents agree that TikTok is used while 12 (9.1%) disagree that TikTok is not used.

Table 5:

Benefits of social media usage in reading and listening habits of students at The Polytechnic, Ibadan.

S/N	ITEMS	Strongly Agree	Agree	Strongly Disagree	Disagree
1.	It helps me collaborate with course mates on assignments	65 (49.2%)	37 (28%)	12 (9%)	18 (13.6%)
2.	It helps me access literature	41 (31%)	60 (45.5%)	19 (14.4%)	12 (9%)
3.	To be up to date with news and events	80 (60.6%)	40 (30.3%)	2 (1.5%)	10 (7.6%)
4.	To download and read educational materials	74 (56%)	51 (38.6%)	7 (5.3%)	0 (0%)
5.	It enhances my studies	82 (62.1%)	36 (27.3%)	8 (6.1%)	6 (4.5%)

This table above shows the benefits of social media usage in reading and listening habits of students at The Polytechnic, Ibadan. 102 (77.3%) of the respondents agreed that social media helps them collaborate with course mates on assignment while 30 (22.7%) disagreed. 101 (76.5%) of the respondents agreed that it helps them access literature while 31 (23.5%) disagreed. 120 (90.9%) of the respondents agreed that it helps them to be up to date with news and events while 12 (9.1%) disagreed. 125 (94.7%) of the respondents agreed that social media is used to download and read educational materials while 7 (5.3%) disagreed. 118 (89.4%) of the respondents agreed that social media has significantly enhances their studies while 14 (10.6%) disagreed.

Table 4:

Hours students waste in using social media at The Polytechnic, Ibadan.

S/N	ITEMS	<30 minutes	One Hour	Two Hours	Three Hours	Above Four Hours
1.	Facebook	40 (30.3%)	37 (28%)	23 (17.4%)	26 (19.7%)	6 (4.5%)
2.	Whatsapp	36 (27.3%)	29 (22%)	35 (26.5%)	17 (12.9%)	15 (11.4%)
3.	Telegram	70 (53%)	33 (25%)	12 (9.1%)	13 (9.9%)	4 (3%)
4.	Instagram	85 (64.4%)	20 (15.2%)	11 (8.3%)	14 (10.6%)	2 (1.5%)

5.	TikTok	30 (22.7%)	56 (42.4%)	15 (11.4%)	21 (15.9%)	10 (7.6%)
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Table 4.9 shows the time students spend or waste while using social media in the faculty of science, The Polytechnic, Ibadan. 40 (30.3%) of the respondents use Facebook for less than thirty minutes, 37 (28%) of the respondents use it for one hour, 23 (17.4%) of the respondents use it for two hours, 26 (19.7%) of the respondents use it for three hour and 6 (4.5%) of the respondents use it for above four hours. The table also shows that 36 (27.3%) of the respondents use Whatsapp for less than thirty minutes, 29 (22%) of the respondents use it for one hour, 35 (26.5%) of the respondents use it for two hours, 17 (12.9%) of the respondents use it for three hour and 15 (11.4%) of the respondents use it for above four hours. The respondents that makes use of Telegram, 70 (53%) of them uses it for less than thirty minutes, 33 (25%) use it for one hour, 12 (9.1%) use it for two hours, 13 (9.9%) use it for three hours, and 4 (3%) use it for above four hours. The respondents that makes use of Instagram, 85 (64.4%) of them uses it for less than thirty minutes, 20 (15.2%) use it for one hour, 11 (8.3%) use it for two hours, 14 (10.6%) use it for three hours, and 2 (1.5%) use it for above four hours. The respondents that uses TikTok, 30 (22.7%) of them uses it for less than thirty minutes, 56 (42.4%) use it for one hour, 15 (11.4%) use it for two hours, 21 (15.9%) use it for three hours, and 10 (7.6%) use it for above four hours.

Table 5:

Number of times students visit library to read books.

S/N	ITEMS	YES	NO
1.	Once a week	105 (79.5%)	27 (20.5%)
2.	Twice a week	67 (50.8%)	65 (49.2%)
3.	Three times a week	41 (31%)	91 (69%)
4.	Four times and above	33 (25%)	99 (75%)
5.	Non	21 (16%)	111 (84%)

This above table shows the number of times that students visit library to read books at the faculty of science, The Polytechnic, Ibadan. 105 (79.5%) of the respondents said that they use the library once a week while 27 (20.5%) don't. 67 (50.8%) of the respondents said that they use the library twice a week while 65 (49.2%) don't. 41 (31%) of the respondents agree that they use the library three times a week while 91 (69%) disagreed. 33 (25%) of the respondents said that they use the library four times a week while 99 (75%) don't. 21 (16%) of the respondents said that they don't visit the library at all while others 111 (84%) said they can't do without visiting the library at all.

Findings:

This study was carried out to investigate the effects of social media on listening and reading habits of polytechnic students. Five research questions were posited and the major findings were stated as follows:

1. The findings show the effects of social media on reading and listening habits of polytechnic students. It was revealed that social media causes distraction while listening during lectures, it also affects their daily routine activities, it makes them become addictive and it affects their communication skills.
2. This study reveals that Facebook, Whatsapp, Telegram, Instagram and TikTok are the types of social media frequently used by polytechnic students.
3. This study shows that social media has benefited students at polytechnic in diverse ways in their academics positively.
4. This research reveals that students spend time on social media depending on what they need or what they want to use it for.
5. The findings also identified that students do not often visit the library since the advent of the use of social media for academic purposes.

Conclusion

The study was conducted to examine the impact of students use social on media sites on their academic performance. The study revealed that majority of the respondents had mobile phones with internet facilities and had knowledge of the existence of social media sites. As a result, they visit social media sites and spend between thirty minutes and three hours every day. In addition, the study revealed that use of social media had affected academic performance of the respondents negatively and further confirmed that there was a strong positive relationship between the use of social media and academic performance. The study further revealed that the most respondents use the social media sites to chat than for academic purpose.

Recommendation:

Based on the findings, the researchers made some recommendations as follows, students with phones having internet connectivity should be encouraged to either use it to supplement their research in the library rather the usual chatting with friends all the time. Students should be advised to limit the time the time they spend on social media sites per day and encourage them

to rather substitute those hours to read novels and relevant academic books to improve their knowledge. Since the study confirmed that the use of social media sites had affected the academic performance of students negatively, there is urgent need for the introduction of students to the availability of novels and other information materials in the library that can help them academically. It is further recommended that students be advised during orientation of the dangers of addition to social networking sites. They should be introduced to sites that can add values to their academic work and research.

Based on the findings of this research, the following possible recommendations are also forwarded for further improvement: -

1. Polytechnics should organize short term training to aware effects of using social media accounts on student's reading habits in each academic year in collaboration with the student union.
2. Polytechnics should develop mechanisms to have off periods for social media accounts access during class and study time within the campus in collaboration with the internet administrators.
3. Ministry of science and higher education (MOSHE) should develop proclamations in collaboration with polytechnics to discourage and penalize students directly coping assignments, project works, and exams using social media accounts.
4. Polytechnics should establish online repositories throughout the country to discourage direct copying of senior essays and project works.

References

- Kaitlin, C. (2010). Social Media changing social interactions. *Student Journal of Media Literacy Education* 1(1), 1-11.
- Kojo, D. B; Agyekum, B. O & Arthur, B. (2018). Exploring the effects of Social Media on reading culture of students in Tamate Technical University. *Journal of Education and practice* 3 (7), 56-64.
- Loving, M. & Ochoa, M. (2010). Facebook as a classroom solution. *New library world*. 112 (3&4), 121-130.
- Nssien, F. U. (2007). "Reading habits and skills" in F. E. Etim and F. U. Nssien (eds) *Information Literacy for Library search*. Uyo: Abaam publishers.
- Ogbe, U. (2014). Social media and Nigerian youths. *Daily Sun*, Tuesday 27th May, www.sunnewsonline.com
- Olaofe I. A. (2013). *Teaching English in Second Language averse situation: A solution based approach*. Zaria: Yahaya Ventures.
- Onwusu-Acheaw, M. (2014). Reading habits among students and its effect on academic performance: A study of students of Koforidua Polytechnic. *Library philosophy and practice* (E-journal). Retrieved 8/11/2018 from <http://digitalscommons.unl.edu/libphilprac/1130>
- Rahman, M. H. (2004). *An evaluation of the teaching of reading skills in English in Bangladesh*. A master's thesis submitted to Department of English University of Rajshahi, Bangladesh.
- Rithika, M. & Selvaraj, S. (2013). Impact of social media on students' Academic Performance. *International Journal of logistics and supply Chain Management Perspective* 2(4), 636-640.
- Ukume, G., Ochogwu, C. E. & Agbum T. P. (2018). Influence of social network usage on undergraduate students' academic performance in Benue State. *Literacy and Reading in Nigeria* 17(1), 97-109.
- William, L., Scot, K., & Simone, D. (2015). Social networks: making non-fiction trend in your classroom. *The Reading Teacher* 69(2), 181-188.

