Information Technology Use and Evidence-Based Practice among Librarians in University Libraries in South-West, Nigeria

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Abstract

Evidence-based practice (EBP) is a professional approach that involves the process of collecting, interpreting and integrating valid and reliable data in decision making in library practice to enhance continuous professional improvement. The concept gives additional value to library and information science in many aspects of librarianship activities and services. The study investigated information technology use and evidence-based practice among librarians in universities in South-West, Nigeria. This study adopts survey research methodology and used questionnaire for data collection. The data collected was analysed using descriptive and inferential statistics. The findings of the study revealed that the level of evidence-based practice of librarians was high on the scale of four (4). The finding further shown that information technology use influenced evidence-based practice of librarians in universities in South-West, Nigeria. The study concluded that information technology use is crucial to evidence-based practice of librarians in universities in South-West, Nigeria. The study recommended that appropriate policies should be introduced and implemented by library management and professional librarians in continuous training and retraining of librarians on evidence-based practice implementation and information technology use.

Keywords: Evidence-based Librarianship; Evidence-based practice; Information technology use; Mission; Organizational culture.

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1. Introduction

Library and Information Science (LIS) is one of the most important human disciplines, and large amount of money is spent annually on the acquisition of high-quality information resources resulting in exponential growth in LIS literature. Regularly, new and more effective services, devices and procedures are put in place. One major objective behind these efforts is to assist LIS professionals provide the best possible service to its diverse and teaming patrons. In addition to using traditional and well-established procedures and practices, LIS professionals are adopting innovative techniques that are based on best practices as well as solid research based-practice. Evidence-based practice is one of such techniques and it is quickly gaining popularity due to its ability to effectively handle LIS issues and enhance better service to library users.

The concept of evidence-based practice originated from medicine in the early 1990s, known as Evidence-Based Medicine (EBM). EBM anchors on merging what is learned from the literature with what is observed in daily practice in other to produce a better result that can be used to inform medical practice. Since then, the movement has extended to other fields of knowledge such as nursing, rehabilitation and even librarianship. In library and information science, Evidence-Based Practice (EBP) is also known as evidence-based Library Practice (EBLIP). EBP involves a method of resolving daily problems in the library profession through the integration of experience and research. It involves asking questions, finding evidence to answer the questions and applying that knowledge to library practice. Evidence-based practice supports librarians in problem-solving and decision-making process. The concept provides additional value to a library in numerous aspects of library activities and services [1]. The act of evidence gathering activities is a good practice. It is already in practice but the problem is to engage librarians with evidence-based activities [2]. Due to some factors, some librarians are sceptical with research methodology and evidence-based activities. Librarians prefer to use assumptions and personal experience alone as a basis for library decision making. [3], opined that this behaviour stems from lack of research skills and ability to analyse data. The librarians' experience in applying EBP was reported by [4] who developed a model to capture the critical variation of librarians' experiences at applying formal research skill and method to assist in decision-making and establish best practice. The main concern of EBP in decision making is to find tools that support the processes and the librarians' readiness to implement it [5]. There are numerous kinds of evidence used by librarians and various evidence sources that library can refer to in engaging library practice with evidence-based activities. The type of evidence used is based on the librarians' needs. When a librarian understands which evidence is the best for the context of the problem, they will seek deeper information and build knowledge on that matter. The available evidence can then be evaluated and use. References[6], articulates five stages of evidence-based practice which are as follows: identification of a problem or question, searching for the best available evidence to answer the question, appraising the evidence for validity and usefulness, applying the evidence, and evaluating the outcome of the intervention. These steps are explained below:

Identification of a problem or question: In this section, one of the challenging steps in practicing EBLIP may be the translation of a librarianship's question into answerable one. During library practice, people come across a particular question for which they would like to answer. The question may be on library such as service provision, building high quality collection or education of library users in any of the library units (readers

services section, cataloguing and classification or collection development).

