



Level Of Satisfaction With online Public Access Catalogue(Opac) Utilization By Undergraduate Students In Selected University Libraries In Ogun And Oyo States South-West, Nigeria

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ABSTRACT

This study investigates the level of satisfaction with Online Public Access Catalogue (OPAC) utilization by undergraduate students in Federal university of Agriculture (FUNAAB) and University of Ibadan (UI) libraries in Ogun and Oyo States, South-West of Nigeria; and the effects on undergraduate students. This study adopted the survey design. Multi-stage and proportionate allocation sampling techniques were used to determine the sample size of the population. A total of N=149 of the sample size were drawn from the population of 2,972 using questionnaire as validated survey instruments for data collection. The major findings revealed that in both universities, male undergraduates were more than their female counterparts, majority were in the age bracket of 16-20 years, mostly single, they had very high OPAC awareness, were highly satisfied with the conducive library environments and usefulness of OPA; but were not satisfied with library OPAC use due to unavailability of library staff at the OPAC Terminal to assist them when necessary, difficult design of library OPAC and slow delivery of search results. Based on the findings, there are implications for theory, research and practice. For theory and research, the findings suggest the use of Technology Acceptance Model in the study of OPAC level of satisfaction. In the area of practice, the findings highlight the importance of perceived usefulness of library OPAC, recommend strategies to help improve undergraduate students' level of satisfaction with perceived ease of OPAC system which they deemed difficult so as to enable undergraduate students get the maximum benefits of library PAC.

Keywords: academic library, level of satisfaction, OPAC Use, Undergraduate students, Nigeria.

INTRODUCTION

The ever-increasing growth of library information seekers has prompted academic libraries all over the world to strategize towards satisfying their demanding information quests with modern methods which delivers information at a timely and convenient rate irrespective of their geographic locations of the library users. The university libraries are the main focal point of the parent institutions as they are the provider of all academic information resources which supports all academic activities such as research, teaching and learning. [1] reiterates that the university libraries generally, are those libraries attached to universities to support teaching, learning and research.

The undergraduate students constitute the largest number of library users and they also have diverse information needs which they always want to satisfy quickly. The library card catalogue cannot satisfy their speedy information needs as it poses physical limitation on access as undergraduate students must visit the library to search the catalogues rigorously for information on library holdings. With card catalogues, this category of students is expected to know how to search and retrieve the needed information from the library card catalogue not taking into consideration that undergraduate students come in guises as some may be novices and others may be not. It also takes a lot of time to access.

The introduction of information technologies to university libraries brought about the Online Public Access Catalogue (OPAC) which enable undergraduate students and other library patrons to access the library OPACs through a computer terminal for several benefits. [2] viewed OPAC as an imperative device in the libraries to offer a moral support of the clients. The researchers of this study, view the Online Public Access Catalogue (OPAC) as an electronic information



system that acts as a discovery tool which help undergraduate students and other library users to know about their library information holdings and in the same vein expose some unknown facts about the library information resources which are very useful for their academic pursuits. The basic purpose of the OPAC is to create a database of library holdings which provides an online catalogue to help undergraduates and other library users in identifying and searching information resources. Historically, Library OPACs first emerged in the late 1970s and early 1980s in USA, and had gone through several cycles of change and development [3]. These several changes are referred to as generation and all aimed at OPACs significant improvements. Currently, the third generation OPACs incorporates features that are characterized by the facilities of World Wide Web as OPACs can be assessed by author, title, subject, and keyword which is an added advantage over Card catalogues which is only searched by author, title and subject. With the above advantage, OPAC undergraduate users can extend their search by using Boolean operator (AND, OR, NOT) and they can combine search strategies (like: title and author, subject and author). OPAC users may limit their search result by such features as publication date, type of material (examples: magazines, book, video), language, or reading level, and they can sort by author, title, and publication date.

It is faster to search the library OPAC than the library card catalogues and can be accessed from anywhere in the world. Generally, OPAC allows user to search the library's catalogue and also provide some other facilities such as checking borrower records, reserving reading materials, allow users to print, download or export records to an e-mail account, access and retrieve vital information on the location of such library information resources in the library thereby saving the time of undergraduate students and other users e.t.c. The Online Public Access Catalogues (OPACs), is gradually replacing the card catalogue since its emergence in the 1970s.

The utilization and satisfaction level of undergraduate students with Online Public Access Catalogue (OPAC) being an information retrieval system must be accessed as these key factors determine if they would come back to use the system or not. [4] refers satisfaction as how users feel after using information resources and services and their willingness to return to the library when next they need information. In the same vein, [5] stated that, users' satisfaction could be considered as the satisfaction users derive from the library by using the various types of information resources and services to fulfill their information needs for their various daily activities. The library conducive environment which includes overall general cleanliness of the library facilities such as toilets, adequate water supply, serene atmosphere, well illuminated reading Halls, comfortable chairs and tables, functional computers, available internet access or adequate electronic information resources and other physical or tangible evidence which undergraduate students judge for themselves and conclude that the library would offer them quality services can influence their level of satisfaction with OPAC Use.