- Yeboah, J. & Ewur, G. D. (2014). The impact of whatsapp messenger usage on students' performance in tertiary institutions in Ghana. *Journal of Education and practice* 5(6), 157-165
- Agbezree, L (2001) Library Facilities and their use in Ghanaian Secondary School. Case study of St. Peters. Unpublished MA dissertation, University of Ghana: Legon. pp 70
- Babbie, E. (2005). *The Basics of Social Research*. 3rd ed, Belmont: Thomson Wadsworth pp 265, 274.
- Bashir, I& Mattoo, N.H (2012) A Study on Study Habits and Academic Performance among Adolescents (14-19) years. *International Journal of Social Science Tomorrow*. Vol.1, No. 5, pp. 1-5.
- Bhan, K. S., & Gupta, R. (2010) Study Habits and Academic Achievement among the students belonging to scheduled caste and non-scheduled caste group. *Journal of Applied Research in Education* 15(1) pp. 1-9.
- Dadzie, P. S. (2008) Reading for Education: The roles of Libraries. *Ghana Library Journal*. Vol. 20. No. 1. pp. 1-14
- Deavers, R. (2000). The Effect of Instruction on Early Non-Word Reading Strategies. *Journal of Research in Reading*. No.23, pp 267-286.
- Gallo, D. (2007) Reading Interests and Habits of Connecticut Students in Grades Four through Twelve. *The Reading Matrix*. Vol. 2, No.3 pp 1-20.
- Greene, B. (2001) "Testing Reading Comprehension of Theoretical Discourse with Close" *Journal of Research in Reading*. 24 (1) pp. 32-98
- Guthrie J.T. Benneth, L & McGough, K (2007), *Concept-oriented Reading Instruction: An Integrated Curriculum to Develop Motivations and Strategies for Reading* http://curry.virginia.edu/go/clic/nrrc/corri_rlo.html Retrieved on November, 28 2013.
- Higginbotham, S. (1999). Reading Interest of middle school students and preferences by gender of middle school students in a South Eastern State Atlanta Georgia, Master's Dissertation. Mercer University. pp. 140

Issa, A. O., Aliyu, M. B., Akangbe, R. B. & Adediji, A. F. (2012) Reading Interest and Habits of the Federal Polytechnic Students. *International Journal of Learning & Development*. Vol.2, No. 1, pp 470-486.

Ogbodo, R.O. (2010) Effective Study Habits in Educational Sector: Counseling Implications. *Edo Journal of Counseling*, Vol. 3, No.2. pp. 1-11.

Palani, K. K. (2012) Promising Reading Habits and Creating Literate Social. *International Reference Research Journal* Vol. III Issue 2(1) pp 91.

Singh, Y. G. (2011) Academic Achievement and Study Habits of Higher Secondary Students. *International Referred Research Journal* 3 (27) pp. 2.

Ward, M. L. (1997) Reader and Library Users: A Study of reading habits and public library use. Unpublished MA dissertation, University of Ghana: Legon. pp 70.

West African Examination Council, (2008) Chief Examiners Report Ghana. pp. 3.

Adeyinka, T. Children's Reading Habit and Availability of Books in Botswana Primary Schools. Implications for achieving quality education. *The Reading Matrix*, 7(2):117-137, 2007. Print.

Barker, V. Older Adolescents' Motivations for social network sites use: The influence of gender, group identity and collective self-esteem. London: Cyber Books, 2009.

Boyd, D. Social Network Sites: Definition, History and Scholarship. *Journal of computer mediated communication*, 13(1), 1-11, 2007.

Bryant, J.A. Text messaging and adolescent social networks. *Journal of Computer Mediated Communication*, 2006. Retrieved from: <http://jeme.indiana.edu/vol11/issue2/Bryant.html>. Web

Chaika, E. *Language: The Social Mirror*. Dakubu: Newbury House Publications, 1982.

Ezeji, E.C. *Influence of Electronic Media on Reading among School Children*. Nsuka: Nnamdi Azikiwe University, Nsuka, 2012.

Holte. M.S. *Creating an Optimum Reading Culture in Low Countries*. Amsterdam: IFLA conference, 1998.

Russell, Bernard H. Preserving language diversity: computers can be a tool for making the survival of languages possible, 1992. Cultural Survival Quarterly. Available from: <http://www.culturalsurvival.org/publications/cultural-survival>

Shields, Patricia and Rangarjan, N. A Playbook for Research Methods: Integrating Conceptual Frameworks and Project Management. 2013.

Data Literacy Skills of Health Information Management Professionals in Tertiary Hospital, Bayelsa State, Nigeria.

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Abstract

Data literacy is the bedrock of every organizational decision support, as such health information management professionals is pivotal to this crucial role through constant interaction with patients on a daily basis. These roles can only be acted upon swiftly if they are data literate and competent. A situation whereby these factors are not in existence, there is every tendency that health information management professionals will face threat on their roles. It is against this backdrop this study considers it apt to investigate the data literacy skills (DLS) of health information professionals in tertiary hospitals in Bayelsa state. Descriptive research design was adopted. Population consists of 78 health information management professionals in tertiary hospitals in Bayelsa state. Total enumeration sampling technique was adopted as the sampling technique for this study. The reliability coefficient for each of the variables is 0.99, 0.98, 0.99, and 0.98. Data collected was analyzed using descriptive and inferential statistics. Findings revealed that, data gathering skill was more common with the highest mean, while other skills such as data storing, data processing and data visualizing skills were not common. The study concluded that data literacy skills of health information

management professionals are low. In the shed light of this, the study recommended that organizational heads of tertiary hospitals and regulatory bodies should promote data literacy skills that will improve the quality healthcare data.

Key Words: Data Literacy skills, Tertiary hospitals, Health information management professionals (HIMPs).

Background

Data literacy skills of health information management professionals is the ability to interact, gather, manipulate and interpret data that suit the healthcare desire for information. The health information is an important compilation of facts about a patient's life and health, the ability to collect, manage, evaluate, and apply data in a critical manner (International Literacy Association, 2017). It includes documented data on past and present illness and treatment written by health care professionals caring for the patient (Zierler-Brown, et al. 2007). The health information must contain sufficient data to identify the patient, support the diagnosis or reason for attendance at the health care facility, justify the treatment and accurately document the results of treatment. The health information management professional's job description is concentrated on data; the transactional fact (data) requires literacy skills in data to manage patient care records. Decisions are informed by quality data collected, managed, evaluated, and applied to support evidence-based decisions that benefit citizens and increase knowledge (Ridsdale et al. 2015). Data is now the world's currency of power in the digital economy (Ridsdale et al. 2015). It is an essential ability required in the global knowledge based economy; which the manipulation of data occurs in daily processes across all sectors and disciplines ((Ridsdale et al. 2015).

Data gathering skill is the ability to collect and collate data in a manual or electronic manner by measuring targeted variables in an established system, which then enables one to answer relevant questions and evaluate outcomes. The health information management professional is the first point of contact to prepare the patient before proceeding to the next level of care, accuracy of data gathering is necessary to make informed business decisions, ensure quality, and maintain integrity because mistakes at this point affect' the entire healthcare management process (Lindén-Lahti et al. 2022). The health care sector is research based, as such at all times relies totally on accurate data. To meet these expectations on a daily basis, health information

management professionals must have data literacy skills (Andrew et al, 2019). Also, data storage skills are vital to sustaining references and their usability (Andrew et al, 2019).

Data storage skill is the ability to prolong, extend, and sustain the continuity of data in futuristic terms for service users to ensure its availability of use. Health information management professionals, being the custodians of healthcare data, have a responsibility to maintain and archive the health information of patients in accordance with the records life-cycle model (Lindén-Lahti et al. 2022). Data is often tracked and used by companies' everyday activities, such as credit card transactions, analytics from websites, or social media activity (Javaid et al, 2021). More so, data processing is the set of knowledge related to data skills expected of a health information management professional.

Data processing skill is the practice of analyzing, evaluating, interpreting, and distributing usable data securely, efficiently, and cost-effectively. The global economy is increasingly dependent on brainpower, our ability to process knowledge, and how people (health care providers) have ideas about the current situation in the healthcare sector (Büchi et al, 2020). The goods and services of our brainpower will be marketed in an increasingly competitive global village (Raghupathi, 2014). The health care industry depends absolutely on processed data readily available to sustain the overall decision process through data visualization (Raghupathi, 2014).

Data visualization skill is the ability to display data in a critical manner that draws logical and conclusive statements of facts and figures in tables, charts, histograms, and pie charts. The era of digital economy holds data in high esteem as gold mine, which compels health information management professionals to live up to expectations as data literates (Van Der Wel et al, 2019). Data generated are demographic characteristics, which consists of age, race, gender, ethnicity, religion, income, education, home ownership, sexual orientation, marital status, family size, health and disability status, and psychiatric diagnosis (Grillenberger & Romeike, 2018). Despite the substantial stimulus for the development of skills to handle data, the reality for most professionals does not seem to match the expectations of organizations, be it businesses in general, educational institutions, the academic community, or a variety of other stakeholders.