Searching for evidence, to answer the question: once the librarianship question has been formulated, the next stage is to search for relevant evidence that will answer the question. There are several sources of information that may be of help. For instance, the librarian may resort to asking professional colleagues or experts, however, the quality of information obtained from this source is variable [7]. In addition, data bases that focus on library and information science literature (LIS) may be consulted., web resources, pre-print, LIS abstract, and subject repository may hold valuable content. Statistics taken on daily library practice may also be a good source of evidence [8]. Appraising the evidence for validity and usefulness: After obtaining relevant articles on a subject, the next stage is to appraise the evidence for its validity and usefulness. Appraisal is putting away prejudices regarding the source or nature of evidence that are available. There is the need to separate what is significant from what is not. Critical appraisal therefore takes care of three important factors: which are validity, reliability and applicability.

Applying the evidence: Having conducted a literature search, and found some relevant articles and evaluated them for validity and usefulness, the librarian then decides whether that evidence can be applied to answer the question. The evidence can be applied at three different levels. At the first level, for instance, the evidence may yield an improved understanding of the question. That is, the librarian may not find the answer but the evidence may enhance the comprehension of the issue and help him to better understand and answer the question. At the second level, the evidence obtained may not be directly applied to the question and there may be the need to locally validate the evidence. In the third level, the evidence may be directly applicable to the situation at hand.

Incorporating evidence-based practice into library activities has been found to have the following benefits: it helps in prioritizing the needs of library users, helps in better decision making that saves the time of the library users and helps to keep the practice of LIS current and relevant EBP fosters lifelong learning and critical thinking, besides, it leads to the generation of new knowledge [9]. Having identified the benefits of EBP, there seems to be the need for the involvement of librarians. In spite of the importance of EBP, some scholars such as [10, 1], noticed that the active engagement of librarians in EBP is low.

Information Technology Use (ITU) refers to computing technologies such as networking, hardware, software, the internet or the people that work with these technologies for receiving, storing, processing, transmitting and presentation of information [11]. References [12] views information technology as a short hand for computers, software, hardware, satellites links and related systems that allow people to access and share information and knowledge in a variety of forms. Information Technology (IT) includes radio, scanners, modems, mouse, printers, handsets, television, word processing and operating system software. Computers provides the processing, storage and retrieval facilities while telecommuting provides the facilities for transferring the information to those that need it. ITU is the deploying of information technology equipment to carry out routine activities. ITU can be a means of facilitate the right to information [13]. The use of IT to facilitate the right to information can also be applied in organization like the public university libraries. IT can enhance organization to produce, adapt, access and apply a greater amount of information and offer enormous opportunities for enhancing productivity [14]. References [15] is of the view that IT equipment can be used to deliver services to

library users.   Also, IT can be used in all the various unit of the library. These units include: acquisition; circulation; cataloguing; and bindery. These activities cover administrative services, readers services and special services. Administrative services include budget preparation, selection and training of staff, library development planning, and supervision. These types of services can be managed by the help of integrated library automation. In the reference section for example, IT can be used to train reference librarians and can be used as medium for digital reference platform instead of the traditional method of waiting for the references desk. The reference librarians can also deliver reference services through electronically mediated platform.

1.1. Objective of the Study

The two objectives for this study were to:

1. Determine the evidence-based practice of librarians in the university libraries in South-West, Nigeria.
2. Find out the Information Technology use of librarians in university libraries in South-West, Nigeria.

To achieve the identified objectives, the following research questions were answered in the study:

1. What is the level of evidence-based practice of librarians in the universities in South-West, Nigeria?.
2. What is the information technology use of librarians in universities in South-West, Nigeria?.

