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Satisfaction and Challenges facing Undergraduates with the Use of Online Public Access Catalogue in University Libraries in Gombe State, Nigeria

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Abstract

This study aimed at finding out the level of undergraduate students' satisfaction with Online Public Access Catalogue and the challenges faced. Quantitative research method was adopted for the study, using cross-sectional survey research design. The targeted population was two thousand, eight hundred and forty (2,840), the study centered on registered undergraduate students' in Federal University Kashere and Gombe State University Libraries. Out of this population, four hundred and forty-eight (448) samples were drawn. Questionnaire was used as the instrument for data collection. The data collected was analyzed using descriptive statistics displayed in tables and charts. Inferential statistic using independent sample t-test was used for the null hypothesis formulated, tested at 0.05 level of significant by the used of Statistical Package for Social Science Version 23.0. The study revealed that the level of undergraduate students' satisfaction with OPAC in both libraries is low and the unique challenges faced are: lack of skills to use OPAC independently, inadequate OPAC terminals, and no hyperlink to library OPAC from the university website. The researchers recommend among others that the university libraries in Gombe State should provide different marketing strategies or services to make undergraduate students satisfy with OPAC, train them on how to use OPAC independently, also there should be hyperlink from the university website that will link undergraduates to information resources that are online or in soft copy.

Keywords: OPAC, Satisfaction, Challenges, Undergraduates, University Libraries

1.1 Introduction

Due to the jet speed in Information and Communication Technology in this contemporary dispensation, library and information centres activities and services

delivery have been transformed immensely; this is evident in all units of the library. At present, the issue of collection development, organisation of knowledge, registration of users, statistics, charging and discharging of

information resources, information dissemination as well as information retrieval by the library users has been influence significantly. Online Public Access Catalogue (OPAC) refers to Automated Library Catalogue which complements the traditional card catalogue system. With OPAC, data can be spread within computer and then the required entry can be retrieved immediately in any format. It is increasingly becoming a familiar Information Retrieval Device (IRD) in libraries. Currently, reasonable numbers of libraries have automated their operations and services using this technology in order to effectively satisfy the users' diverse needs. OPAC is one of the most important services of the library.

Online Dictionary for Library and Information Science (ODLIS, 2017) defines OPAC as, 'an acronym for Online Public Access Catalogue, a database composed of bibliographic records describing the books and other materials owned by a library or library system, accessible via public terminals or workstations usually concentrated near the reference desk to make it easy for users to request the assistance of a trained reference librarian.' Most online catalogues are searchable by author, title, subject, and keywords and allow users to print, download, or export records to an e-mail account. On the other hand, the American Library Association (ALA) Glossary (1983), defines OPAC as, 'a computer based and supported library catalogue (bibliographic database) designed to be accessed via terminals so that library users may directly and effectively search for and retrieve bibliographic records within the assistance of a human intermediary such as a specially trained member of the library staff.

Satisfaction according to Ikenwa and Adegbilero-Iwari (2014) refers to how users feel after using information resources and services and their willingness to return to the library when next they need information. Tiemo and Ateboh (2016) **forwarded 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. Thus, the availability of quality information resources and services in libraries do have a significant influence on users' satisfaction. When users are satisfied with library information resources and services, they not only come back but speak well of the library to other library users. While, Ijiekhuamhen, Aghojare and Lerdinand (2015), are of the opinion that the level of using the library depends on users' satisfaction with the available information resources and services rendered to them.

1.2 Statement of the Problem

Online Public Access Catalogue (OPAC) has brought enormous changes in the library practice by complementing the traditional card catalogue system with computerised system. It has made the library collections easily accessible to users by breaking the physical boundaries of the library. It is the most flexible and current information retrieval device in the library. For instance, additions, deletions and changes of entries can be made at any time and the results immediately made available to the library users. OPAC can be used from far away location, so that the library users can access to the diverse information resources in the library holdings at their convenience.

However, the researchers **observed** that users do not make effective use of **OPAC** due to some reasons. Some library users are found going from one division to the other and in some cases from one shelf to the other in order to search for information directly. Some users hardly come to the library throughout their academic programme in the university, thinking that the library has nothing to offer them. It is based on this background that the researchers carried out this study because

despite many of the studies conducted by different researchers locally and globally this problem still exists.

1.3 Research Questions

The following research questions were used for the study:

1. What is the level of undergraduate students' satisfaction with OPAC in University Libraries in Gombe State?
2. What challenges undergraduate students' encountered with the use of OPAC in University Libraries in Gombe State?