Objectives

The objectives are to:

- i. assess the data gathering skill of health information management professionals in tertiary hospitals in Bayelsa State, Nigeria.
- ii. examine data storing skill of health information management professionals in tertiary hospitals in Bayelsa State, Nigeria.
- iii. determine the data processing skill of health information management professionals in tertiary hospitals in Bayelsa State, Nigeria.
- iv. examine the data visualizing skill of health information management professionals in tertiary hospitals in Bayelsa State, Nigeria

Literature Review

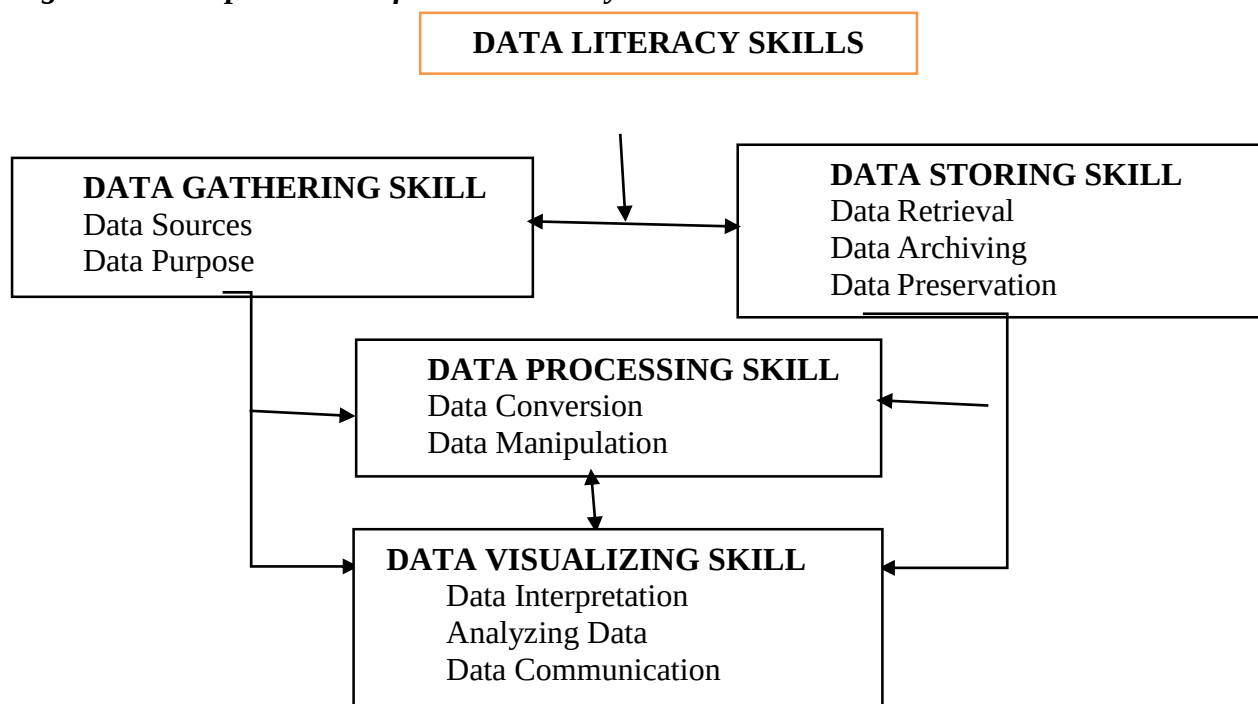
The data literacy competency model is composed of four elements: gathering, storing, processing, and visualizing data. However, the main constructs of this theory was expanded to include sub-constructs based on related literatures, such as data gathering (sources and purpose of data), data storage (retrieval, archiving, and preservation of data), data processing (conversion and manipulation of data), and data visualization (interpretation, analysis, and communication of data). The model consists of two intertwined areas that are interconnected based on practical and content-oriented factors. This model is on par with health information management professionals, who practically communicate and interact with data on a daily basis, with the need to be data skilled in both aspects to effectively manage, handle, and process data profitably. Data Gathering (Sources and Purpose of Data) is construct that takes into account the prerequisite of handling data (George, Osinga, Lavie, & Scott, 2016). However, from the researcher's view, some sub concepts and sub-terms can be considered that cannot be overruled separately, such as data sources and data purpose. The data source takes into consideration data attributes needed to be captured and the source to get the required data.

Data storing (retrieval, archiving, and preservation of data) is on the storage of and access to data, hence concepts that are particularly related to data management but also considered relevant to data science. Contextualizing Data storing, securing data, data archiving, and data presentation is contextualized on the basis of data preservation for future use (Abilock & Ballard et al, 2017, Mandinach, Ellen & Gummer, 2016). A relevant term, "management of data quality," is also used (Babu, Niehaus & Shah et al, 2019). As the very concept of privacy might be under threat, individuals need to be aware of their rights and how they can secure their data, especially online (Acquisti et al, 2010). Data Processing (Conversion and Manipulation of Data)

involves evaluating data, which starts with understanding data and discerning its value suitable for decision-making (Wolff & Gooch et al., 2016). Although it is simpler to interpret data accurately when background information about data is provided, being data literate also means being able to develop hypotheses accordingly and to find correlations that are not easily apparent (Zhu & Schober et al, 2015; Weintrop & Beheshti et al, 2016). Data processing competency skills take a retrogressive step backward; the need to go through a process known as data cleaning, which is the process of detecting and removing errors and inconsistencies from data in order to improve the quality of data (Guler, 2019). Data literacy is important as it makes realizing the structure and potential patterns in datasets easier and more apparent (Zhu & Schober et al, 2015; Wilson, 2017).

Data Visualizing (interpretation, analysis, and communication of data) is considered a “rich” aspect of data literacy (Mandinach, Honey & Light, 2006). Data visualization skills are focused on methods, algorithms, and principles that are central to analyzing data, making predictions, and communicating data based on phenomena of interest. An example from the 2016 US elections makes for a stunning analysis of this case (Ikemoto, Schuyler and Marsh, 2007). Data-driven decision making (also known as data-based decision making) is where data literacy is put into action and data is implemented, meaning that data is turned into information, then knowledge, and finally, a decision is made accordingly in the end (Jerome & Aaron, 2016; Garcia & Espinoza et al, 2013; Oyinate, 2017).

Figure 1. Conceptual Model for Data Literacy Skills.



Methodology

The study adopted descriptive research approach; this method became very necessary due to the nature of the problem and issue under investigation, which demand in-depth knowledge to explore the data literacy skills of health information management professionals in tertiary hospitals in Bayelsa State, Nigeria. The population of this study consists of seventy-eight (78) health information management professionals in tertiary hospitals, which are composed of the Federal Medical Centre, Yenagoa, and the Niger Delta University Teaching Hospital, Okolobiri, Yenagoa, Bayelsa State. Patients were included in the study because they are the direct beneficiaries of health information management professional service delivery. All licensed health information management professionals practicing in tertiary hospitals in Bayelsa state. While non-licensed personnel's working in the health information management departments in the both tertiary hospitals was excluded from the study. Data were collected from the respondents in the designated tertiary healthcare institutions, structured self-administered questionnaire was adopted. The questionnaire was divided into five sections: (1) Section A: Socio-demographic characteristics of the respondents such as age, sex, religion, level of education, years of experience, unit of deployment (2) Section B: Data gathering (3) Section C: Data storing skill (4) Section D: Data processing skill (5) Section: Data visualizing skill.

Ethical considerations

The study was granted ethical approval from the Ethics and Research Committee of both tertiary healthcare institutions (NDUTH/REC/06/09/23). Verbal and Informed consent was also obtained from the respondent. The confidentiality of information collected was secured by restricting access to the data collected to investigator and research assistants. Anonymity of the respondents was ensured by not including personal details of the respondents in the instrument.

Results

Table 1: Demographic Characteristics of Respondents

	(FMC & NDUTH)	Frequency	Percentage
Sex	Male	33	25.7
	Female	45	35.1
	Total	78	100
Age Range	≤ 36 years	11	8.58

	36 - 45	50	39
	46 - 55	14	10.9
	56 - above	3	2.3
	Total	78	100
Level of Education	ND	59	46
	HND/BSC	16	12.5
	M.Sc.	2	1.6
	PhD	1	0.8
	Total	78	100
Years of Working Experience	1 - 5	10	7.8
	6 -10	30	23.4
	11 - 15	33	25.7
	16 - Above	5	3.9
	Total	78	100
Current Unit of Deployment	A/E	14	10.9
	GOPD	26	20.3
	CHOP	4	3.1
	Eye Clinic	3	2.3
	Clinical Coding/Indexing	4	3.1
	A/D	6	4.7
	Other Units	21	16.4
	Total	78	100

The above table presents the demographic distribution of respondents in the two tertiary healthcare facilities in Bayelsa State. It provides insights into their sex, age distribution, level of education, working experience, and current unit of deployment. The gender distribution shows that women dominate the profession in both tertiary hospitals. The age distribution of the respondents from both hospitals showed that they are knowledgeable, and within decision-making age to distinguish between good and bad in the routines of health information management practice. Furthermore, it proves that the majority of the respondents are very agile and full of life, meaning that they are still very active.

The educational dispositions of the study participants indicate majorly national diploma holders, showing that career progression in health information management profession begins with the National Diploma. More so, it suggests that fresh undergraduate are more enthusiastic and zealous without faulting the decisions of the top management. The work experience of the respondents presuppose that they have been in the health information management practice for quite some time, and may have wealth of expertise operating in the space of knowledge. As a result, there won't be room for prejudice because the participants are well informed and experienced; hence, they could effectively respond to the questions pertaining to this study.

The table shows that majority of the respondent are deployed to major service points where the bulk load of service delivery is demanded.

Data Gathering Skill	N	R	S	O	A	Mean	Std.
I understand the imperative of collecting reliable and dependable data	6 (7.5)	7 (8.8)	9 (11.3)	11 (13.8)	45 (56.3)	3.05	1.33
I collect patient data devoid of error	8 (10.0)	19 (23.8)	17 (21.3)	22 (27.5)	12 (15.0)	2.14	1.25
There is consistency in Data extraction among HIM	4 (5.0)	9 (11.3)	13 (16.3)	20 (25.0)	32 (40.0)	2.86	1.22
Sources of data collection is well understood?	4 (5.0)	9 (11.3)	13 (16.3)	20 (25.0)	32 (40.0)	2.86	1.22
I can effectively collect data manually	7 (8.8)	7 (8.8)	14 (17.5)	22 (27.5)	28 (35.0)	2.73	1.29
1 maintain quality data collection	10 (12.5)	11 (13.8)	17 (21.3)	17 (21.3)	23 (28.8)	2.41	1.34
Weighted Mean:						2.68	

Table 2. Respondents level of Data gathering skill (n=78).