2. Literature Review

Evidence-Based Practice (EBP) has three distinct words with different connotations: "Evidence', 'Based' and 'Practice'. The concept of' evidence' has been defined in a number of ways. From the legal perspective, [16], defines evidence as anything which may be observed by the magistrate or the judge to assist in the decision making. [17], define evidence as "anything that establishes a fact or gives reason for believing in something". The etymology of the word 'evidence' is rooted in the concept of experience, relating to what is manifest and obvious as put forward [18]. In Library and Information Science, however, "evidence" comprises of results of research findings, professional knowledge, and local data [19]. [20] Proposes that evidence in Library and Information Science is more than research findings but consists of two types: performance evidence (related to operational aspect of LIS service and may take the form of quantitative and qualitative). This type of evidence includes inputs, outputs, outcomes, and impacts of specific library services. The other type of evidence is research evidence which comprises findings of empirical studies. This type of evidence includes published research studies, as well as in-house research studies, with the main qualification being the rigor of the research, so as to be applicable and useful. According to [21], the evidence base for library and information science is located within three search domains: the library and information literature; the grey literature for LIS profession and the relevant literatures outside the field of LIS such as the literatures of the social, behavioural, education, or management sciences. References [22] grouped evidence sources that librarians use into hard evidence and soft evidence. Hard evidence sources are usually scientific in nature and they include published literature, statistics, facts, while soft evidence comprises of inputs from colleagues, tacit knowledge (experience, intuition, feedback from users and observations). Librarians could use any of these evidence sources to inform practice.

The word "based" on the other hand, connotes a foundation. In case of EBP delivery, it means that evidence should be used as the foundation or the centre of library practice. In contrast, a "practice" is seen as the act of doing [23]. In EBP library practice, practice entails the act of performing evidence-based librarianship actions.

References [22] defines evidence-based practice as an approach to professional practice that involves a structured process of collecting, interpreting and applying valid and reliable research findings and evidence to support decision-making to enhance continuous service improvement in professional practice. References [23] opined that EBP is about making better decisions, informing actions that has the desired impact. Therefore, after critically analysing EBP definition from the definitions enumerated above, EBP is defined as a problem-solving approach where the practitioners need to ask a question, relating to his professional practice, then gather/access evidence (appraising and synthesizing), combines evidence with experiences (of practitioner and target group), and applying what has been learned from evidence in making decisions. These definitions therefore, suggest that for librarians need to possess complex level of thinking or understanding in order to correctly isolate relevant contextual issues that influence utilization of research evidence for decision making [24], as well as necessary expertise and experience.

Misconceptions about evidence-based practice are some of the major barriers to its adoption and implementation. These misconceptions in most cases are as a result of limited and narrow understanding of the principle of evidence–based practice. Some of these misconceptions as highlighted by [25] are that (1) Evidence-based Practice ignores the practitioner's professional experience, (2) that it is all about numbers and statistics, (3) that practitioners need to make decisions quickly; (4) it do not have time for evidence-based practice, also, that each organization is unique, so the usefulness of scientific evidence is limited. Ever since the introduction and implementation of EBP, the challenges and barriers to its practice never stop [26]. The knowledge of barriers to EBP in library and information science will not only help in closing prevailing knowledge-to-practice-gap, but could increase compliance with EBP initiatives [27]. References [28] founds out that lack of time was the most common reason given by professionals for not consulting research literatures for evidence use. Other barriers include inadequate information sources at work places such as lack of access to information required for EBP, lack of access to internet to access current information that practice can be based on, as well as inadequate sources of access to evidence [29, 30].

References [31] established that the EBP process involves five steps; which are (1) to define the problem; (2) to find the evidence; (3) critically appraise the evidence; (4) apply the appraised /evidence to the problem; and (5) quality assurance (evaluate or assess the plan). The processes are also referred to as the 5As model because it goes through 5 stages of Ask, Acquire, Appraise, Apply and Assess [32]. [33] proposed a more corporate and collaborative seven basic steps in EBP, which include: Ask, Collect the best and most pertinent evidence, critically analyse and rate the evidence, Integrate the evidence with your own expertise, implement your practice change if authorized, evaluate how practice change has influenced or affected your practice area, disseminate and share this evidence with your peers and colleagues. The processes are explained below:

