Full Length Research

OPAC awareness as a factor affecting OPAC use by Undergraduates in two Nigerian libraries

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This study examined the extent to which OPAC awareness affected undergraduates in two federal university libraries in South-West, Nigeria. The study adopted a survey research design. Multistage and proportionate sampling techniques were used to determine the sample size. The two universities are University of Lagos and Obafemi Awolowo University. Data were collected using questionnaire and semi-structured interview. Though there was significant relationship between OPAC awareness and OPAC use (r = 0.358; P< 0.05), OPAC awareness by undergraduates in both universities was high but their level of OPAC use was low. Studies on OPAC awareness by undergraduates at federal university libraries in Nigeria are few. Researches particularly on OPAC awareness as a factor affecting OPAC use by undergraduates in Nigeria has not been identified. This informed the need for research in this area.

Keywords: OPAC awareness, OPAC use, university, undergraduates, Nigeria

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INTRODUCTION

The primary purpose of university libraries is to support teaching, learning, and research in ways that are consistent with and supportive of the institution's mission and goals. An ideal university library should be able to make available and accessible information resources that would meet the needs of its users. Information and Communication Technology (ICT) has influenced library services in developed countries as most of these libraries are automated. Many libraries in Nigeria are now being automated while others are aspiring to become automated. An aspect of library automation is the deployment of Library Management System (LMS) which houses various modules such as circulation, cataloguing, serials, references, acquisition and OPAC. Not all the automated libraries, especially the academic libraries in South West, Nigeria have OPAC included in their LMS modules.

An Online Public Access Catalogue (OPAC) contains all the bibliographic information of an information centre or can be said to be a gateway to information center's collection (Husain and Ansari, 2006). Mulla and Chandrashekara (2009) confirmed that OPAC is an

instrument of change in today's libraries as it helps facilitate users' search for library materials and to determine the availability of such materials in the library at a given point in time. Depending on the design, the search menu of an OPAC may comprise items such as author, title, subject, call number, patron name, basic search, keyword search, International Standard Book Number (ISBN), International Standard Serial Number (ISSN), Library of Congress Call Number (LCCN) and item barcode. Basic search is useful when a user knows the facts about an author, title, subject, series, call number and heading while keyword search is useful when a user does not know the facts about an author, title, subject, heading. Some OPACs are Internet-based, that is, can be accessed globally on the World Wide Web while those that are not internet-based are those usually installed on standalone computers. Presently in Nigeria, not all available OPACs can be accessed on the World Wide Web. Some are already operational while others are not fully operational.

OPAC awareness can be described as a state of being knowledgeable about the availability of OPAC in an establishment. Nisha and Naushad Ali (2011) described awareness of OPAC as the degree of user knowledge and availability of the service and the extent made use of them. Awareness of OPAC can also be described as having a knowledge of the existence, benefits and purpose of OPAC, though the level of awareness vary from one user to another. Ruzegea (2012) also described awareness of OPAC as knowledge of it and maintains that it is also a first step to increased usage (usability) of the literature materials and other relevant information in library and outside libraries or online databases to aid students in their learning process.

Studies on OPAC awareness by undergraduates at federal university libraries in Nigeria are very scarce. Meanwhile, researches particularly on OPAC awareness as a factor affecting OPAC use by undergraduates in Nigeria has not been identified. This informed the need for research in this area. There is need to find out whether or not undergraduates in Nigerian federal university libraries are aware of their universities' libraries' OPACs, whether or not they make use of them and whether or not their OPAC awareness affects their OPAC use. If they are aware and they make use of them, then, what is the relationship between their OPAC awareness affect their OPAC use? It is on the need to answer these questions that this study to assess OPAC awareness as a factor affecting OPAC use by undergraduates in two libraries in Nigeria became imperative.

STATEMENT OF THE PROBLEM

In Nigeria, a number of federal university libraries have claimed to have deployed OPAC in order to improve services to their clientele. In spite of this, it is observed that, students do not usually make reference to OPAC. It may be that students are not conversant with the concept of OPAC, its functions and benefits. From the preliminary visits to and observation of some of the OPAC-compliant university libraries, not many students were usually found using OPAC at the OPAC workstations of some OPAC-compliant federal university libraries in Nigeria. Sometimes, the OPAC workstations are seen not powered up. Other times, students are found browsing the internet on the OPAC workstations. Thus, concerns raised by these initial observations are: whether or not undergraduates of federal universities where OPACs are functional are actually aware of their universities' libraries' OPACs; whether or not the OPACs are being satisfactorily used by these undergraduate students; whether or not the awareness about the availability of the OPACs and their benefits affect undergraduates' use of them. It is on this basis that this study sets out to examine OPAC awareness as a factor affecting OPAC use by undergraduates in two federal university libraries in South-West, Nigeria.