Note: N, R, S, O and A depicts N=Never, R= Rare, S= Sometime, O= Often and A= Always

The table above presents a breakdown of the level of data gathering skill of the study respondents, indicating low level of data gathering skill among health information management professionals, 56.3% of the respondents always understood the imperative of collecting reliable and dependable data. In the same vein, 27.5% of the respondents indicate that they often collect patient data devoid of error: Meanwhile, 40.0% indicate that there is always consistency in data extraction among health information management professionals. Also, 40.0% expressed that they always understand the sources of data collection. 28.8% of the respondents regarding effective collection of data manually. Furthermore, data from the respondents implies that 28.8% always maintain quality data collection. The weighted mean score for data gathering skill is 2.68, which indicates a high level of data gathering skill among health information management professionals in tertiary hospitals in Bayelsa state.

Table 3. Respondents level on Data storing skill (n=78)

Data Storing Skill	N	R	S	O	A	Mean	Std.
I can effectively store data manually?	3 (3.8)	4 (5.0)	15 (18.8)	25 (31.3)	31 (38.8)	2.99	1.08
There are adequate data storage facilities in the hospital for use?	23 (28.8)	7 (8.8)	9 (11.3)	20 (25.0)	19 (23.8)	1.44	1.12

Note: N, R, S, O and A depicts N=Never, R= Rare, S= Sometime, O= Often and A= Always

I am well conversant with archival equipment used in the storage of data?	9 (11.3)	7 (8.8)	23 (28.8)	20 (25.0)	19 (23.8)	2.42	1.27
Retrieval of data is prompt based on equipment in use?	27 (33.8)	31 (38.8)	9 (11.3)	7 (8.8)	4 (5.0)	1.10	1.14
I do not have any difficulties locating data?	5 (6.3)	7 (8.8)	25 (31.3)	21 (26.3)	20 (25.0)	2.69	1.19 9
Data tracking system is highly efficient?	33 (41.3)	7 (8.8)	10 (12.5)	17 (21.3)	11 (13.8)	1.56	1.55
Weighted Mean:						2.03	

The third table is used to measure data storage skill, which showed that 38.8% of the respondents always effectively store data manually. However, 28.8% of the respondents indicated that there is adequate data storage facilities in the hospital for use. The findings in this statement proved that the shortfall in data storing skill is tied to the lack of sufficient manual storage facilities for patients' case notes. In like manner, 28.8% of the respondents were sometimes conversant with the archival equipment used in the storage of data. The item showed that 38.8% of the respondents rarely respond promptly to the retrieval of data based on the equipment in use. The responses on the item indicate a gap in the promptness of health information management professionals to deliver service based on the constraining factors, such as the above-mentioned responses from the respondents. Furthermore, 31.3% of the study respondents sometimes do not have any difficulties locating data, which affirmed that patients are most times frustrated due to the longer time used to retrieve their case note. In the same manner, 41.3% indicated that the data tracking system is never efficient, which buttresses the data of the preceding statements. The weighted mean score for the data storing literacy construct is 2.03, indicating a low level of data storage skill among the respondents.

Table 4. Respondents level on Data Processing skill (n=78)

Data Processing Skill	N	R	S	O	A	Mean	Std.
Health care data is easily displayed to reflect the purpose for which it was collected?	8 (10.0)	13 (16.3)	10 (12.5)	23 (28.8)	24 (30.0)	2.54	1.36
Health care data is timely processed to allow for actionable decisions?	2 (2.5)	11 (13.8)	13 (16.3)	35 (43.8)	17 (21.3)	2.69	1.04 8
I can analyze data that for easy comprehension?	12 (15.0)	28 (35.0)	9 (11.3)	16 (20.0)	13 (16.3)	1.87	1.36
I can clean and transform data without close supervision?	14 (17.5)	27 (33.8)	14 (17.5)	14 (17.5)	9 (11.3)	1.71	1.28 0
Data processed by me is reproducible with consistency of result?	17 (21.3)	19 (23.8)	20 (25.0)	11 (13.8)	11 (13.8)	1.74	1.33 3
I analyze data to meet targeted information need?	15 (18.8)	27 (33.8)	11 (13.8)	12 (15.0)	13 (16.3)	1.76	1.37 9

Weighted Mean:						2.05	

Note: N, R, S, O and A depicts N=Never, R= Rare, S= Sometime, O= Often and A= Always

The third matrix for measuring data literacy skill is, on data processing skill of the respondents. The first item shows that 30.0% of the respondents shows that healthcare data is always displayed. Similarly, 43.8% indicate that health care data is often timely processed to allow for actionable decisions. Furthermore, 35.0% showed that they can always analyze data. Also, 33.8% of the respondents admitted that they rarely can clean and transform data without close supervision. Similarly, 25.0 % showed sometimes data processed by them is reproducible with consistency of result" Interestingly. Likewise, 33.8% indicated that they rarely analyze data to meet targeted information needs. Those who never consent are, however, in the minority, which means that a significant number of respondents can analyze data to meet targeted information needs. The weighted mean score of the measure on data processing skill is 2.05, which implies a low level of data processing skill among health information management professionals in tertiary hospitals in Bayelsa State, Nigeria.

Data Visualizing Skill	N	R	S	O	A	Mean	Std.
I can visualize data using charts, graphs and tables?	14 (17.5)	27 (33.8)	13 (16.3)	13 (16.3)	11 (13.8)	1.74	1.32 3
I can display healthcare data at ease?	15 (18.8)	24 (30.0)	15 (18.8)	15 (18.8)	9 (11.3)	1.73	1.29 6
I can accurately interpret data visualized?	12 (15.0)	20 (25.0)	14 (17.5)	13 (16.3)	19 (23.8)	2.09	1.42 5
Data presentation to users at all level is done often?	19 (23.8)	25 (31.3)	12 (15.0)	9 (11.3)	13 (16.3)	1.64	1.40 5
I take appropriate steps to display data for quick understanding?	12 (15.0)	30 (37.5)	16 (20.0)	11 (13.8)	9 (11.3)	1.68	1.23 3
Data elements are structured strategically?	11 (13.8)	10 (12.5)	10 (12.5)	17 (21.3)	30 (37.5)	1.81	1,29 0
Weighted Mean:						1.78	
Criterion Mean for all variable						2.14	

Table 5. Respondents level on Data Visualizing skill (n=78)

Note: N, R, S, O and A depicts N=Never, R= Rare, S= Sometime, O= Often and A= Always

The fourth measurement for data literacy skill is data visualization skill, which has 33.8% of the respondents showing they rarely visualize data using charts, graphs, and tables. Interestingly 30.0% of the study respondents can rarely display healthcare data at ease, while 25.0% can rarely interpret visualized data accurately. Also, it showed that 31.3% of the respondents indicate that “data presentation to users at all levels is done often. Suggestively,

37.5% fall within the rare group of the respondents that take appropriate steps to display data for quick understanding, 37.5% of the respondents in the rare scale of measurement posited that data elements are structured strategically. On average, the weighted mean score for data visualization skill is 1.78, which indicates a low level of data visualization skill.

Discussion

The study showed that data gathering skill is more common and high among health information management professionals than other constructs of measuring data literacy skills on a scale of 1 to 5, with a weighted mean score of 2.68. Whereas data storing skill is shown to be low, with a weighted mean score of 2.03, data processing skill is found to be low, with a weighted mean score of 2.05, and data visualizing skill is also low, with a weighted mean score of 1.78.

Even though, the mean scores of data literacy skills were just at the average level, data gathering skill was more prevalent than the others. The findings of this study has shown that the data literacy skills of health information management professionals are low, with a criterion mean of 2.14, which is in agreement with other studies, that there is a gap in data literacy, and that a theory-practice gap does exist (Borgman, 2017; Bertram et al, 2021). More so, the revealed findings from this study disavow the result of other authors assertion that health workers overall level of digital literacy was desirable, and health information management professionals have not experienced deskilling, which reimagined aligned with industry needs (Alipour, and Payandeh, 2022; Borgman, 2017). Therefore, the position of these study findings is argued on the ground that if patients are literate in health information and general literacy, they can hold the health information management professionals accountable for processing their data accurately for better service delivery. The foundation for data literacy skills is personal coaching and training to overcome the obstacles faced by professionals (Babroudi et al, 2021). In all, this research findings shows that data gathering skill is more prevalent than other data literacy skills in tertiary hospitals in Bayelsa State. It is worthy to note that health information management professionals were primarily trained to gather and manage data.

Conclusion

Accurate data plays a vital role in the practice of health information management in the context of Data literacy skills. Data literacy skills involves data gathering, storing, processing and visualizing skills in the practice of health information management in healthcare. The study has established that data gathering skill is high among the study respondents.

The challenges of healthcare decision making are evident of data literacy skills, and the access to quality data is critical in cutting costs and promoting collaboration among patient and health care professionals. Moreover, data literacy is directly linked to health information management professionals' ability to access, understand, appraise, and apply data. The expertise in data management is a prerequisite to navigate data task and resolve challenges of data queries. By leveraging on these skills, to effectively collect, organize, analyse, and interpret health data in order to provide accurate and reliable health information to healthcare providers, patients, and other stakeholders.

Recommendations

The following recommendations are hypothesized based on the findings of the study;

1. Health information management professionals should engage in life-long learning to develop their data literacy skills that aligns with the current digital era is in the stage of the data economy, and as such, the demand for data-literate professionals to survive the threat.
2. Self-motivation of professionals can encourage reskilling and upskilling of knowledge that will reduce the high level of job loss, employee turnover intention, and improve the level of employability.
3. Management of tertiary healthcare institutions should to provide annual budget for training and retraining of health information management professionals to local, national, and international scientific conferences, workshops, and symposiums to reskill their knowledge of international best practices and new innovations that can influence them for a positive competition.