Information technology refers to computing technology, such as networking, hardware, software, the internet or the people that work with these technologies for receiving, storing, processing, transmitting and presentation of

information [34]. Similarly, [35], defines IT as any computer-based tool that facilitates the search, retrieval and dissemination of information to information seekers and as well support the information and information processing needs of individual, group and organization. According to him IT include radio, scanners, modems, mouse, screens, printers, handsets, television, word processing and operating system software etc. Computer provides the processing, storage and retrieval facilities while telecommunications provides the facilities for transferring the information to those that need it. The advent of IT has improved efficiency in the performance of routine tasks in the library and many other aspects of the economy such education, health, political and social aspects as observed by [36]. As managers oversee resource coordination and allocation, it can be difficult to coordinate organizational activities across various projects, but information technology can be used to assist in this process. [37], opined that IT is used to facilitate communication, achievement of organizational goals, improve integration, enhance productivity and service delivery. In academic libraries, IT helps to improve the efficiency of library services, global integration of library services, universal access to information, digitalization of document for preservation, space saving and has also encouraged/ networking and global resource sharing [38]. Organization today uses IT to find solutions to business quality and compete for new markets in our global and business environment [39]. Moreover, information technology has also be seen as a powerful force that opens exciting opportunities for corporate organizations to achieve their missions and goals [37]. Hence, it is imperative for organizational leadership particularly in academic library to obtain an overall appreciation of the potential of IT and link the acquisition and utilization to the academic libraries mission. Despite the benefits of IT use in organizations, users' resistance has been identified as a salient reason for the failure of its adoption. Scholars attest to the fact that people have developed a resistance toward the use of IT in accessing information. [40], attributed the failure of adoption of IT to users' resistance. Users' resistance is an adverse reaction or the opposition of users to perceived change related to a new information system implementation. This resistance according to [41] couple with little incentive to use IT has posed a major difficulty that persists among many professionals. Therefore, it is important for librarians to understand the reason for resistance and find a solution, find lasting solution to it. [40], outlined the factors of ITU resistance as: culture, technological, and hierarchical. In the opinion of [42], it is the fear of the feeling of anxiety connected with the introduction of information technology. [43], therefore suggested that organization has to go through system development life cycle such as feasibility study, system analysis, system design, system implementation integration and testing and system audit to be able optimized the use of information technology.Further, constraints to effective IT use in university libraries have been noticed; such constraints include negative attitudes of the librarians to adoption of IT, incessant technical problem in the course of its use, paucity of fund for maintenance and poor maintenance culture [44]. In line with this, [45], highlighted inadequate IT facilities in the libraries, lack of staff with appropriate skills to manage IT equipment both at the strategic and operational levels, absence of institutional policies and strategies to support and guide the information resources and deal with issues relating to copyright in a digital information environment. In this study, information technology use is hinged on types of information technology use, purpose of use and extent of use. In a typical university library, information technology use is illustrated through the accomplishment of a whole piece of work. For instance, in the circulation section of the library, where librarians have to register library users, disseminate information to students and taking statistics of library users. The personnel working in this unit of the library can make use of information technology to enhance their work.

3. Methodology

The population of this study consists of two hundred and twenty six (226) professional librarians from public universities libraries in South-West Nigeria. Total enumeration sampling technique was used in this study because the researcher is interested in the total enumeration of all the public universities in the six South-Western states of Nigeria. Total enumeration sampling according to [46], is a kind of sampling method in which a researcher chooses to examine the entire population that has a common set of characteristics. [46], was of the opinion that the use of total enumeration sampling technique is carried out when the population under study has a manageable size. The researcher's choice for total enumeration was based on the small size of the population which was manageable in terms of cost. Also the choice for excluding the library officers is because most of them do not involve in core library practice such as cataloguing, users education and so on.