1.4 Hypotheses

The following null hypothesis was formulated to guide the study:

H₀: There is no significant difference in the level of undergraduate students satisfaction with OPAC in University Libraries in Gombe State.

2.1 Review of Related Literature

OPAC is an electronic database of bibliographic information that is faster, easier to use, and offer multiple searches to find more items or refine searches. OPAC is used to look for specific information or general in very quick manner. Reitz (2004), defined OPAC as the interfaces that help users communicate with a library's collection of information resources. OPAC is a popular service developed as a result of the evolution of online technologies. It is a database consisting of the bibliographic records that describe the materials held by a library, accessible via public terminals or workstations. Most OPACs are searchable by author, title, subject and keywords and allow users to print, download or export records to an e-mail account.

OPAC is a gateway to library collections. Ansari and Amita (2008), stated that an OPAC provides the users with online access to the library's catalogue by allowing

them to search and retrieve records from the online catalogue and depending on the underlying library management software, it offers several other facilities such as online reservation, borrower status checking and so on. While, Malak (2008), submitted that OPACs are the interfaces and very valuable extensions of the functionality that help user communicate with the collections of a library. And another, 'consistent step is improving the availability of information and services'. Typically, OPAC allows user to search the library's catalogue and also provide some other facilities such as checking borrower records, reserving reading materials, and so on. Several changes have taken place and OPACs have improved significantly since then. The third generation OPACs incorporates features that are characterized by the facilities of World Wide Web.

2.2 Positive Effect of OPAC

According to Adenike and Akin (2014), without OPAC there would not have been library automation and eventually easy and timely access to information. OPAC adds a layer of functionality by providing more techniques for searching the same data. Some of the positive effects of OPAC in libraries are highlighted below:

1. It allows patrons to use search strategies that exceed those that can be used with card catalogues. Card catalogues can be searched only by author, title and subject; OPACs can be assessed by author, title, subject, and keyword. Users can extend their search by using Boolean operator (AND, OR, NOT) and by combining search strategies (e.g., title and author, subject and author). In addition, OPAC users may limit their search result by such features as publication date, type of material (e.g., magazines, book, video), language, or reading level, and they can sort by author, title, and publication date.

2. The windows-based OPAC allow for hyperlink searching and this is a new feature that was not possible in character based system. Through hyperlink search, a user can find related records in the automated system's database under a word or subject. The user can also locate related resources that appear on the web via the Machine Readable Catalogue (MARC). Another search feature that was not possible in character-based systems is the visual search. An OPAC that has a Graphical User Interface (GUI) capability allows users to click on icons that represent function instead of clicking on command buttons only. The visual representation of search function is very attractive to young children especially because visual interfaces that are based on pictures or icons are usually in argument with colors and easy-to read text.
3. It allows users to search the library's collection from locations outside the library walls. Patrons who are equipped with a computer and a modem can dial into the OPAC from home, an office or another remote location. Using the Z39.50 standard allows users to search OPAC on the web using common interfaces and/or search features.
4. It supports new means of information retrieval by introducing patrons to global information. The popularity and success of OPAC make them ideal to coexist with CD-ROM databases, online databases, the web and other information systems on a library's computer. A Z39.50 compliant OPAC allows users to search Z39.50 compliant databases using the search syntax of the OPAC, thereby eliminating the need to learn each database search syntax.
5. OPAC also provides users with timely access to library materials. Materials can be placed on shelves as soon as items are processed and MARC records are downloaded into a database.
6. It encourages cooperative collection development and resources sharing (e.g. interlibrary loan). Automated media centres and libraries can developed a union catalogue and join bibliographic utilities and consortia. A user who does not find an item of interest in the library's local OPAC may identify the libraries in the union catalogue or consortia that have it. The user can then borrow the item through interlibrary loan or by checking it out from a designated library.
7. It motivates patrons, equips them with problem solving and information retrieval skills, and provides them with lifelong learning experiences. In addition, it reinforces a positive attitude about the media centre or library and improves the image of the media specialist or information professional. Using OPAC can be friendly because information about all books published by an author can be accessed at a time as long as it networked together.
8. It allows patrons to use search strategies that exceeds those that can be used with card catalogue. Card catalogue can be searched only by author, title and subject. OPAC can be accessed by author, title, subject and keyword.
9. Search for library materials using many options such as author, title, subject and call number.
10. Find details status about an item such as

its availability, number of copies, and its location within the library.