References

- Abilock, Debbie, D. Susan Ballard, Tasha Bergson-Michelson, Jennifer Colby, Catherine D'Ignazio, Kristin Fontichiaro, Lynette Hoelter et al. (2017). Data Literacy in the Real World: Conversations & Case Studies." *Maize Books*.
- Abilock, Debbie, D. Susan Ballard, Tasha Bergson-Michelson, Jennifer Colby, Kristin Fontichiaro, Lynette Hoelter, Justin Joque et al. (2017). Creating data literate students." *Maize Books*.
- Acquisti, Alessandro. (2010). The economics of personal data and the economics of privacy.
- Alipour, Jahanpour, and Abolfazl Payandeh. (2022)."Assessing the level of digital health literacy among healthcare workers of teaching hospitals in the southeast of Iran." *Informatics in Medicine Unlocked*, 29, 100868.

- Andrew, PS Damon, M. Paul. Pedersen, and D. Chad. McEvoy. (2019) Research methods and design in sport management. *Human Kinetics*.
- Babroudi, Naeira Elyas Pour, Kamyar Sabri-Laghaie, and Nazli Ghanbari Ghoushchi. (2021). "Re-evaluation of the healthcare service quality criteria for the Covid-19 pandemic: Z-number fuzzy cognitive map." *Applied Soft Computing*, 112, 107775.
- Babu, A. N., E. Niehaus, S. Shah, C. Unnithan, P. S. Ramkumar, J. Shah, V. V. Binoy, B. Soman, M. C. Arunan, and C. P. Jose. (2019). Smartphone geospatial apps for dengue control, prevention, prediction, and education: MOSapp, DISapp, and the mosquito perception index (MPI)." *Environmental monitoring and assessment*, 191, 1-17.
- Bertram, Maja, Urs Steiner Brandt, Rikke Klitten Hansen, and Gert Tinggaard Svendsen. (2021). "Does higher health literacy lead to higher trust in public hospitals?." *International Journal for Equity in Health* 20, 1-15.
- Büchi, Moritz, Eduard Fosch-Villaronga, Christoph Lutz, Aurelia Tamò-Larrieux, Shruthi Velidi, and Salome Viljoen. (2020). The chilling effects of algorithmic profiling: Mapping the issues." *Computer law & security review*, 36, 105367.
- Christia, Jerome, and Aaron Ard. (2016). "The influence of demographic characteristics on service quality perceptions." *Journal of Marketing Management*, 4(2), 57-62.
- Garcia, H. Cesar, E. Sara Espinoza, Michael Lichtenstein, and P. Helen Hazuda. (2013). "Health literacy associations between Hispanic elderly patients and their caregivers." *Journal of health communication*, 18(sup1), 256-272.
- George, G., Osinga, E. C., Lavie, D., & Scott, B. A. (2016). Big data and data science methods for management research. *Academy of Management Journal*, 59(5), 1493-1507.
- Grillenberger, Andreas, and Ralf Romeike. (2018) "Developing a theoretically founded data literacy competency model." *In Proceedings of the 13th Workshop in Primary and Secondary Computing Education*, 1-10.
- Guler, Gulsen. (2019). "Data literacy from theory to reality: How does it look?." *Vrije Universiteit Brussel, Brüssel*.
- Ikemoto, Gina Schuyler, and A. Julie Marsh. (2007). "Cutting through the "data-driven" mantra: Different conceptions of data-driven decision making." *Teachers College Record*, 109(13), 105-131.
- International Literacy Association. (2017). What's hot in literacy: *Report*.
- Javaid, Mohd, Abid Haleem, Ravi Pratap Singh, Shanay Rab, and Rajiv Suman. (2021) "Internet of Behaviours (IoB) and its role in customer services." *Sensors International*, 2, 100122.
- L. Borgman, Christine. (2017). Big data, little data, no data: Scholarship in the networked world. *MIT press*.
- Lindén-Lahti, Carita, Sanna-Maria Kivivuori, Lasse Lehtonen, and Lotta Schepel. (2022) Implementing a new electronic health record system in a university hospital: the effect on reported medication errors. *In Healthcare (MDPI)*, 10(6), 1020.
- Mandinach, B. Ellen, and S. Edith Gummer. (2016). What does it mean for teachers to be data literate: Laying out the skills, knowledge, and dispositions." *Teaching and Teacher Education*, 60, 366-376.
- Mandinach, B. Ellen, Margaret Honey, and Daniel Light. (2006). "A theoretical framework

- for data-driven decision making." *In annual meeting of the American Educational Research Association, San Francisco, CA.*
- Ndukwe, Ifeanyi Glory, and Ben Kei Daniel. (2020). "Teaching analytics, value and tools for teacher data literacy: A systematic and tripartite approach." *International Journal of Educational Technology in Higher Education* 17(1), 1-31.
- Oyinade, Tomori. (2017). "HEALTH CARE INFORMATION LITERACY THE ROLE OF LIBRARIANS.
- Raghupathi, Wullianallur, and Viju Raghupathi. (2014). Big data analytics in healthcare: promise and potential." *Health information science and systems*, 2, 1-10.
- Ridsdale, Chantel, James Rothwell, Michael Smit, Hossam Ali-Hassan, Michael Bliemel, Dean Irvine, Daniel Kelley, Stan Matwin, and Bradley Wuetherick. (2015) "Strategies and best practices for data literacy education: *Knowledge synthesis report.*
- Van Der Wel, Kjetil A., Olof Östergren, Olle Lundberg, Kaarina Korhonen, Pekka Martikainen, Anne-Marie Nybo Andersen, and Stine Kjaer Urhoj. (2019). A gold mine, but still no Klondike: Nordic register data in health inequalities research." *Scandinavian Journal of Public Health*, 47(6), 618-630.
- Weintrop, David, Elham Beheshti, Michael Horn, Kai Orton, Kemi Jona, Laura Trouille, and Uri Wilensky. (2016). Defining computational thinking for mathematics and science classrooms." *Journal of science education and technology*, 25, 127-147.
- Wilson, K. Graham. (2017). "Brexit, Trump and the special relationship." *The British Journal of Politics and International Relations*, 19(3), 543-557.
- Wolff, Annika, Daniel Gooch, J. Jose Cavero Montaner, Umar Rashid, and Gerd Kortuem. (2016). Creating an understanding of data literacy for a data-driven society. *The Journal of Community Informatics*, 12(3).
- Zhu, Jun, Robert Schober, and K. Vijay Bhargava. (2015). *Linear precoding of data and artificial noise in secure massive MIMO systems.* *IEEE Transactions on Wireless Communications*, 15(3), 2245-2261.
- Zierler-Brown, Seena, R. Timothy Brown, David Chen, and Robert Wayne Blackburn. (2007) "Clinical documentation for patient care: models, concepts, and liability considerations for pharmacists." *American Journal of Health-System Pharmacy*, 64(17), 1851-1858.

Patient Records Retrieval Strategy on Service Quality of Health Information Management Professionals in Public Health Institutions in Oyo State, Nigeria

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Abstract

Service quality (SQ) has emerged as an essential aspect for high customer industries like hospitals. Patients demand quality, healthcare institutions must implement a system in meeting the expectations of the patients. Medical records are important tools in patient management with details about each patient's health history from birth to death. The wide range of clinical information seekers suggests a strong demand for information, thus getting records is essential in information retrieval systems. Patient records retrieval strategy entail all processes and procedures in place to enhance prompt recollecting patient health records as the need arises. For high SQ there should be comprehensive working record retrieval strategy (RRS). Literature has not been established on how patient records retrieval strategy (PRRS) influence SQ among HIMPs, the study is based on it. This is a cross-sectional study that included 322 HIMPs, total enumeration technique was employed. Structured questionnaire was used. Data collected was analyzed using descriptive and inferential statistics. Findings revealed that HIMPs render very high quality service to their patients with the grand mean of 3.55 on a four-point scale where PRRS has grand mean of 3.36 showing high level of PRRS in PHIs in Oyo State. Hypothesis reveals a fair relationship at 0.421, adjusted value 0.175 implying less significant contribution of PRRS on SQ. The outcome show that PRRS has contributed significantly to SQ of HIMPs in PHIs in Oyo State. Therefore, it is recommended that HIMPs should be encouraged through training, and conferences with modern IT equipment to enhance higher performance.

Keywords: Service quality (SQ), patient record retrieval strategy (PRRS), public health institution (PHI), Health information management professional (HIMP), patient.

Introduction

In the recent era of globalization, healthcare sustainability has attracted more attention due to its market size, investments, technological advancements, quality patient services, rise in medical tourism, rising patient safety consciousness, and government initiatives. In the age of globalization, adherence to specified standards has become important. Particularly, this assists organizations to benchmark their services against those provided by the peers in the other parts of the world. The requirements or the standards are interpreted base on customers' needs. Therefore, when patients are happy with their healthcare services, it suggests that the set of requirements were met and satisfied. Notably, this approach of service quality from the standpoint of addressing patients' demands is also implied in numerous quality improvement models. However, some have developed a more robust view and understanding of quality. Service quality was considered to be multi-dimensional encompassing aspects such as trustworthiness, responsiveness, politeness, and the ability to maintain of a service, quality is dynamic in nature because of the fact that clients' beliefs, attitude and values are liable to change. The difficulties of complexity, co-production, and service intangibility inherent in service delivery in healthcare organizations may make research valuable.