A self-structured questionnaire was used to collect data and divided into three sections. The first section consists of demographic profiles such as age, gender, year of service, educational background and working experiences. The second section comprises of eighteen (18) items with four (4) liker scale. While the last section consists of eighteen (18) items drawn from the dimensions of information technology use with four liker response scale.

Data was extracted and entered into IBM SPPS statistical version 20. Validity and reliability test were carried out to confirm the content of the questionnaire. Pre-test were conducted to ensure the quality and validity of the questionnaire. Data analysis for this study comprised of descriptive statistics. The descriptive statistics were used to delineate demographic characteristics of the librarians.

3.1 Reliability of instrument

Reliability of an instrument is the extent to which a measurement of a phenomenon provides consistent results and how close multiple measurements of variables are to each other [47].

Table 3.3: Cronbach's Alpha Reliability test of the Research instrument.

S/N	Variables	Number of Items	Cronbach's Alpha Coeficiency	Comment
1.	Evidence-based Practice	17	.943	Reliable
2	Organizational Culture	24	.913	Reliable
3	Information Technology Use	18	.862	Reliable

Source: Field Study (2022)

Table 3.2: Construct Validity Test of Research Instrument.

S/N	Variables	Number of Items	Average Variance Extracted (AVE)	Kaiser Meyer Olkin (KMO)	Bartlett's Test of Sphericity	Composite Reliability	Sig
1.	**Evidence-based practice**	**17**	**0.643**	**0.744**	**471.411**	**0.910**	**0.000**
	Knowledge of Evidence-based Practice	6	0.608	0.820	91783	0.902	0.000
	Skill in Evidence-based practice	6	0.618	0.824	98.643	0.906	0.000
	Practice in Evidence based	5	0.703	0.877	88.504	0.922	0.000
2.	Information Technology (IT) Use	18	0.713	0.646	436.375	0.898	0.000
	Type of IT tools use	6	0.757	0.667	62.840	0.898	0.000
	Purpose of use	6	0.662	0.691	127.209	0.920	0.000
	Extent of use	6	0.720	0.609	90.348	0.877	0.000

4. Findings and Discussion

Research Question One: What is the level of evidence-based practice of librarians in the universities in South-West, Nigeria?

Table 4.2: Evidence-based Practice of librarians.

Evidence-Based Practice	Very high level (4)	High level (3)	Low level (2)	Very low level (1)	Mean	Std.
Knowledge					**3.45**	**0.537**
My knowledge awareness of major information types and sources is	98 (55.7%)	77 (43.8%)	0	1 (0.6%)	3.55	0.533
My knowledge of how to retrieve evidence is	83 (47.2%)	92 (52.3%)	1 (0.6%)	0	3.47	0.512
My knowledge in applying evidence is	81 (46.0%)	92 (52.3%)	3 (1.7%)	0	3.44	0.531
My knowledge of how to appraise evidence is	78 (44.3%)	95 (54.0%)	3 (1.7%)	0	3.43	0.529
My level of information sharing with colleagues is	83 (47.2%)	86 (48.9%)	7 (4.0%)	0	3.43	0.572
My level of evaluation of the outcome of my practice is	76 (43.2%)	95 (54.0%)	5 (2.8%)	0	3.40	0.547
Skills					**3.40**	**0.574**
The level of my ability to identify information sources is	101 (57.4%)	70 (39.8%)	4 (2.3%)	1 (0.6%)	3.54	0.574
The level of my ability to retrieve evidence is	82 (46.6%)	87 (49.4%)	7 (4.0%)	0	3.43	0.571
The level of my skill in applying the evidence is	73 (41.5%)	96 (54.5%)	7 (4.0%)	0	3.38	0.562
The level of skill in sharing the ideas and information with my other colleagues is	73 (41.5%)	96 (54.5%)	5 (2.8%)	2 (1.1%)	3.36	0.599
The level of my skill in evaluating my performance is	70 (39.8%)	98 (55.7%)	7 (4.0%)	1 (0.6%)	3.35	0.585