Also, undergraduate students' expectation of timeliness and competent services from library staff and information retrieval system as they are always in haste to have their information quest satisfied as fast as possible. They rely and expect library staff most times to be knowledgeable and be committed and willing to assist them in locating needed materials and information quickly and efficiently. When users perceive that the library staff are competent, they will be confident and feel assured that their challenges will be easily handled and resolved, leading to greater satisfaction with the services. But if on the contrary library staff are not well equipped and positioned to help undergraduate students in satisfying their information quest easily and promptly, they would be unable to access the vital library OPAC.

Thus, the availability and utilization of OPAC has great influence which could be positive or negative on undergraduate students' level of satisfaction with OPAC as information retrieval system. The above fact is supported by [6] opinion that the level of using the library depends on users' satisfaction with the available information resources and services rendered to them. While, [7], view users' satisfaction of library information resources and services as a way in which users judge the adequacy of the library information resources and services rendered to them and also if their expectations are provided to them.

With all the numerous advantages of library OPAC, several authors have conducted studies on the various problems faced by undergraduate students and other library OPAC users in their designated libraries while browsing the Library OPAC. [8] study found that, one of the major constraints of the use of OPAC is lack of awareness between user communities. [9] studied the problems faced by the Online Public Access Catalogue (OPAC) Users in Sri Lankan University Libraries that there is no proper user education programme to boost up the OPAC usage, no authority control for author or title, not using vocabulary control standers, no direct link for the OPAC from the university home page, and lack of enough terminals. [10] considered difficulty in conducting searches on OPAC and difference in OPAC interface design and library Website interface design as part of factors affecting use of OPAC.

It is imperative to conduct a study on the level of satisfaction on OPAC Use by undergraduate students in two selected university libraries in Ogun and Oyo States, South-west, Nigeria.

Objective of the Study

The main objective is to investigate the utilization and level of satisfaction with Library Online Public Access Catalogue by undergraduate students in two selected libraries in Ogun and Oyo State, South-West of Nigeria.

The specific objectives are to:

1. determine undergraduate students' level of satisfaction with OPAC use in two selected libraries in Ogun and Oyo states, South-West, Nigeria.
2. determine the purposes of OPAC use by undergraduate students in two selected libraries in Ogun and Oyo states, South-West, Nigeria.
3. determine the level of OPAC awareness by undergraduate students in two selected libraries in Ogun and Oyo states, South-West, Nigeria.
4. investigate the challenges associated with the utilization and level of satisfaction with Library Online Public Access Catalogue by undergraduate students in two selected libraries in Ogun and Oyo States, South-West of Nigeria.

Research Questions

1. What is the level of undergraduate students' satisfaction with OPAC use in two selected libraries in Ogun and Oyo states, South-West, Nigeria?
2. What are the purposes of OPAC use by undergraduate students in two selected libraries in Ogun and Oyo states, South-West, Nigeria?
3. What is the level of OPAC awareness by undergraduate students in two selected libraries in Ogun and Oyo states, South-West, Nigeria?
4. What are the challenges associated with the utilization and level of satisfaction with Library Online Public Access Catalogue by undergraduate students in two selected libraries in Ogun and Oyo States, South-West of Nigeria?

Statement of the Problem

The Online Public Access Catalogue (OPAC) is gradually replacing the manual/card catalogues in many libraries in the world. This is due to its numerous advantages such as: users can search a document, confirm its availability, reserve the book and even issue/return the materials at a faster rate and convenience.

Despite these overwhelming benefits, undergraduate students still face challenges like: lack of search skills on their parts to independently browse the library OPAC, slow internet access, erratic power supply, the unavailability of library staff at the OPAC Terminals to render assistance when necessary and many others which affect the level of undergraduate students' satisfaction with OPAC use. This will determine whether undergraduate students will use the library OPAC information retrieval system more or not; and also help to expose the effectiveness and efficiency with which these two selected libraries under study that provide OPAC and other services are functioning. It is thus paramount to investigate the level of satisfaction with the Library Online Public Access Catalogue (OPAC) utilization by undergraduate students in two selected libraries in Ogun and Oyo States, South-West of Nigeria.

Theoretical Framework

This research adopts the Technology Acceptance Model [11]. This model suggests that there are two factors that determine whether a computer system will be accepted by its potential users. TAM comprises core variables of user motivation: perceived ease of use, perceived usefulness, and attitudes toward technology. [12] stated that of all the elements of TAM, perceived usefulness (PU) and perceived ease of use (PEU) are considered as a principal determinant that directly or indirectly explains the behavioral intention to use (acceptance) new technology. [13] defines perceived usefulness as the extent to which an individual believes that applying certain technology will advance job performance. On the other hand, [11] defines perceived ease of use as the degree to which a person believes that the use of a system will be effortless and easy to use. [14] posit that the perceived ease of use is considered as one of the most important constructs of TAM that helps to predict user's acceptance or rejection of technologies.

In applying TAM to our research, we identified the potential users to be undergraduate students in the two (2) selected university libraries and the technology system is the library OPAC. The perceived usefulness of OPAC by this category of students will have a positive effect on their attitude towards the library and on their intentions to use the Library OPAC effectively as they understand its numerous uses to their academics.