Service quality has emerged as an essential aspect for high customer industries like hospitals. In essence, building a reputation of quality service practices to the patients could be key to supporting companies in the service industry gain a competitive edge and sustain long-term profitability. The relevance of service quality in the service sector is important since it supports and enhance corporate performance. Patients demand quality, so healthcare institutions must implement a system that will assist in meeting the expectations of the patients who are healthcare consumers. Quality originated from the Latin word, *qualis*, which means 'what kind of' Quality is an abstract and illusive idea, with different meanings and interpretations. Consequently, quality has been referred to as excellence, adherence to standards and patient satisfaction. Notably, according to several authors' service quality is defined as going above and beyond what the client requires by ensuring that the organization's processes and services are up to design standards. While the definition of service quality used in the literature is non-uniform, it is even more varied when considered from the perspective of healthcare.

Service quality among health information professional's framework is a set of principles, standards, policies and constraints used to direct the design, development, deployment, operation and retirement of services provided by a service provider with the goal of providing a consistent service experience to a particular user in a specific business context. This includes also the setting for the organization as service provider's skills are organized into services. An

action that is intended to benefit a patient is referred to as a practice. As a result, service quality in healthcare practice is considered to be the gap between the service's actual performance and what was anticipated. The degree to which a particular service meets the expectations of the patients is regarded as a sign of a high-quality service in healthcare practice (Shankar, Datta, & Jebarajakirthy, 2019).

Hospitals must maintain accurate patient records that are easily accessible in order for health information management personnel to perform effectively and efficiently. Record retrieval technique or strategy is the process of finding record system resources from a group of those resources that are relevant to a record need. Searches may use full-text indexing or another type of content-based indexing. Record retrieval is science of finding patient health records in papers, in documents themselves, in databases of patient texts and photos, as well as in the metadata that characterizes data. Automated record retrieval systems are used to decrease what has been known as record overload. An information record system is a software program that gives users access to patients' health record. A record retrieval strategy starts when a health information management professional inserts a query into the system. Queries, such as search terms in web search engines, are explicit declarations of health record demands. A query used for record retrieval does not specifically identify each and every item in the collection. Instead, several objects may match the query, perhaps with different degrees of relevancy. An object is a representation of an entity in a database or content collection. The database record is compared with user queries. Results in record retrieval are often ranked since the results may or may not fit the query. One significant distinction between record retrieval searching and database searching is the ranking of the results.

Depending on the application the data objects could be, for instance, text documents, images, audio files, mind maps or laboratory test results on health conditions (Shankar, Datta, & Jebarajakirthy, 2019). Frequently, document surrogates or metadata are used in record retrieval systems to represent actual documents rather than keeping or storing them there directly. The majority of record retrieval systems calculate a numerical score on how well each database object matches the query and rank the objects within the database based on this score. This study will measure patient record retrieval strategies with record searching, record collecting, record reading and writing of records. These protocols are not followed when patients are examined and it is due to poor record management in public health institutions in Oyo State. For patients' record to be retrieved appropriately and properly, the records must first be saved appropriately. In light of the aforementioned discussion, this study seeks to

investigate the influence of patient record retrieval strategies on service quality among health information management professionals in public health institutions in Oyo State, Nigeria.

Statement of the Problem

Professionals in health information management should have a reliable method for getting information to patients, as well as an appropriate approach, to make it possible to transfer information without difficulty. Preliminary investigation or investigation, close observations and literature review, however, have revealed that patients face difficulties in accessing their health records (case note), time wastage due to long line on appointment days, poor communication and occasionally rude attitude from health information management professionals. These difficulties might impair patients' perception of the value of the service provided, thus, calling to question the practices of health information management professionals in public health institutions in Oyo State. Good patient record retrieval strategies has been found to enhance service quality. Practical experiences reveal that there is no promptness in retrieving patient health records, no specific policy on patient waiting time including inadequate monitoring of patient movement from unit to unit in the hospital in public health institution in Oyo State, all the aforementioned have negative impact on the level service quality in public health institutions causing patient worsen health condition and even death.

Empirical studies on patient record retrieval strategies within the context of service quality of health information management professionals have been conducted. However, scholars in Nigeria have paid less attention to studies concentrating on how patient record retrieval strategy affect service quality, particularly in public health institutions in Oyo State. This suggests a hole that needs to be looked into. This study aims to find out how patient record retrieval strategy affects the level of service quality provided by health information management professionals in public health institutions in Oyo State, Nigeria.

Aim and Objectives of the Study

The aim of this study is to investigate the influence of patient record retrieval strategies on service quality among health information management professionals in public health institutions in Oyo State, Nigeria. The objectives are to:

- I. identify the level of service quality among health information management professionals in public health institutions in Oyo State, Nigeria;

- II. examine different patient record retrieval strategies that exist among health information management professionals in public health institutions in Oyo State, Nigeria;
- III. ascertain the influence of patient record retrieval strategies on service quality among health information management professionals in public health institutions in Oyo State, Nigeria;

Research Questions

1. What is the level of service quality among health information management professionals in public health institutions in Oyo State, Nigeria?
2. What are the different patient record retrieval strategies that exist among health information management professionals in public health institutions in Oyo State, Nigeria?

Hypothesis

H₀– There will be no significant influence of patient record retrieval strategies on service quality among health information management professionals in public health institutions in Oyo State, Nigeria;

Scope of the Study

The study focuses on the influence of patient record retrieval strategies on service quality among health information management professionals in public health institutions in Oyo State, Nigeria. Communication of service, reliability of service, timeliness of service and empathy are the standards established for measuring service quality while the measures for patient record retrieval strategies are record searching, record collecting, record reading and record writing. The geographical scope include public tertiary, secondary and primary health institutions while the respondents are health information management professionals in public health institutions. This population was chosen due to the high number of HIM staffs working in the chosen scope and they were contacted through the help of the human resources staff, and research assistance.

Significance of the Study

This research work would greatly benefit the patients who are the primary healthcare consumers to be fully aware of the existing challenges that may possible tamper the expected

service quality, staffs and management in public health institutions in Oyo State as well as the following stakeholders; health information management professionals, aspiring researchers, and government.

Literature Review

Service Quality meaning in the healthcare industry is challenging due to the nature of services, variety of professionals and ethical practices that support healthcare delivery. One of the common healthcare service quality definitions indicated in literatures is healthcare services whose elements and traits adhere to predetermined specifications and standards. In this regard, it is known as “conformance to specifications or requirements”. In light of this, service quality in this research paper is recognized as conformity to specifications. To sum it up, the use of the aforementioned definition in defining service quality in healthcare practices is the best because it is straightforward in assessment. In other words, assessment of service quality in healthcare practices only necessitates that the services offered be compared against the established criteria and requirements to see whether there is conformance.

A survey of the literature in service quality reveals the intrinsic complexity of quality in the healthcare industry, which makes healthcare sector unique in terms of how service quality management practices should be put into effect. First, providing a distinct treatment path for each patient, given the diversity of customers (patients), requires a highly tailored level of care that add to the complexity of the quality of care as it rises. Second, the knowledge asymmetry (knowledge gap) between the healthcare provider and the patient increases the complexity of the overall healthcare process. Third, compared to other industries, both patients and the healthcare providers are exposed to high risks and costs related to the services rendered, where the cost of failure is considerable and significant. Fourth, in order to guarantee that clients receive high-quality service, healthcare organizations should follow specified regulatory procedures and regulations. Finally, unlike other industries, service delivery may take place over a longer time frame, and may involve variety of treatments, which may affect how customers perceive the quality of care in the healthcare industry. Hence, both healthcare organizations and patients would be significantly impacted by understanding the antecedents and drivers of service quality results (Halamka, Lippman & Ekblaw, 2017).

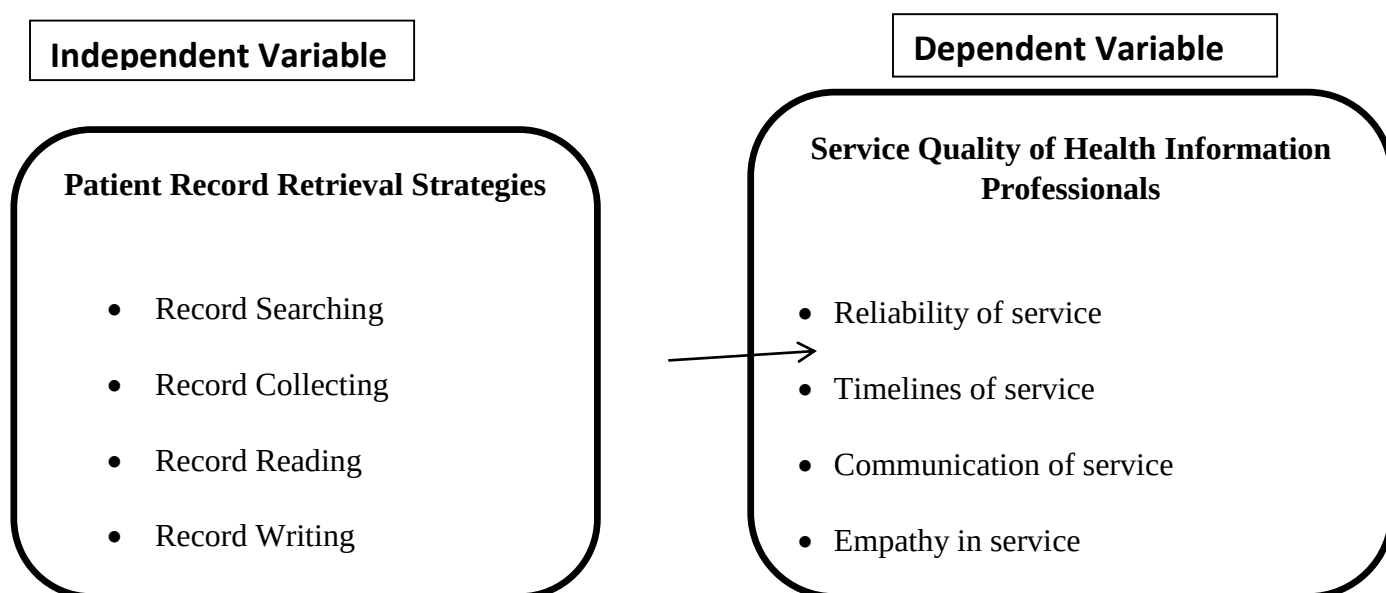
Poor service quality among health information professionals continues to be a major overwhelming problem in most African countries. Healthcare practices are significantly impacted by infrastructure. For instance, in Nigeria, the availability of better infrastructures

has lagged behind over years. There are inferior medical equipment, limited energy supply etc. Public procurement, at the healthcare level, is believed to be one of the primary areas where corruption in Nigeria occur. Any government department's ability to function properly suffers greatly from corruption. It transfers decision- making and the provision of services from those who need them to those who can pay for them.