The level of my ability to determine how valid (close to the truth) the evidence is	65 (36.9%)	104 (59.1%)	7 (4.0%)	0	3.33	0.550
Practice					**3.32**	**0.599**
My competency in evaluating the outcome of my practice is	77 (43.8%)	88 (50.0%)	9 (5.1%)	2 (1.1%)	3.36	0.636
My competency in retrieving evidence once I have formulated the question is	70 (39.8%)	95 (54.0%)	11 (6.3%)	0	3.34	0.591
The level of my ability to apply the evidence retrieved to inform my practice is	71 (40.3%)	95 (54.0%)	9 (5.1%)	1 (0.6%)	3.34	0.603
The level of my ability in sharing the evidence retrieved with other librarians is	69 (39.2%)	97 (55.1%)	8 (4.5%)	2 (1.1%)	3.32	0.617
The level of my ability in formulating answerable question at the beginning so as to fill the gap in practice is	61 (34.7%)	106 (60.2%)	9 (5.1%)	0	3.30	0.559
My capability to critically appraise the worthiness of the evidence that has been retrieved	61 (34.7%)	102 (58.5%)	13 (7.4%)	0	3.27	0.590
Grand Mean					**3.39**	**0.570**

Source: Researcher's Field Survey, 2023

Decision rule: 1.0 - 1.74 = Very low; 1.75 – 2.49 = Low; 2.5 – 3.24 = High, 3.25 – 4.0 = Very high.

Librarians were asked to indicate their level of evidence-based practice in South-West, Nigeria in Table 4.2. The result indicates high level of evidence-based practice of librarians in university libraries in South-West, Nigeria (3.39, SD = 0.570), on a scale of 4. Evidence-based practice was divided into three dimensions namely knowledge, skills and practice. The average mean values for each of the evidence-based practice constructs were also calculated. Of the three dimensions of evidence-based practice measured, knowledge was rated the highest (3.45) while practice had the lowest rating (3.32) among the librarians.

Research Question Two: What is the information technology use of librarians in university libraries in South-West, Nigeria?

Table 4.4: Information Technology Use of librarians.

IT tools used	Strongly agree (4)	Agree (3)	Disagree (2)	Strongly disagree (1)	Mean	Std.
Purpose of use					**3.63**	**0.565**
For better library practice	137 (77.8%)	36 (20.5%)	2 (1.1%)	1 (0.6%)	3.76	0.493
To meet up with the IT Age Demand	127 (72.2%)	49 (27.8%)	0	0	3.72	0.449
Operational efficiency	129 (73.3%)	41 (23.3%)	5 (2.8%)	1 (0.6%)	3.69	0.553
Flexibility of information search	117 (66.5%)	56 (31.8%)	2 (1.1%)	1 (0.6%)	3.64	0.537
Accuracy of library services	114 (64.8%)	57 (32.4%)	5 (2.8%)	0	3.62	0.542
Error-free services	95 (54.0%)	57 (32.4%)	17 (9.7%)	7 (4.0%)	3.36	0.817
Type of IT tools use					**3.59**	**0.605**
Computer	153 (86.9%)	22 (12.5%)	0	1 (0.6%)	3.86	0.396
Electronic database	127 (72.2%)	46 (26.1%)	2 (1.1%)	1 (0.6%)	3.70	0.518
Smartphone	120 (68.2%)	52 (29.5%)	3 (1.7%)	1 (0.6%)	3.65	0.544
Scanner	121 (68.8%)	47 (26.7%)	7 (4.0%)	1 (0.6%)	3.64	0.589
Multiple Projector	90 (51.1%)	65 (36.9%)	17 (9.7%)	4 (2.3%)	3.37	0.752
Camera	89 (50.6%)	59 (33.5%)	21 (11.9%)	7 (4.0%)	3.31	0.833
	Very highextent (4)	**High extent (3)**	**Low extent (2)**	**Very low extent (1)**	**Mean**	**Std.**
Extent of use					**3.40**	**0.714**
Computer	139 (79.0%)	36 (20.5%)	1 (0.6%)	0	3.78	0.426
Smartphone	113 (64.2%)	54 (30.7%)	6 (3.4%)	3 (1.7%)	3.57	0.646
Network	112 (63.6%)	49 (27.8%)	13 (7.4%)	2 (1.1%)	3.54	0.683
Scanner	83 (47.2%)	64 (36.4%)	25 (14.2%)	4 (2.3%)	3.28	0.792
Projector	72 (40.9%)	65 (36.9%)	33 (18.8%)	6 (3.4%)	3.15	0.845
Camera	64 (36.4%)	67 (38.1%)	35 (19.9%)	10 (5.7%)	3.05	0.890
Grand Mean					**3.54**	**0.628**