The perceived ease of use of library OPAC is affected by external factors such as unavailability of library staff around the OPAC Terminals to render assistance to undergraduate students when necessary, lack of search skills on their parts to

browse the OPAC independently, slow delivery of search results by OPAC and many other factors. This is corroborated by the opinion of [15] that users’ perception on the usefulness of a technology could be affected by external factors. Thus, undergraduate students in the two selected university libraries under study will have a negative effect on intention to use the library OPAC that they view to be a difficult information retrieval system due to the underlying factors. Also, their attitudes will be negative towards the library OPAC use despite its perceived ease of usefulness. They will move further away from the library and search for other information retrieval system that they feel and judge to be easy to browse and satisfy their information quests. This conformed with the studies of [16, 17] all who suggested that attitudes of users are a significant factor in the acceptance and efficiency of the use of technologies in practice.

In summary, while the library managements of the above university libraries believe that the library OPAC as an information retrieving system is useful and easy to use, it may be rejected or not accepted by the potential users (undergraduate students) who may not share the same view since they are the end-users and will have the final say on the library OPAC.

Conceptual Framework

The conceptual framework identified an independent variable (Level of Satisfaction of undergraduate students with library OPAC) and a dependent variable (OPAC use). The relationship is that of a CAUSE and EFFECT connected by an arrow. The researchers confidently submit that the use of library OPAC for retrieving document of my choice, poses no physical accessibility and retrieval of library resources, know the current volume/status of library resources, place Online reservation of books and check fines/dues on library information resources is greatly affected by the independent variable (Level of satisfaction: Conducive Library Environment, Users’ perceived ease of usefulness, Users’ perceived ease of use, Availability of Library staff at the OPAC Terminal to assist students when necessary and Speedy delivery of search results). This further implies that, if undergraduate students of the two university libraries under study are satisfied with the use of OPAC, then they will be attracted to visit the Library OPAC Terminal more often to utilize the system for its great benefits.

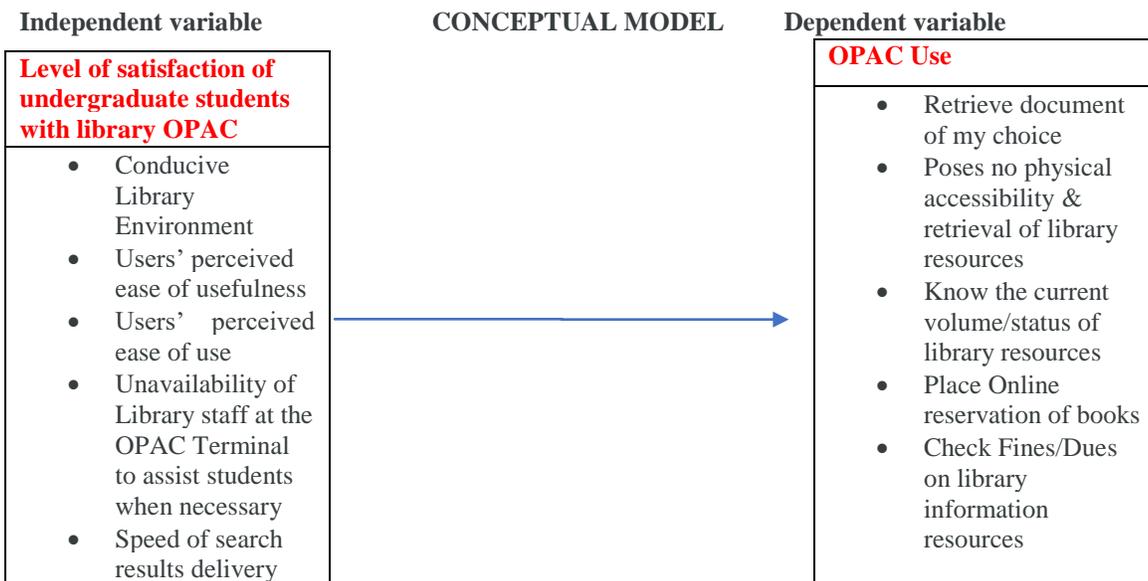


Figure 1: depicts a self-designed Conceptual Model on Level of satisfaction of undergraduate students with library OPAC use.

RESEARCH METHODOLOGY

Population of the Study

The 2017/2018 undergraduate students’ users of university libraries of Federal University of Agriculture (FUNAAB) and University of Ibadan (UI) constitute the population of this study. FUNAAB uses the nomenclature, College of to represent major academic divisions while UI uses the word Faculty to represent its major academic divisions. The summary of the entire population size of undergraduates in the two institutions show that FUNAAB had a population of 15,095 and UI had 13,129. The grand total of the population of the two institutions is 28,284.