It has been well documented how crucial and noteworthy it is for medical practitioners to have access to timely information so they may make the finest diagnoses and decide on the most appropriate course of treatment, which makes it essential to consider health records or information retrieval system (Halamka, Lippman & Ekblaw, 2017). Records retrieval can be traditional paper-based or Electronic medical records (EMRs). EMR is an electronic way for capturing, storing, accessing, and compiling health and medical data as a result of the development of digital technology and it has emerged as a preferred way⁴. Both the paper-based and EMR has the same strategy which include record searching, collecting, reading and writing. Records retrieval becomes challenging when there is lack of training, unqualified professional, suitable equipment, low rate of EMR adoption will definitely affect services quality as this will result into long patient waiting, delay in retrieving existing records, misplaced laboratory result affecting patient satisfaction and perception of such health institution (Alzoubi, Hayati, Ahmad & Al-Hamdan, 2019).

In conclusion service quality is rated by patient satisfaction based on the kind of care given to them in health institution beginning from health information management professionals who are the public relation officers of their health institution.

Conceptual Model



Methodology

Descriptive cross-sectional study design was adopted for this study. The population of this study consists of three hundred and twenty-two (322) health information management professionals working in Health Records Department in public health institutions in Oyo State, Nigeria i.e. University College Hospital (86), Ladoke Akintola University Teaching Hospital (Lautech) (30), Primary health board (111), State hospital management board (95). Total number was adopted.

The data collected was analyzed using descriptive statistics such as frequency distribution, percentage, mean and standard deviation. Linear regression was used to analyze the hypothesis. The hypothesis was tested at 0.05 level of significance. The data were entered into Statistical Packages for Social Sciences (SPSS) version 24. The analysis is presented in tables and explained.

Presentation and Discussion of Findings

TABLE 1: Demographic Characteristics of Respondents

Gender of Respondents

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	74	23.0	23.0	23.0
	Female	248	77.0	77.0	100.0
Total		322	100.0	100.0	

Age of Respondents

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
Age	20- 25	29	9.0	9.0	9.0
	26- 30	39	12.1	12.1	21.1
	31- 35	68	21.1	21.1	42.2
	36- 40	90	28.0	28.0	70.2
	41- 45	68	21.1	21.1	91.3
	46 and above	28	8.7	8.9	100.0
Total		322	100.0	100.0	

Educational Level of Respondents

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
Educational Level	Technician	60	18.6	18.6	18.6
	OND	42	13.0	13.0	31.7
	HND	119	37.0	37.0	68.6
	Bachelor's degree	89	27.6	27.6	96.3
	Master's degree	11	3.4	3.4	99.7
	Ph.D.	1	0.3	0.3	100.0
Total		322	100.0	100.0	

Work Experience of Respondents

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
Experience	5-10	111	34.5	34.5	34.5
	11-15	104	32.3	32.3	66.8
	16-20	76	23.6	23.6	90.4
	21-25	31	9.6	9.6	100.0
Total		322	100.0	100.0	

The above table reveals the gender distribution of health information management professionals in public health institutions in Oyo State, Nigeria which include 74 male and 248 female. Followed by age distribution, 29 of the respondents are between the ages of 20 and 25 years of age. 39 of them are within the age range of 26 to 30 years of age while 68 of them are between the ages of 31 and 35 years of age. 90 of them are also within the range of 36 to 40 years of age and 68 of them are within the age of 41 and 45 years of age. Finally, 28 of them are within the age range of 46 years and above. Educational factor shows 60 respondents possess technical certification while 42 have OND degree. 119 have HND degree while 89 possess bachelor' degree. Master's degree and Ph.D. were 11 and 1 respectively. Years of experience shows 111 respondents are between 5 and 10 years of experience. 104 respondents falls between 11 and 15 years of experience. 53 of them have worked for 16 to 20 years and 31 have experience within the range of 21 and 25 years.

Research Question One: What is the level of service quality among health information management professionals in public healthcare institutions, Oyo State, Nigeria?

TABLE 2: Service Quality among Health Information Management Professionals in Public Health Institution in Oyo State

Reliability of service	VS	S	D	VD	Mean	Standard Deviation
I perform the promised practices dependably and accurately	223 (69.3%)	96 (29.8%)	1 (0.3%)	2 (0.6%)	3.68	0.513
I influence my colleague's work positively	211 (65.5%)	103 (32.0%)	6 (1.9%)	2 (0.6%)	3.62	0.557
I keep error free records	201 (62.4%)	107 (33.2%)	8 (2.5%)	6 (1.9%)	3.56	0.639
Patients have very high confidence healthcare Workers	179 (55.6%)	127 (39.4%)	4 (4.3%)	2 (0.6%)	3.50	0.613
I am sincere in solving patients' problem	220 (68.3%)	97 (30.1%)	2 (0.6%)	3 (0.9%)	3.66	0.542
Mean: 3.60						
Timeliness of service						
I have the willingness to help patients and provide prompt record	229 (71.1%)	89 (27.6%)	2 (0.6%)	2 (0.6%)	3.69	0.513
Personal attention is given to patients by physicians and other medical staff with their records	199 (61.8%)	113 (35.1%)	8 (2.5%)	2 (0.6%)	3.58	0.576
I respond to patients' request and complaints almost immediately	197 (61.2)	113 (35.1%)	8 (2.5%)	4 (1.2%)	3.56	0.610

I deliver prompt services without an appointment to our patients	188 (58.4%)	108 (33.5%)	17 (5.3%)	9 (2.8%)	3.48	0.724
I give adequate information about our patients' health status	219 (68.0%)	90 (28.0%)	11 (3.4%)	2 (0.6%)	3.63	0.582
Mean: 3.59						
Communication of service						
Adequate information regarding treatment and admission was provided by the health information management professionals	208 (64.6%)	100 (31.1%)	13 (4.0%)	1 (0.3%)	3.60	0.584
There is a clarity in staff communication	192 (59.6%)	120 (37.3%)	6 (1.9%)	4 (1.2%)	3.55	0.600
During admission, I and/or patients family members were given proper counselling to make informed decisions	177 (55.0%)	105 (32.6%)	31 (9.6%)	9 (2.8%)	3.40	0.776
Alarm systems and communication systems were in place and functioning	176 (54.7%)	98 (30.4%)	43 (13.4%)	5 (1.6%)	3.38	0.773
Mean: 3.48						
Empathy						
I individualized attention given to my patients	194 (60.2%)	101 (31.45)	22 (6.8%)	5 (1.6%)	3.50	0.694
I am always willing to help our patients	201 (62.4%)	108 (33.5%)	9 (2.8%)	4 (1.2%)	3.57	0.614
I understand the specific needs of our patients	196 (60.9%)	107 (33.2%)	10 (3.1%)	9 (2.8%)	3.52	0.707

The management provide safe feeling of patients during treatment	.92 59.6%)	.11 34.5%)	.7 5.3%)	1 0.6%)	3.53	.627
I provide the needed attention to patient at all time	.04 63.4%)	.06 32.9%)	1 2.8%)	1 0.9%)	3.59	.596
Mean: 3.54						
Grand Mean: 3.55						

Key: Very Satisfied (VS) = 4, Satisfied(S) = 3, Dissatisfied (D) = 2, Very Dissatisfied (VD) = 1

Decision Rule: 1.00 – 1.49 (very low), 1.50 – 2.49(low), 2.50 – 3.49 (High), 3.50 – 4.00 (Very High)

The first research question in this study has to do with determining the level of service quality among health information management professionals in public health institutions in Oyo State. Four indicators were used. The indicators are Reliability of service, Timeliness of service, Communication of service and Empathy. Each indicator has a mean of 3.60, 3.59, 3.48 and 3.55 respectively on a scale of 4 point scale. Out of these indicators only communication of service fell under high and the rest (reliability of service, timeliness of service and empathy) falls under very high. Overall, from the grand mean score of 3.55, we could say that the health information management professionals in public health institutions in Oyo State gives very high-quality service to their patients.

Research Question Two: What are the different patient record retrieval strategies that exist among health information management professionals in public healthcare institutions, Oyo State, Nigeria?