OBJECTIVE OF THE STUDY

The general objective of this study is to determine how OPAC awareness affects undergraduates' use of OPAC in two OPAC-compliant federal university libraries in South-West, Nigeria.

Research Questions

The study is positioned to answer the following research questions which are derived from the general objective.

1.   What is the level of OPAC awareness of undergraduates of the selected federal universities in Nigeria?
2.   What is the level of OPAC use by undergraduates of the selected universities?

Hypothesis

The following null research hypothesis will be used to guide the study and it will be tested at 0.05 level of significance.
H_{01} There is no significant relationship between undergraduates' OPAC awareness and their use of OPAC.

LITERATURE REVIEW

According to Kapoor and Goyal (2007), OPAC is the key

to a library's collection as it allows users to find out about what books, journals, conference proceedings, reports and other resources are available in either print or electronic format. Ramesh Babu and O'Brien (2000) highlighted the features of Web OPACs as graphical, that is, Graphical User Interface (GUI), standard features of traditional OPACs, that is, standalone OPACs, availability of hypertext links through bibliographic records, emulation of search engines in terms of appearance and search features, availability of full-text and one interface to search all electronic information. Husain and Ansari (2008) noted that, of late, libraries, in particular academic and research, has begun to realise that access to bibliographic information should meet varied approaches of the users. The fastest way to access bibliography information is through an online catalogue.

Successful online catalogue searches are very dependent on a user's knowledge of OPAC features, computer skills and the system as well as language competencies… users do not utilise the full features of the system since they are unaware of their existence (Ariyapala and Edzan, 2002).The analysis of the study by Nisha and Naushad Ali (2011) at the Indian Institute of Technology, Delhi, in regards to awareness about OPAC showed that 75 percent of respondents were aware about the OPAC through the intranet while 25 percent were not at all aware. Setting up OPAC without the target users being sensitised about the purpose, functions and benefits can be considered a waste of resources. Thus, the need for proper training and sensitisation sessions for the target library users is very pertinent. OPAC awareness can be created through library orientation, seminars, workshops, conferences, notice boards, university Website, library Website, library bulletin and university bulletin.

The study conducted by Ansari and Amita (2008) on awareness and use of OPACs in five Delhi libraries shows that, not many users are aware of the expert searches provided by OPAC. Findings of study based on questionnaire distribution to both IT and library students at in International Islamic University Malaysia (IIUM) by Ruzegea (2012) revealed that, awareness about OPAC has enhanced library user-based system and its interface design (features) in IIUM. Consequently, it has become an important first step towards access and eventually increased usage (usability) of literature materials and other relevant information in libraries, outside libraries or online databases to aid students in their learning process. The result of the findings reveals that all students (100 percent) were aware of the OPAC and its interface features.

The study by Mulla and Chandrashekara (2009) on the effective use of OPAC by staff and students of engineering colleges across Karnataka (India) showed that 91.06 percent and 55.69 percent of the respondents were not interested in the use of OPAC due to shortage of terminals and lack of awareness of the facilities respectively. Deployment of OPAC to a library requires that the target users be kept abreast of its availability, functions and benefits in order to ensure easy access and effective use. To gain access to and use the library and its OPAC, undergraduates are usually required to present their library registration cards and in some cases, university registration cards. This implies that, such students must be duly registered in the university and its library. It is often generally presumed that, awareness promotes use. This is to say that, a system or resource cannot be used by someone who does not have any prior knowledge of it.

The major reason for OPAC use by undergraduates is because it saves users' time and energy. With OPAC, library users need not spend time to travel from their residents to the library to know whether or not the library holds a particular book, to place book requests. They would not need to spend time scanning through the library card catalogues before they know the shelving locations of books. Impliedly, OPAC reduces the cost of travelling and number of physical presence in the library. The user will only need to pick up the requested or borrowed books from their pick up locations or the library moves the books to the library user's location as it is the practice in some libraries in the United States. Thus, OPAC minimizes the time and stress of searching through the shelves for books thereby supporting the fourth of the Ranganathan's laws of Library Science "save the time of the user".