Sample and Sampling Procedure

Due to the large population size of registered undergraduates in the two selected universities, the researchers used Multistage sampling technique. At the first stage, the researcher grouped the universities into colleges/faculties. At the second stage, homogenous colleges/faculties were selected. Next, two (2) homogenous departments were selected from each college/faculty. We selected: (1). Agriculture (Agric Economics and Forestry Management), (2). Veterinary Medicine (Veterinary Physiology and Veterinary Pharmacology), (3) Science (Chemistry and Computer Science). The homogenous departments in each college/faculty in the 2 universities have different population size. In FUNAAB, Agric Economic had 320 and Forestry Management (522), Veterinary physiology (108), and Veterinary Pharmacology (86), Chemistry (440) and Computer Science (162) and this gave us the total of 1,638. While in UI, Agric Economic (280) and Forestry Management (392), Veterinary physiology (206), and Veterinary Pharmacology (244), Chemistry (120) and Computer Science (96). Therefore, the population size of registered undergraduates in FUNAAB is (1,638) and UI is (1,334). The two totaled to (2,972). The Expert advice of John Curry (1984) Rule of the Thumbs which stated that if you have a population size within the range of 1001-5000, 5% sampling fraction should be allocated to the population so as to determine the Sample Size. Therefore, the researchers proportionately allocated 5% to each population size of the homogenous department. This summed up and gave us approximately 82 in FUNAAB and 67 in UI. From 2,972 undergraduates in both FUNAAB and UI, we sampled approximately 149 respondents which became our Calculated Sample Size.

The descriptive and inferential statistical methods were used to analyze the data collected from the respondents and results presented in tables and charts. The data was subjected to computer analysis using the Statistical Package for Social Sciences (SPSS), Version 23.0.

Table 1: Demographic variable of respondents

Variable	University Libraries			
	Federal University of Agriculture(FUNAAB) 82 Respondents		University of Ibadan (UI) 67 Respondents	
Gender	Frequency	Percentage (%)	Frequency	Percentage (%)
Male	49	59.76	51	76.12
Female	33	40.24	16	23.88
Total	82	100	67	100
Level of Study				
100	25	30.49	18	26.86
200	30	36.59	15	22.39
300	12	14.63	20	29.85
400	9	10.97	6	8.96
500	6	7.32	8	11.94
TOTAL	82	100	67	100
Age(Years)				
16-20	40	48.78	33	49.25
21-25	32	39.02	18	26.87
26-30	6	7.32	10	14.93
31 & above	4	4.88	6	8.95
Total	82	100	67	100
Marital Status				
Single	66	80.49	62	92.54
Married	14	17.07	4	5.97
Others	2	2.44	1	1.49
Total	82	100	67	100

Researchers' field work, 2017/18

The Table above shows that in FUNAAB, 49(59.76%) were Male as compared to 33(40.24%) Female. On Level of Study 25 (30.49%), 30(36.9%), 12(14.63%), 9(10.97%) and 6(7.32%) were in 100, 200, 300, 400 and 500 level respectively. On Age, 40(48.78%) indicated 16-20 years, 32(39.02%), indicated 21-25 years, 6(7.32%) indicated 26-30, and 3(4.88%) stated 31 and above. On marital status, 66(80.49%) indicated single, 14(17.07%) married and 2(2.44%) others. In U.I, 51(76.12%) were Male while 16(23.88%) were Female. On level of study, 18(26.86%),

15(22.39%), 20(29.85%), 6(8.96%), and 8(11.94%) were in 100, 200, 300, 400 and 500 Levels Respectively. On age, 33(49.25%) in age bracket of 16-20, 18(26.87%) indicated 21-25 years, 10(14.93%) stated 26-30 years and 6(8.95%) indicated 31 and above. 62(92.54%) stated they are single, 4(5.97%) married and 1(1.49%) others

Answering Of Research Questions

Research Question 1: What is the level of undergraduate students' satisfaction with OPAC use in two selected libraries in Ogun and Oyo states, South-West, Nigeria?

Table 2: Undergraduate Students Level of Satisfaction with OPAC Use

		University Libraries			
		FUNAAB		UI	
Variable	Level of Satisfaction	Frequency	Percentage (%)	Frequency	Percentage (%)
Conducive Library environment	Very satisfied	46	56.09	38	56.72
	Satisfied	25	30.49	23	34.33
	Lowly satisfied	8	9.76	4	5.97
	Not satisfied	3	3.66	2	2.98
			82	100	67
Users' perceived ease of usefulness	Very satisfied	60	73.17	50	74.63
	Satisfied	19	23.17	12	17.91
	Lowly satisfied	1	1.22	4	5.97
	Not satisfied	2	2.44	1	1.49
			82	100	67
Users' perceived ease of use	Very satisfied	8	9.76	4	5.97
	Satisfied	15	18.29	3	4.48
	Lowly satisfied	3	3.66	12	17.91
	Not satisfied	56	68.29	48	71.64
			82	100	67
Availability of Library staff at the OPAC Terminal to assist students when necessary	Very satisfied	3	3.66	6	8.96
	Satisfied	5	6.09	2	2.99
	Lowly satisfied	9	10.98	5	7.46
	Not satisfied	65	79.27	54	80.59
			82	100	67
Speedy delivery of search results via OPAC Interface	Very satisfied	11	13.41	9	13.44
	Satisfied	6	7.32	5	7.46
	Lowly satisfied	23	28.05	18	26.86
	Not satisfied	42	51.22	35	52.24
			82	100	67

Researchers' field work, 2017/18

Table 2 presents undergraduate students' level of satisfaction. In FUNAAB, 46(56.09%) were very satisfied with conducive library environment, 60(73.17%) indicated perceived use of usefulness of OPAC, 56(68.29%) indicated not satisfied with perceived ease of use of library OPAC, 65(79.27%) were not satisfied with the availability of library staff around to OPAC terminal to assist undergraduate students when necessary and on delivery of search result, 42(51.22%) indicated not satisfied.