Source: Researcher's Field Survey, 2023

Decision Rule: 1.0 - 1.74 = Strongly disagree and Very low extent; 1.75 – 2.49 = Disagree and low extent; 2.50 – 3.24 = Agree and high extent; 3.25 – 4.0 = Strongly agree and very high extent.

Table 4.4 reveals that information technology use has a very high usage in university libraries in South-West, Nigeria ($\overline{x}$ = 3.54, SD = 0.628). Some of the information technology used in university libraries include

computer ($\overline{x}$ =3.86), electronic database ($\overline{x}$ =3.70) and smartphone ($\overline{x}$ = 3.65). Table 4.4 also reveals that computer ($\overline{x}$ = 3.78) and smartphone ($\overline{x}$ = 3.57) were used to a very high extent. The purpose of information technology use was also presented in Table 4.4. For better library practice was rated the highest with a mean score of ($\overline{x}$ = 3.76), while error-free services was rated the lowest ($\overline{x}$ = 3.36).

5. Discussion of findings

Research Question one: What is the level of evidence-based practice of librarians in the universities in South-West, Nigeria.

Research question one sought to find out the level of evidence-based practice of librarians in the universities in South-West, Nigeria. The findings showed high level of evidence-based practice of librarians in university libraries in South-West Nigeria. Participants agreed that knowledge, skill and practice were involved in evidence-based practice uptake. The findings are in line with theory of knowing in practice of [48] which opined that knowledge, skill and practice are the three prominent indicators that can be used to measure practice. However. the evidence-based practice indicator that was rated highest among librarians is knowledge. Under knowledge, the librarians agreed that they have the awareness of major information types and sources with the mean score of. This finding is in agreement with [5] study that affirms that librarians are relatively knowledgeable about evidence-based practice and skilled in identifying appropriate resources for evidence-based practice also that librarians can identify and retrieve evidence from literature and from various sources. The finding also indicated that librarians have the knowledge of how to retrieve evidence. The finding confirmed [1] that revealed that librarians can retrieve evidence and use them for various purposes. Librarians agreed that they have the knowledge in applying evidence. The finding also affirmed [49] study reveals that librarians involved themselves in some form of EBP activities such as informally collect evidence from stakeholders, use evidence to impact knowledge and also use social circle network to access evidence that can support their information needs. Librarians agreed that they are knowledgeable at appraising evidence. The finding agreed with [50] study that submitted that librarians prepare evidence summaries, provide searching services and also help individual to build critical appraisal skill to assess the increasing amount of information. knowledge of sharing information with colleagues. and knowledge of evaluation of the outcome of my practice. This finding is in line with [51] study that affirmed that librarians evaluate the outcome of their practice and that such practice has helped the librarians to construct its library strategic planning which has positively enhanced the library management system.

In addition to the finding, librarians agreed that they have a high level skill at identifying information sources, retrieving evidence, critical appraisal, applying evidence, sharing of evidence, and evaluating performance. This finding agreed with [52], study that revealed that librarians must be familiar with various evidence sources, skilful in resource selection and possess skill for effective commutation. While, [1], study that revealed that librarians need to have a good evidence-based skill in literature searching.