Several factors can affect the use of OPAC. For instance, Wallis and Kroski (2009) 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. Moore (2006) identified factors that can affect OPAC use as: certain personal characteristics (age and occupation), time, medium of communication, credibility of source of information, users' information need, type of information required and information seeking behaviour. Libraries with functional Web-based OPACs need to periodically assess level of users' awareness of the facility.

In a study by Adedibu (2008) to investigate catalogue use by science students of the University of Ilorin, only 7.9 percent of the respondents use OPAC. This is obviously not encouraging. The study further affirms that, the most essential library tools (the card catalogues and the OPAC) in accessing the library collection in the University of Ilorin, are not always consulted because of inadequate knowledge of how to use them. Knowledge in this context refers to awareness. According to Mulla and Chandrashekara (2009), one of the major constraints of the use of OPAC is lack of awareness between user communities. Other reasons could be lack of awareness and computer literacy skills needed to facilitate their use of OPAC. Kakai et al. (2004) advised that Makerere

University Library which is in the automation process should setup two–hour workshops to teach undergraduate students on how to use the OPAC, online databases, CD–ROM resources, selected Websites and carry out Internet navigation use. In this computer age, OPAC-compliant libraries are to ensure awareness about their OPACs so as to facilitate valuable use of them.

In a study by Srinivasulu and Reddy (2010) on medical college users (undergraduates and postgraduates) in Andhra Pradesh, India, most of the users (78.14 percent) replied that they have not used the library catalogue/OPAC to locate books in the library. Consequently, the authorities were advised to take appropriate steps to creating awareness of OPAC among the users by conducting user education programmes. Asemi and Riyahiniya (2007) investigated the relationships between awareness and use of digital resources among students in Isfahan University of Medical Sciences. The result of the study shows that 70 percent of students were aware of digital resources, but only 69 percent of them have used them. In another study by Ariyapala and Edzan (2002) on international students' ability to use an online library catalogue at the University of Malaya Library,Malaysia, most respondents indicated that there were no OPAC facilities in their home countries and if available, they were limited to university libraries.

In Nigeria, federal universities like University of Lagos (UNILAG), University of Ibadan (UI), Obafemi Awolowo University (OAU), University of Jos (UJ), Bayero University (BU), Ahmadu Bello University (ABU) and University of Port-Harcourt (Uniport) have deployed OPAC to their libraries. However, among these university libraries OPACs, only a few can be accessed by the users via the World Wide Web. A number of the state and private university libraries in Nigeria have also deployed OPAC e.g. Covenant University, Ota, Ogun State Nigeria has deployed a full-fledged functional OPAC Onifade et al. (2011).

There is need for libraries to keep their users abreast of the services they provide. This can be achieved through adequate promotion of library products and services such as OPAC. Promotion, according to Joseph and Parameswari (2002) involves mechanisms that inform the target groups about the resources available, services and products offered by the libraries/information centers. Ifijeh (2011) suggested some possible promotional activities that a library could embark on, to include publishing and distribution of hand bills, publishing and distribution of newsletters, mailing list programs, placing posters in strategic places, use of billboards and library awareness programs such as library week or library orientation for all incoming students. Such promotional measures can also be employed to boost awareness of university libraries' OPAC.

METHODOLOGY

Descriptive survey research design was adopted for the study. The population comprised the undergraduates of two selected federal universities: UNILAG and OAU. The population of undergraduates at UNILAG was 23,367 while that of OAU was 23,861. Multistage sampling was adopted to select four homogeneous faculties from each of the universities: Arts, Education, Science and Social Science (first stage) There were 12 faculties in University of Lagos and 13 faculties in Obafemi Awolowo University; thus, homogeneous departments were selected from both universities using proportionate sampling (second stage). These methods were chosen so as to ensure good representation of the population and they allowed coverage of reasonable number of faculties and departments. The selection of homogenous faculties was to allow for comparisons between the two institutions under study. At the final stage respondents were proportionately chosen using 5% sampling fraction of the population of each of the selected departments. Hence, the sample size for this study was 431 (Table 1). The sample size for this study was justified by the principle of sample size determination of Israel (2003). This principle specifies that, in a population of 50,000, if 5% Precision Level is taken at 95% Confidence Level and P=.5, then the sample size should be 397. The total population for this study is 47,228 while the sample size is 431 which is greater than 397, which shows that the sample size was justified.