While in UI, 38(56.72%) indicated satisfaction very satisfied with conducive library environment, 50(74.63%) indicated very satisfied with perceived ease of usefulness of OPAC. However, 48(71.64%) respondents were not satisfied with perceived ease of use of library OPAC, 54(80.59%) out of 67 respondents stated they were not satisfied with the availability of library staff around the OPAC terminal to assist undergraduate students when necessary and lastly, 35(52.24%) undergraduate students stated not satisfied with delivery of search result.

Research Question 2: What are the purposes of OPAC use by undergraduate students in two selected libraries in Ogun and Oyo states, South-West, Nigeria?

Table 3: Purposes of OPAC Use by Undergraduate Students

Purpose of OPAC Use	Likert Scale	University Libraries			
		FUNAAB (82)		UI (67)	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Retrieve Documents of my choice	Strongly Agree	75	91.46	55	82.09
	Agree	4	4.88	8	11.94
	Disagree	2	2.44	1	1.47
	Strongly Disagree	1	1.22	3	4.48
OPAC poses no physical limitation on accessibility & retrieval	Strongly Agree	57	69.51	48	71.64
	Agree	15	18.29	11	16.41
	Disagree	7	8.54	2	2.99
	Strongly Disagree	3	3.66	6	8.96
Know current status of library resources and where to locate them	Strongly Agree	45	54.87	51	76.12
	Agree	23	31.71	10	14.93
	Disagree	7	8.54	5	7.46
	Strongly Disagree	4	4.88	1	1.49
Place online reservation on books	Strongly Agree	24	29.27	36	53.73
	Agree	42	51.22	16	23.88
	Disagree	10	12.19	8	11.94
	Strongly Disagree	6	7.23	7	10.45
Check borrowers' account dues /fines	Strongly Agree	49	59.76	42	62.69
	Agree	21	25.61	11	16.41
	Disagree	5	6.09	8	11.94
	Strongly Disagree	7	8.54	6	8.96

Researchers' field work, 2017/18

Table 3 Presents purposes of OPAC use by undergraduate students in FUNAAB and U.I as follows: In FUNAAB, retrieve documents of my choice strongly agree by 75(91.46%) respondents; 57(69.51%) indicated OPAC poses no physical limitation on accessibility and retrieval; 49(59.76%) stated check dues /fines; 45(54.87%) indicated know current volume location and status of resources in the library and lastly place online reservation of books ranked least by 24(29.27%) undergraduates.

In U.I, 55(88.09%) indicated retrieved documents of my choice, 48(71.64%) went for poses no physical limitation in accessibility and retrieval, 51(76.12%) indicated know current volume/status of library resources and where to locate them; 42(62.69%) went for check dues/fines and 36(53.73%) indicated place online reservation of books.

Research Question 3. What is the level of OPAC awareness by undergraduate students in two selected libraries in Ogun and Oyo states, South-West, Nigeria?

Table 4: Undergraduate students’ level of OPAC Awareness

Level of Awareness	University Libraries			
	FUNAAB (82)		UI (67)	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Very High	70	85.37	60	89.55
High	8	9.76	3	4.48
Moderate	3	3.65	1	1.49
Low	1	1.22	1	1.49
Very Low	–	–	2	2.99

Researchers’ field work, 2017/18

Table 4 reveals that 70(85.37%) undergraduates in FUNAAB indicated they have very high level of OPAC awareness; 8(9.76%) indicated high, 3(3.65%) stated moderate, and 1(1.22%) indicated low and none indicated very low in FUNAAB; as compared to 60(89.55%), 3(4.48%), 1(1.49%), 1(1.49%) AND 2(2.99%) very high, high, moderate, low and very low in U.I. This points to the fact that these categories of students are very well aware of OPAC in their university libraries.

4. What are the challenges associated with the utilization and level of satisfaction with Library Online Public Access Catalogue by undergraduate students in two selected libraries in Ogun and Oyo States, South-West of Nigeria?

Table 5: Challenges associated with OPAC Use by Undergraduate students

Challenges	Scale	University			
		FUNAAB (82)		UI (67)	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Takes time to deliver search results	Very True	7	87.80	48	71.64
	True	6	7.32	10	14.43
	Undecided	2	2.44	5	7.46
	Not True	2	2.44	4	5.97
Unavailability of Library Staff around the OPAC Terminals	Very True	74	90.24	52	63.41
	True	4	4.88	7	13.42
	Undecided	3	3.66	3	4.48
	Not True	1	1.22	5	7.46
Unfriendly and Difficult User Designed OPAC Interface	Very True	59	71.95	46	68.65
	True	17	20.73	12	17.91
	Undecided	2	2.44	7	10.45
	Not True	4	4.88	2	2.99
Epileptic Power Supply	Very True	43	52.44	36	63.41
	True	30	36.58	7	13.42
	Undecided	3	3.66	3	4.48
	Not True	6	7.32	5	7.46
Lack of Search Skills on my part to browse OPAC	Very True	51	62.19	42	62.69
	True	23	28.05	15	22.38
	Undecided	2	2.44	7	10.45
	Not True	6	7.33	3	4.48
Inadequate OPAC Terminals/Workstations	Very True	48	58.54	40	59.70
	True	22	26.83	19	28.36
	Undecided	5	6.09	5	7.46
	Not True	7	8.54	3	4.48

Researchers’ field work, 2017//18

In FUNAAB, 72(87.80%) indicated very true that OPAC takes time to deliver search results, 6(7.32%) stated true, 2(2.44%) undecided, and 2(2.44%) not true that OPAC takes time to deliver search results. Unavailability of Library Staff around the OPAC Terminals as a challenge was scored by 74(90.24%) Very True, 4(4.88%) True, 3(3.66%) undecided, and 1(1.22%) Not True.