Patient Record Retrieval Strategies among Health Information Management Professionals in Oyo State

Record Searching	SA	A	D	SD	Mean	Standard Deviation
Customizability of the system according to users' needs	.78 55.3%)	.18 30.4%)	.13 7.1%)	.13 7.1%)	.34	.893

Additional time for data entry	.54	.14	.15	.9	.25	1.873
affects utilizing the record system	47.8%)	35.4%)	10.9%)	5.9%)		
Distributing patient-doctor	.53	.08	.16	.15	.21	1.926
communication	47.5%)	33.5%)	1.2%)	7.8%)		

Mean: 3.26

Record Collecting

Availability of records to sup	.83	.07	.1	.1	.40	0.838
patients' healthcare services	56.8%)	33.2%)	3.4%)	6.5%)		
Social support for patients to enh	.69	.14	.6	.3	.33	0.867
wholesome care	52.5%)	35.4%)	5.0%)	7.1%)		
Understanding health information	.97	.19	.1	.10	.47	0.813
enough to know what to do	61.2%)	30.7%)	1.9%)	6.2%)		

Mean: 3.40

Record Reading

Legible medical practitic	.94	.13	.6	.9	3.43	1.837
handwriting	60.2%)	28.9%)	5.0%)	5.9%)		
Types orders are clear to read leadin	.75	.08	.10	.9	3.36	1.844
less error	54.3%)	33.5%)	6.2%)	5.9%)		
All orders are done in one place	.75	.11	.10	.16	3.29	1.938
using electronic record	54.3%)	28.3%)	9.3%)	8.1%)		

Mean: 3.36

Record Writing

Benefits of electronic record	.79	.03	.9	.1	3.37	1.862
outweighs records' remote access	55.5%)	32.0%)	5.9%)	6.5%)		
Electronic record increase practice	.94	.17	.1	.10	3.44	1.831
productivity	60.2%)	30.1%)	3.4%)	6.2%)		
Electronic information equipment	.85	.16	.10	.1	3.38	1.368
give help in better	57.5%)	29.8%)	6.2%)	6.5%)		

Writing

Mean: 3.40

Grand Mean: 3.36

Source: Field Work

Key: Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SD) = 1

Decision Rule: 1.00 – 1.49 (very low), 1.50 – 2.49 (low), 2.50 – 3.49 (High), 3.50 – 4.00 (Very High)

The second research question in this study has to do with determining the patients' records retrieval strategies that exist among health information management professionals in public health institutions in Oyo State with four indicators. The indicators are Record searching, Record collecting, Record reading and Record writing. On a scale of 4, record searching has a mean score of 3.26, record collecting has mean score of 3.40, record reading has 3.36, record writing has an average score of 3.40. All of these indicators fell under high. Overall grand mean score is 3.36, we could say that the health information management professionals in public health institutions in Oyo State have high level of patients' records retrieval strategies.

Presentation of Test of Hypothesis

The null hypothesis is the one that states that there will be no significant influence of patient records retrieval strategy on service quality among health information management professionals in public healthcare institutions, Oyo State, Nigeria was tested using regression analysis and results are presented in the tables below

Hypothesis: There will be no significant influence of Patient Record Retrieval Strategies on Service quality among Health Information Management Professionals in public health institutions in Oyo State.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.421 ^a	.177	.175	6.312

a. Predictors: (Constant), RECORD RETRIEVAL STRATEGIES

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2746.678	1	2747.678	256.935	.000 ^b
	Residual	12747.732	320	39.837		
	Total	15494.410	321			

a. Dependent Variable: SERVICE QUALITY

b. Predictors: (Constant), RECORD RETRIEVAL STRATEGIES

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	50.295	1.700		29.585	.000
	RECORD RETRIEVAL STRATEGIES	.343	.041	.421	8.304	.000

a. Dependent Variable: SERVICE QUALITY

The study hypothesis investigates the influence of patients record retrieval strategies on service quality among Health Information management Professionals in public health institutions in Oyo State. The outcome of this null hypothesis is that patients record retrieval strategies is an indicator of service quality. The probability value was at 0.000. This is lesser than the actual level of significance (0.05) this study adopted to determine how an independent variable will determine a dependent variable. The relationship between patients record retrieval strategies and service quality was at 0.421. This indicated in the model summary table. This implies that there is a 42.1% relationship between patients record retrieval strategies and service quality. It also means that the relationship is positive and fair. The adjusted r^2 value is at 0.175. This means that record retrieval strategies has less significant contribution to service quality among Health Information management Professionals in health institutions in Oyo State.

Discussion of Findings

The outcome of research questions in this study is extensively expatiated upon using empirical findings to support this discussion. The first research question has its main subject of attention on service quality among health information management professionals. The four components or measures examined in this study determining service quality are; reliability of service, timeliness of service, communication of service and empathy. All the components surrounding service quality had high mean scores which remarkably are very satisfactory. The outcome of this study is in line with the statement that people who work in hospitals, in particular health information management professionals to all patients should render patient-centered services (Alzoubi, Hayati, Ahmad & Al-Hamdan, 2019).

The second research question had to do with patient record retrieval strategies among health information management professionals. There are four indicators or measures used to examine this context, it includes record searching, record collecting, record reading and record writing.

All the indicators had approximately equal high mean scores indicating agreement with positive patient record retrieval strategies. This corresponds with a statement that a record retrieval strategies begins when a health information management professional enters a query into the system. Queries are formal statements of health record needs, for example search strings in web search engines. In record retrieval a query does not uniquely identify a single object in the collection. Instead, several objects may match the query, perhaps with different degrees of relevancy.

The hypothesis is about “Patient record retrieval strategies will not significantly influence the service quality”. On this, the outcome of the study comes out significant, therefore, it means that the service quality of health information management professional significantly are influenced by the practice of patient record retrieval strategies. Several studies have reported positive significant effect of record retrieval strategies on service quality (Tang, Liu, Zhao & Wang, 2018).

Conclusion

This study revealed that service quality of health information management professional can be very satisfactory diligent patient record retrieval strategies. The retrieval strategy should be improve on because independent variable studied in the research has a great influence on dependent variable. Therefore to have a satisfactory service quality in health institution, patients health records should be available and retrieved as when needed by the authorized user using all modern technology suitable and applicable.

Recommendations

The study hereby recommended that health institution management should provide appropriate technology and modern equipment needed in all health records department to aid patient satisfactions including seminars, conferences and other health related trainings that will broaden their mind and equip them in rendering a patient-centered service that can meet up with international standard.

References

Alzoubi, M. M. Hayati, K. S. Ahmad, A. M. & Al-Hamdan, Z. M. *Total Quality Management in Health-care Context: Integrating the Literature and Directing Future Research. Risk Management and Healthcare Policy.* 12, 167-177; 2019.
<https://doi.org/10.2147/RMHP.S197038>

- Cu, A. Meister, S. Lefebvre, B. & Ridde, V. *Assessing Healthcare Access Using the Levesque's Conceptual Framework-A Scoping Review*. **International Journal for Equity in Health** 20(1): 2021. 166. <https://doi.org/10.1186/s12939-021-01416-3>
- Donabedian, A. Ann Arbor, MI. *The Definition of Quality and Approaches to Its Assessment. Vol 1, Explorations in Quality Assessment and Monitoring* **MI: Health Administration Press:** 1980. ISBN: 9780914904489. **National Center for Patient Safety Network (NCPS)**, 2005
- Griggs, K. N. Ossipova, O. Kohlios, C. P. Baccarini, A. N. Howson, E. A. Hayajneh, T. *Healthcare Blockchain System Using Smart Contracts for Secure Automated Remote Patient Monitoring*. **Journal of Medical System**. 6;42(7):130. 2018
- Halamka, J. D. Lippman, A. Ekblaw, A. *The Potential for Blockchain to Transform Electronic Health Records*. **Harvard Business Review**. 3.3; 2-5. 2017
- Larkins-Pettigrew, M. Rising, S. Strickland, C. *A Pivotal Paradigm Shift: Group Care Challenges Racial Bias in Maternity Care*. **American Journal of Obstetrics and Gynecology**. 225(1); 2021. DOI: <https://doi.org/10.1016/j.ajog.2021.04.214>
- Ma, F. Liu, X. Liu, A. Zhao, M. Huang, C. & Wang, T. *A Time and Location Correlation Incentive Scheme for Deep Data Gathering in Crowdsourcing Networks*, **Wireless Communications and Mobile Computing**. Vol. 2018, Article ID 8052620. 2018. <https://doi.org/10.1155/2018/8052620>
- Nguyen, L. K. Kumar, C. Jiang, B. Zimmermann, N. *Implementation of System Thinking in Public Policy*. **A Systematic Review**. 2023. 11(2) 64. <https://doi.org/10.3390/systems11020064>
- Shankar, A. Datta, B. & Jebarajakirthy, C. *Are the Generic Scales Enough to Measure Services of Generic Service Quality Measurement Scales to Mobile Banking Context*. **Taylor and Francis Online Journal**. 2019. 224-244.
- Soomro, B. Mangi, S. Shah, N. *Strategic Factors and Significance of Organizational Innovation and Organizational Learning in Organizational Performance*. **European Journal of Innovation Management**. 24(2): 481-506; 2020.
- Strzelecka, A. Stachura, M. Wojcik, T. Kordyzon, M. Chmielewski, J.P. Luszczki, M. & Nowak-Starz, G. *Determinants of Primary Healthcare Patients' Dissatisfaction with the*

Quality of Provided Medical Services. Annals of Agricultural and Environment Medicine.
28(1) 142; 2021.

Tang, J. Liu, A. Zhao, M. & Wang, T. *An Aggregate Signature Based Trust Routing for Data Gathering in Sensor Networks, Security and Communication Networks.* 2018, 1-30.
DOI:[10.1155/2018/6328504](https://doi.org/10.1155/2018/6328504)