Questionnaire was administered on the undergraduates of the selected institutions while the semi-structured interview was conducted with the System Librarians in charge of OPAC. The researcher personally administered the questionnaire on the respondents at the two selected institutions over a period of two weeks. The respondents were given the questionnaire in their classes while they were waiting to start lectures and in a few cases, when they had just finished their lectures. The questionnaire comprised four sections, A, B, C. Section A was on demographic factors scale which was designed to obtain information on various demographic variables that were of interest to the study. The variables of interest in this section include university, faculty, department, level of study, gender, age and religion making seven questions in this section. Section B was on OPAC awareness scale that was self-developed and designed to obtain information on undergraduates' level of OPAC awareness. The scale comprised two major questions each with sub-items that were responded to. In all, this section was made up of 21 questions. Section C was a self-developed scale and was used to obtain information on undergraduates' level of OPAC use. In this section, four main categories of OPAC use were measured. These were: i = extent of OPAC use by undergraduates; ii = medium through which undergraduates learnt to use

Table 1. Study Population and Sample Size

S/N	Selected Faculties	Depts.	University of Lagos		Obafemi Awolowo University	
			Study Population	Sample Size (5%)	Study Population	Sample Size (5%)
1	Arts	English	462	23	1036	52
		Philosophy	561	28	322	16
2	Education	Educational Foundation	308	15	622	31
		Educational Administration	395	20	65	3
3	Science	Biochemistry	294	15	485	24
		Chemistry	358	18	604	30
		Physics	408	20	249	12
4	Social science	Economics	753	38	631	32
		Political Science	459	23	611	31
Total			**3998**	**200**	**4625**	**231**
Grand Total				**8623**		
Sample Size				**431**		

OAU   N=216, UNILAG   N=192

OPAC; iii = purpose for which OPAC was used and iv = frequency of OPAC use. This section was made up of 14 questions.

The semi-structured interview allowed for considerable flexibility in responses during the interview. It allowed the researcher to be able to elicit more detailed information from the System Librarians because they manage the OPAC database and have access to all activities on the OPAC platform. The interview schedule comprised 9 questions. Questionnaire was collected, coded and analyzed. Statistical Package for Social Science (SPSS) was used for the data analysis. Descriptive statistics (simple frequency counts and simple percentages) were used to analyse the research questions while inferential statistics (correlation and regression analyses) were used to test the null hypothesis. The null hypothesis was tested at 0.05 level of significance. The interview was manually transcripted and analysed.

RESULTS AND DISCUSSION

Four hundred and thirty one copies of a questionnaire were administered to undergraduates in OAU and UNILAG and 408 copies which represent 94.7 percent were returned and were all found usable for the analysis.

Research Question 1: What is the level of OPAC awareness of undergraduates of the selected federal universities in Nigeria?

The findings revealed that majority of the respondents in both universities had high level of OPAC awareness although the level of OPAC awareness among the respondents in OAU was higher than that of those in UNILAG. Respondents who were not aware of OPAC were more than those with low level of OPAC awareness in both universities (Table 2).

In both universities studied, the level of undergraduates' OPAC awareness was found to be high. However, it was found that, undergraduates in OAU had higher level of awareness of OPAC than those in UNILAG. This was in spite of the fact that, as at the time of the study, OAU OPAC was partially operational while that of UNILAG was fully operational. This finding was in line with the confirmation by the System Librarians of both universities that undergraduates' level of OPAC awareness was high. This result, to some extent, is consistent with the view of Ruzegea (2012) that all students studied were aware of the OPAC and its interface features in International Islamic University Malaysia (IIUM) and that of Nisha and Naushad Ali (2011) which showed that 75 percent of library users at the Indian Institute of Technology, Delhi were aware about the OPAC through the intranet while 25 percent were not at all aware. Nevertheless, it was also revealed that there were more respondents with zero level of OPAC awareness than those with low level of awareness. This indicates the need for improvement in OPAC awareness campaign in both universities and it is in agreement with Ifijeh (2011) who suggested that promotional measures such as publishing and distribution of hand bills, publishing and distribution of newsletters, mailing list programs, placing posters in strategic places, use of billboards and library awareness programs such as library week or library orientation for all incoming students, should be employed to boost awareness of university libraries' OPAC.