Unfriendly and Difficult User Designed OPAC Interface as a challenge was scored 59(71.95%) Very True, 17(20.73%) True, 2(2.44%) undecided and 4(4.88%) Not True. For Epileptic Power Supply, 43(52.44%) indicated Very True, 30(36.58%) True, 3(3.66%) undecided, and 6(7.32%) indicated Not True. Lack of Search Skills on my part to browse OPAC was scored by 51(62.19%) Very True, 23(28.05%) True, 2(2.44%) undecided, 6(7.33%) stated Not True. 48(58.54%) stated Very True, 22(26.83%) indicated True, 5(6.09%) undecided and 7(8.54%) indicated Not True for Inadequate OPAC Terminals/Workstations.

In U.I, 48(71.64%) indicated very True, 10(14.43%) true, 5(7.46%) and 4(5.97%) not true that OPAC takes time to deliver search results. 52(63.41%) indicated Very True, 7(13.42%) True, 3(4.48%) undecided and 5(7.46%) stated Not True for Unavailability of Library Staff around the OPAC Terminals. 46(68.65%) Very True, 12(17.91%) True, 7(10.45%) undecided and 2(2.99%) Not True for Unfriendly and Difficult User Designed OPAC Interface as a challenge. 36(63.41%) of undergraduates indicated Very True, 7(13.42%) True, 3(4.48%) undecided, and 5(7.46%) stated Epileptic Power Supply is a challenge associated with OPAC use. Lack of Search Skills on my part to browse OPAC was scored by 42(62.69%) as Very True, 15(22.38%) True, 7(10.45%) undecided, 3(4.48%) for Not True. For Inadequate OPAC Terminals/Workstations, 40(59.70%) indicated Very True, 19(28.36%) True, 5(7.46%) undecided, 3(4.48%) for Not True

INTERPRETATION OF RESULT

Table 1 shows the demographic characteristics of the respondents in the two selected university libraries in Ogun and Oyo States, Southwest, Nigeria respectively. From the Table presented, FUNAAB has 49(59.76%) male as compared to 33(40.24%) female, almost half of the respondents as indicated by 40(48.78%) are within the age bracket of 16-20 years. On level of study, 200 level undergraduates constitute the highest OPAC Users as indicated by 30(36.59%) respondents. 66(80.49%) indicated they are single. Furthermore, in UI, 51(76.12%) were male while 16(23.88%) were female. On level of study, 300 Level undergraduate students as indicated by 20 (29.85%) were the largest number of OPAC Users. On age, 33(49.25%) are in the age bracket of 16-20. Majority respondents as indicated by 72(92.54%) stated they are single. This supports the study of [18] that male respondents were more in comparison to their female counterpart as shown that out of 90 respondents, 67 (74.44%) were male and 23 (25.56%) were female respondents.

Table 2: shows the level of satisfaction of undergraduate students with OPAC use as follows: In FUNAAB, and 60(73.17%) and 46(56.09%) were very satisfied with perceived usefulness of OPAC and conducive library environment. However, 65(79.27%) were not satisfied with the availability of library staff around to OPAC terminal to assist undergraduate students when necessary, 56(68.29%) indicated not satisfied with perceived ease of use of library OPAC, and 42(51.22%) indicated not satisfied on delivery of search result. While in UI, 50(74.63%) indicated very satisfied with perceived ease of usefulness of OPAC and 38(56.72%) were very satisfied with conducive library environment. However, 54(80.59%) out of 67 respondents stated they were not satisfied with the availability of library staff around the OPAC terminal to assist undergraduate students when necessary, 48(71.64%) respondents were not satisfied with perceived ease of use of library OPAC, and lastly, 35(52.24%) undergraduate students stated not satisfied with delivery of search result. This disagrees with the findings of [19], that satisfaction level of B.Tech Students of School of Engineering were quiet encouraging and they were very much satisfied with the performance and quality of OPAC services.

Table 3 Presents purposes of OPAC use by undergraduate students in FUNAAB and UI as follows: In FUNAAB, retrieve documents of my choice was ranked highest by 75(91.46%) respondents; 57(69.51%) indicated OPAC poses no physical limitation on accessibility and retrieval; 49(59.76%) stated check dues/fines; 45(54.87%) indicated know current volume location and status of resources in the library and lastly place online reservation of books ranked least by 24(29.27%). But in U.I, 55(88.09%) stated retrieved documents of my choice, 48(71.64%) went for poses no physical limitation in accessibility and retrieval, 51(76.12%) indicated know current volume/status of library resources and where to locate them; 42(62.69%) went for check dues/fines and 36(53.73%) indicated place online reservation of books. This means that undergraduate students in the two(2) university libraries unanimously agreed that they used OPAC for retrieval of documents of their choices, OPAC poses no physical limitation on accessibility and retrieval; they check dues /fines; they use OPAC to know about the current volume location and status of information resources in the library and they use it to place online reservation of books. This reveals that they understand and know the great importance of OPAC use for their academic success. This agrees with the findings of [18] on the purposes of use of OPAC that 33 (36.67%) of the users used



OPAC to check availability of documents, 26 (28.89%) used OPAC to check available of copies of documents, 19(21.11%) of the OPAC users used it to know status of documents in the library, 12(13.33%) indicated to know about the bibliographical details of documents.