Furthermore, the finding revealed that librarians indicated their involvement in the practice of Evidence-Based Practice with formulating answerable question at the beginning so as to fill the gap in practice. competency in

retrieving evidence once the question has been formulated, capability to critically appraise the worthiness of the evidence that has been retrieved, ability to apply the evidence retrieved to inform their practice, ability in sharing the evidence retrieved with other librarians, and competency in evaluating the outcome of their practice, ($\bar{x} = 3.36$). These findings surported the positions of [53, 1, 49], which revealed that librarian involved themselves in evidence-based activities such as supporting evidence based practice, searching for evidence from different sources, engaging in critical appraisal of evidence, applying various types of evidences to inform practice, sharing the evidences and evaluating the outcome of the intervention. This result suggests the need for librarians in university libraries in South-West, Nigeria to sustain their performance in the process of using research results, data, and other valid evidences in decision making in library practice.

Research Question 2: What is the information technology use of librarians in university libraries in South-West, Nigeria?

Research question three sought to find out the information technology use of librarians in university libraries in South-west, Nigeria. The result outcomes revealed that librarians agreed that they often use various information technology for various purposes. The finding is line with technology Acceptance Model theory of [54] which opined that perceived usefulness is a factor to be considered before adopting any information technology. The finding also corroborated [55] study which revealed that information technology is used for various purposes such as sending and receiving information in the library.

Consequently, the finding showed that librarians agreed that they used information technology for various purposes, which include, for better library practice, to meet up with the IT age demand, operational efficiency, flexibility and information search, accuracy of library services, and for error-free services, These findings confirmed studies of [56, 57] which revealed that information technology was used to enhance innovation performance, enhance accuracy, improve quality of information, reduce error, Lessing administrative demand, used for library management and sourcing information, send and receive information.

The findings also showed that librarians agreed that they use some information technology tools in university libraries which include computer, electronic database ($\bar{x} = 3.70$), and smartphone, scanner, multiple projector, and camera, This finding is in line with [58] that revealed that information technology tools comprised of internet, computers, radio, telephone, projectors, and television. However, computer and smartphones were used to a very high extent.

6. Conclusion

The study established information technology use contributed to the practice of Evidence-based practice of librarians in universities in South-West, Nigeria. The study concluded that evidence-based practice cannot be achieved without recourse to a functional and effective information technology use. It has also been discovered in the study that when the organizational culture is strong, librarians will be engaged in evidence-based activities. Conclusively, information technology use is significant to evidence-based practice accomplishment. It is therefore imperative for education institutions like the library to improve on information technology use so as

to enhance evidence-based practice of librarians in universities in South-West, Nigeria.

Finally, this study has revealed that a significant and positive relationship exist between information technology use and evidence-based practice of librarians in universities in South-West, Nigeria. Sustaining a culture of information technology use, therefore among librarians will not only enhance an improved work environment of librarians, but will also avail the librarians to render quality service to diverse library users.

7. Recommendations

The findings of this study necessitate certain recommendations that are of value for evidence-based practice improvement and sustainability in the university library systems. Hence, this study recommends the following:

1. State Government in South-West, university librarians, and professional librarians should enact innovative strategies toward optimal improvements in evidence-based information practice in the dimensions of knowledge, skill and practice.

1. Appropriate modalities should be put in place by university library management and librarians to monitor and evaluate librarians' knowledge as to curtail any shortcoming that could lead to low evidence–based practice activities in all sections of the university libraries.
2. The study recommends that appropriate policies should be introduced and implemented by library management and professional librarians in continuous training and retraining of librarians on evidence based practice implementation and information technology use.

8. Suggestions for Further Studies

1. Further research effort could be tailored to private universities in South-West, Nigeria.
2. The same study can be repeated within the South-East, geopolitical region in Nigeria.
3. Other studies could be carried out using other cultural dimensions such as leadership style, staff attitude and motivation.

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