Table 2. Level of OPAC Awareness by Undergraduates

OPAC:	Level of Awareness	Universities			
		OAU		UNILAG	
		N	%	N	%
is a database of the library's holdings.	High	119	55.1	96	50.0
	Low	37	17.1	32	16.7
	Not Aware	60	27.8	64	33.3
can be searched to know the status of library materials.	High	121	56.0	99	51.6
	Low	35	16.2	40	20.8
	Not Aware	60	27.8	53	27.6
can be used to place requests for library materials.	High	111	51.4	76	39.6
	Low	42	19.4	46	24.0
	Not Aware	63	29.2	70	36.4
can be used to reserve library materials.	High	79	36.6	74	38.5
	Low	53	24.5	47	24.5
	Not Aware	84	38.9	71	37.0
can be used to check due dates for borrowed library materials.	High	84	38.9	71	37.0
	Low	42	19.4	49	25.5
	Not Aware	90	41.7	72	37.5
can be used to check the amount of overdue fines.	High	63	29.1	59	30.7
	Low	43	19.9	43	22.4
	Not Aware	110	50.9	90	46.8
provides ease of access to library holdings.	High	113	52.3	103	53.6
	Low	36	16.7	37	19.3
	Not Aware	67	31.0	52	27.1

Table 2. . Continuation

provides global access to library materials.	High	116	53.7	93	48.4
	Low	32	14.8	33	17.2
	Not Aware	68	31.5	66	34.4
saves users' search time.	High	115	53.2	102	53.1
	Low	31	14.4	32	16.7
	Not Aware	70	32.4	58	30.2
reduces cost of visiting the library.	High	97	44.9	77	40.1
	Low	45	20.8	43	22.4
	Not Aware	74	34.3	72	37.5
reduces time spent by users to visit the library.	High	103	47.7	86	44.8
	Low	36	16.7	38	19.8
	Not Aware	77	35.6	68	35.4
reduces the possible risks of visiting the libraries.	High	82	38.0	62	32.3
	Low	49	22.7	50	26.0
	Not Aware	85	39.4	80	41.7
can link users to online newspapers.	High	84	38.9	73	38.0
	Low	33	15.3	38	19.8
	Not Aware	99	45.8	81	42.2

OAUN=216, UNILAG   N=192
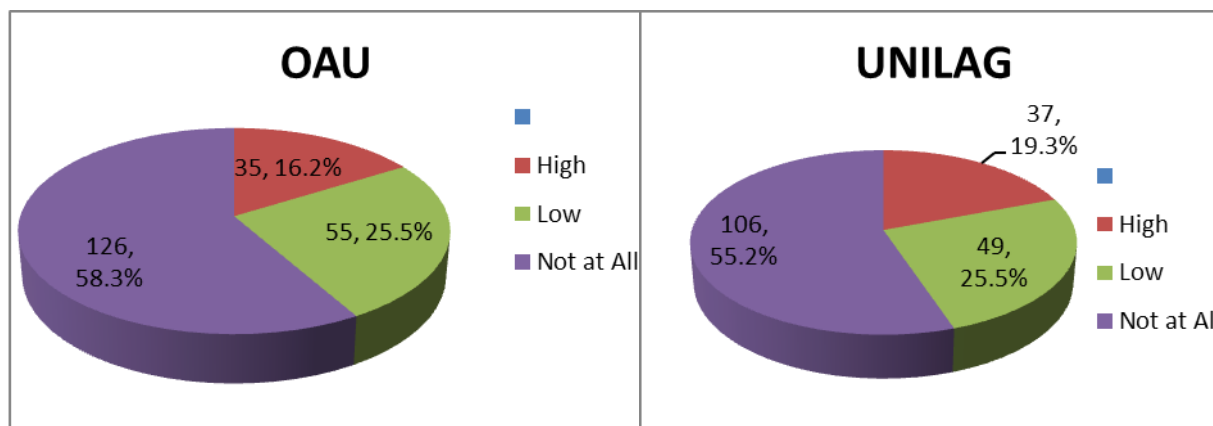
Figure 1. Level of OPAC Use by Undergraduates

Research Question 2: What is the level of OPAC use by undergraduates of the selected universities?

The results showed that 126 (58.3 percent) of the respondents in OAU and 106 (55.2 percent) of those in UNILAG did not make use of their library OPAC at all. Only 35 (16.2 percent) and 37 (19.2 percent) respondents in OAU and UNILAG respectively had high level of OPAC use, indicating low level of OPAC use in both universities (Figure 1).