Table 4 reveals that 85.37% undergraduates in FUNAAB have very high level of OPAC awareness and none indicated very low; as compared to 89.55% who stated very high and only 2(2.99%) out of 67 who indicated very low in UI. This points to the fact that these categories of students are very well aware of OPAC in their university libraries. This negates the finding by [20], on the use of OPAC in the University Library of Guru Gobind Singh Indraprastha University, that problems faced with OPAC in the library was that the respondents had less awareness of OPAC system.

Table 5 presents the challenges associated with undergraduates use of OPAC as follows in order of magnitude.: In FUNAAB, majority 74(90.24%) out of 82 respondents indicated Very True for

as the biggest challenge associated with OPAC Use by Undergraduates in the university libraries under study. This is followed by 72(87.80%) out of 82 respondents indicated Very True that OPAC takes time to deliver search results. Next is Unfriendly and Difficult User Designed OPAC Interface as a challenge which was scored Very True by 59(71.95%) respondents. Lack of Search Skills on my part to browse OPAC was scored by 51(62.19%) assertion of Very True, For Epileptic Power Supply, 43(52.44%) indicated Very True. 48(58.54%) stated Very True for Inadequate OPAC Terminals/Workstations

In UI, Unavailability of Library Staff around the OPAC Terminals was ranked the biggest challenge by 52(63.41%) undergraduates who indicated Very True. 48(71.64%) indicated Very True that OPAC takes time to deliver search results. This is followed by 46(68.65%) Very True, for Unfriendly and Difficult User Designed OPAC Interface as a challenge. 42(62.69%) indicated Very True for Lack of Search Skills on my part to browse OPAC as a challenge. 40(59.70%) stated Very True for Inadequate OPAC Terminals/Workstations. Lastly, 36(63.41%) undergraduates indicated Very True for Epileptic Power Supply as a challenge associated with OPAC use.

This means that all the undergraduate students in the selected universities all indicated the fact that unavailability of Library Staff around the OPAC Terminals, OPAC takes time to deliver search results. Unfriendly and Difficult User Designed OPAC Interface, Lack of Search Skills on my part to browse OPAC, Inadequate OPAC Terminals/Workstations and Epileptic Power Supply as challenges associated with OPAC use. This conforms with the findings of [21] on the challenges undergraduate students encountered with the use of OPAC in University Libraries in Gombe State in :Federal University Kashere Library and in Gombe State University Library are lack of skills to use OPAC independently, inadequate OPAC terminals, no proper user education, lack of proper guidance from the library staff and no hyperlink to library OPAC from the university website. Also, corroborates with [22] findings on the use and satisfaction of users about Online Access Catalogue (OPAC) provided by the Devi Ahilya University Library which revealed that the tool OPAC is useful and suggested there must be someone near the OPAC to help in retrieving the required documents.

CONCLUSION

Our study found that having very high OPAC awareness, been highly satisfied with library OPAC usefulness and the library conducive environment were all not enough to guarantee easy use of the retrieval system. Undergraduate students' ability to use the Library OPAC effortlessly and effectively depended on some external factors which they judged and believed to be very important but were reportedly absent. The unavailability of library staff around the OPAC Terminals, OPAC takes time to deliver search results, unfriendly and difficult user designed OPAC Interface, inadequate OPAC Terminals/Workstations, lack of search skills on their parts to browse the OPAC, and epileptic power supply have all been reported by undergraduates as challenges associated with OPAC use in their respective libraries. They unequivocally view the Library OPAC as a difficult information system to use despite its many academic benefit. Thus, majority of the undergraduate student satisfaction level were affected as they were Not Satisfied with OPAC use.

Based on the above facts, we offer the following as strategies to help improve the level of satisfaction of OPAC use by undergraduates in two (2) selected university libraries in South-west, Nigeria.

RECOMMENDATION

- The library managements of these two libraries should position some committed, cordial and well-trained library personnel at the OPAC Terminals to assist undergraduate students when they need help with the OPAC System.
- User Education through practical demonstration method which is aimed at equipping undergraduate students with the necessary skills they need to browse the Library OPAC on their own is paramount



- Increase the internet bandwidth to enable speedy delivery of search results via OPAC to curb undergraduate frustration and increase their level of satisfaction.
- OPAC Interface should be user friendly designed to allow undergraduate students access and retrieve documents of their choices easily
- The need for an alternative source of power supply is crucial as without electricity the library OPAC cannot be powered.

REFERENCES

- [1]. B. E. Edoaka. (2000). Introduction to library science. Onitsha: Palma Publishing and Links Company Limited, 21-22.
- [2]. A. Thirumagal; M. Mani and R.R.Saravanakumar. Use of Online Public Access Catalogue [OPAC] at Sadakathullahappa College, Tirunelveli District, Tamil Nadu: A Study. July 2018 Library Philosophy and Practice 2018, pp.1-13.
- [3]. M. Heiliger, Edward. and Henderson, Paul B., Jr. (1971) Library automation: experience, methodology, and technology of the library as an information system, ISBN: 0070278881. Available from: <https://lib.ugent.be/catalog/rug01:001292875>
- [4]. I.J. Ikenwa and I. Adebilero-Iwari. (2014). Utilisation and User Satisfaction of Public Library Services in South-West, Nigeria in the 21st Century: A Survey. *International Journal of Library Science*, 3(1), pp.1-6.
- [5]. P.A. Tiemo, and B. A. Ateboh. (2016). Users' Satisfaction with Library Information Resources and Services: A Case Study College of Health Sciences Library Niger Delta University, Amassoma, Nigeria. *Journal of Education and Practice*, 7(16), pp.54-59.
- [6]. O.P. Ijiekhuamhen, B. Aghojare, and O.A. Ferdinand. (2015). Assess Users' Satisfaction on Academic Library Performance: A Study. *International Journal of Academic Research and Reflection*, 3(5), pp.66-77.
- [7]. B.E. Iwhiwhuand P.O. Okorodudu. (2012). Public Library Information Resources, Facilities and Services: User satisfaction with Edo State Central Library, Benin City, Nigeria. *Library. Philosophy and Practice*.
- [8]. K.R. Mulla and Chandrashekara, M. (2009). A Study on the Effective Use of Online Public Access Catalogue at the Libraries of Engineering Colleges in Karnataka (India). *International Journal of Library and Information Science*, 1(3).
- [9]. Wanigasooriya, P. (2007). A Study of Problems faced by the Online Public Access Catalogue (OPAC) Users in Sri Lanka University Libraries. Lecturer, Department of Library and Information Science, University of Kelaniya. Sri Lanka.
- [10]. Wallis, K. and Kroski, E. (2009). The next generation Online Public Access Catalogue in academic libraries. *Open and Libraries Class Journal*. 1(2).
- [11]. Davis, F.D. Perceived usefulness, perceived ease of use, and user acceptance of information technology (1989). *MIS Q Manag Inf Syst*, 13(3), p.319. doi:10.2307/249008
- [12]. Scherer R, Siddiq F, Tondeur J. The technology acceptance model (TAM): a meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Comput Educ*. 2019;128:13–35. doi:10.1016/j.compedu.2018.09.009
- [13]. Marangunić N, Granić A. Technology acceptance model: a literature review from 1986 to 2013. *Univ Access Inf Soc*. 2015;14(1):81–95. doi:10.1007/s10209-014-0348-1
- [14]. Hess TJ, McNab AL, Basoglu KA. Reliability generalization of perceived ease of use, perceived usefulness, and behavioral intentions (2014). *MISQ Manag Inf Syst*, 38(1), pp.1–28. doi:10.25300/MISQ/2014/38.1.01
- [15]. Rahimi B, Nadri H, Afshar HL, Timpka T. A systematic review of the technology acceptance model in health informatics (2018). *Appl Clin Inform*, 9(3):604–634. doi:10.1055/s-0038-1668091
- [16]. Nazi KM. The personal health record paradox: health care professionals' perspectives and the information ecology of personal health record systems in organizational and clinical settings. *J Med Internet Res*. 2013;15(4):e70. doi:10.2196/jmir.2443.
- [17]. Simpao AF, Ahumada LM, Gálvez JA, Rehman MA. A review of analytics and clinical informatics in health care (2014). *J Med Syst*. 38(4). doi:10.1007/s10916-014-0045-x
- [18]. Kasimani, C and Rajentran, N (2019). "Use of Online Public Access Catalogue (OPAC) Services in District Central Library, Chennai, (Tamilnadu)" (2019). *Library Philosophy and Practice (e-journal)*. 3016. <https://digitalcommons.unl.edu/libphilprac/3016>
- [19]. Gohain, A. and Saikia, M. (2013). Use and Users Satisfaction on Online Public Access Catalogue (OPAC) Services among B. Tech, Students of School of Engineering in Tezpur University: A Survey. *Library Philosophy and Practice (e-journal)*, Paper 990.
- [20]. Kumar, R. and Singh, J. (2017). Use of OPAC in the University Library of GGIPU, Delhi. Department of Library and Information Science Kurukshetra University, Kurukshetra, Haryana, India. *Indian Journal of Information Sources and Services*, 7(1), pp.16-20.



- [21]. Liviticus, Apagu and Andrew Temboge(2018). Satisfaction and Challenges facing Undergraduates with the Use of Online Public Access Catalogue in University Libraries in Gombe State, Nigeria. *International Journal of Applied Technologies in Library & Information Management*, 4 (2) 57-68, 2018 JA TLIM International Copyright 2018 by CREW TM
- [22]. Singh, R. P, Naidu G.H.S. and Jadon G. S.2008. Use of online public access catalogue in Devi Ahilya University Library Indore. *SRELS Journal of Information Management*, 45(1),pp.55-62.