It was established by the findings of this study that, undergraduates' level of OPAC use in both universities was very low as majority of the respondents did not make use of their library OPAC at all. This negates the assertion by the System Librarians of the two universities that, undergraduates' level of OPAC use was high but agrees with the study by Adedibu (2008) who investigated catalogue use by science students of the University of Ilorin and reported that, only 7.9 percent of the respondents studied reportedly use OPAC. Respondents in UNILAG were found to use OPAC more than those in OAU. Ariyapala and Edzan (2002) noted that OPAC users at the University of Malaya did not utilize the full features of OPAC because they were unaware of their existence. The opposite was the case in this study as the respondents' level of OPAC use was very low despite their high level of OPAC awareness. It implied that undergraduates were not making the best

Table 3. Relationship between OPAC Awareness and Use

Variables	N	Mean	STD	r	Sig
OPAC awareness	408	31.7647	11.87997	0.358	0.000
OPAC use	408	1.95	1.291		

OAUN=216, UNILAG   N=192

use of the facility. This is not encouraging considering the huge amount of money that the universities spent in deploying the OPACs.

Hypothesis 1: There is no significant relationship between undergraduates' OPAC awareness and their use of OPAC.
The test of the hypothesis showed an r-value of 0.358 (+0.30 ≤ r ≤ +0.39 = moderate positive correlation). This implies that, 12.8 percent (r^2 x 100 percent) of the variation in OPAC use was accounted for by OPAC awareness. There existed a positive though moderate relationship between undergraduates' OPAC awareness and their use of OPAC. That is, there is a significant relationship between undergraduates' OPAC awareness and their use of OPAC. Therefore, the null hypothesis is rejected (Table 3).

The result of the study revealed that there was a significant moderate positive relationship between undergraduates' OPAC awareness and their use of OPAC. This agrees with the assertion of the System Librarians in both universities that undergraduates' awareness of OPAC had got positive impact on their OPAC use. Though the result of the hypothesis test showed that there was a moderate positive relationship between OPAC awareness and use, the findings of this study also revealed that undergraduates' level of OPAC awareness was high while their level of OPAC use was low. This does not imply negative relationship between the two. The fact that there existed OPAC use means that the use was made possible by the existence of OPAC awareness.

The findings further showed that only 12.8 percent of the variation in OPAC use was accounted for by OPAC awareness. This means that, 87.2 percent of the variation in OPAC use was accounted for by other factors other than OPAC awareness which were not covered in this study. These other factors might possibly have contributed to the undergraduates' low level of OPAC use despite their high level of OPAC awareness. This finding agrees with Long (2000) who noted that subject accessibility could also be a factor that affects use of OPAC. It also supported the finding of Moore (2006) which identified factors that can affect use of OPAC as: certain personal characteristics such as age and occupation. Other factors identified by Moore (2006) as factors that could affect OPAC use were: time, medium of communication, credibility of source of information, users' information need, type of information required and

information seeking behaviour. The finding of the present study however, does not agree with the study by Mulla and Chandrashekara (2009) which noted that one of the major constraints of the use of OPAC is lack of awareness between user communities. Whereas, the finding agrees, to a reasonable extent with Ruzegea (2012) who noted that all students (100 percent) studied were aware of the OPAC in International Islamic University Malaysia (IIUM) and that the awareness about the OPAC had enhanced library user-based system and its interface design.OPAC no doubt offers library users especially undergraduates, numerous benefits. These benefits should be maximised to justify the cost-benefit of setting up this exciting facility in university libraries and one major means to achieving this is to increase users' awareness.

CONCLUSION

OPAC is an important tool through which undergraduates can gain quick and wider access to libraries holdings in Nigeria. It had been deducted from this study that, lack of or low level of OPAC awareness is not the reason for low use of OPAC by the respondents. This implies that, there are other factors not covered by this study which could have contributed to the respondents' low level of OPAC use. This poses the need for further research, to determine what factors are responsible for undergraduates' low level of OPAC use in federal universities in Nigeria.

RECOMMENDATIONS

The main aim of OPAC is to encourage wider access to library holdings. To accomplish this aim, OPAC awareness and use policies to encourage high level of OPAC use among undergraduates, such as inclusion of practical-based introduction to OPAC as one of the topics in the use of library courses and giving assignments that will necessitate their use of OPAC, should be formulated and implemented by universities. Moreover, continuous and far-reaching awareness programmes such as sensitization of students and faculties, orientation, campus radio jingles, billboards, banners and handbills should be sustained to further improve undergraduates' awareness of OPAC. This will subsequently lead to increased use of it. Sessions of training or workshops should be organised to teach users about OPAC so as to facilitate its effective use.

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