11. Place a request on a book that is currently on loan to other borrowers.
12. Check the borrower's account to get information about number of items on loan, amount of overdue fines (if any) and other transactions the patrons have with the library.

2.3 OPAC Satisfaction

According to Iwhiwhu and Okorodudu (2012), users' satisfaction of library information resources and services is 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. Harris (2008), studied the satisfaction level of users and found out that satisfaction rose higher as with the available OPAC facilities. Nevertheless, not many users were aware of the expert searches provided by OPAC. The Librarians, especially those from the developing nations, may choose their library software catalogue data into terms that the library user understands, making books more easily accessible via OPACs and fostering a sense of community around library collections.

Singh, Naidu and Jadon (2008), studied the use and satisfaction of users about OPAC Online Access Catalogue provided by the Devi Ahilya University Library. The study revealed that the tool OPAC is useful and suggested there must be someone near the OPAC to help in retrieving the required documents. Similarly, Kumar and Vohra (2011), investigated the use of Online Public Access Catalogue by the users at Guru Nanak Dev University Library, Amritsar (Punjab). The work focuses on various aspects of OPAC such as awareness, frequency of use, frequently used access points and satisfaction level. The findings of the study revealed that most of the users use the OPAC to locate the

documents despite facing some difficulties. However, majority of the users are not satisfied with the OPAC. The study suggests that the users should be made familiar with the use and operation of the OPAC by providing special training.

Gohain and Saikia (2013), studied the Use and Users Satisfaction on Online Public Access Catalogue (OPAC) Services among Students of School of Engineering in Tezpur University. The findings of the study revealed that satisfaction level of B.Tech Students of School of Engineering were quite encouraging and they were very much satisfied with the performance and quality of OPAC services. OPAC is one of these services which help library users to locate and access its resources easily. One can expect the better utilisation of available library resources if users can make fully aware about OPAC and motivate users to use it. In a more recent study conducted by Kumar and Singh (2017), on the use of OPAC in the University Library of Guru Gobind Singh Indraprastha University, Delhi, the study revealed 54.4% of the users were fully satisfied with the present OPAC facility in the library.

2.4 Challenges Encountered by Users in the use of OPAC

Wanigasooriya (2007), studied the problems faced by the Online Public Access Catalogue (OPAC) Users in Sri Lankan University Libraries. The problems identified by library users through the survey is 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 standards, no direct link for the OPAC from the university home page, and lack of enough terminals. To overcome these problems, the users need to have a high level of computer literacy. They also must have a sufficient knowledge on the nature of the

component of bibliographical databases. Selecting the suitable library automation software and promoting uniformity between university library automation activities are the other reform necessary in this connection.

According to Mulla and Chandrashekara (2009), one of the major constraints of the use of OPAC is lack of awareness between user communities. They went further to say that other reasons could be lack of awareness and computer literacy skills needed to facilitate their use of OPAC. 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.

Adenike and Akin (2014), conducted a study on Online Public Access Catalogue in Nigerian Libraries: A Study of Kenneth Dike Library and University of Lagos Library. They found out that despite the attention that OPAC is receiving worldwide, little seems to have change, they went further to state that, the problems facing the utilisation OPAC in Nigeria Libraries are: OPAC it is costly startup, software needed, network cabling, wiring and furniture. Another thing under cost is that OPAC maintenance is expensive and unaffordable due to the poor state of most Nigerian Libraries. Other challenges identified are power failure, copyright issue, it is time consuming, consistent system breakdown, inadequate manpower and lack of committed personnel. Finally, in a more recent study conducted by Kumar and Singh (2017), on the use of OPAC in the University Library of Guru Gobind Singh Inderparstha University, Delhi, the study revealed that problems faced with OPAC in the library were less awareness of OPAC system, inappropriate location of the OPAC terminals and unavailability of library staff near the OPAC terminals.

3.1 Research Methodology

This research work adopted quantitative research method. It was adopted because the population is large and due to the nature of the research problem. Cross-sectional survey research design was used for the study. This is because data were collected from different group of respondents; male and female, different level; 100, 200, 300, 400 and different age group. It is also chosen because of its flexibility which permits the use of variety of data collection techniques such as questionnaire, interview and observation. It is directed to obtain information concerning people's opinions, likes, dislikes, attitudes, values and preferences.

The targeted population for the study was the entire undergraduate students registered with the Federal University Kashere (FUK) Library and Gombe State University (GSU) Library. Questionnaire was used to collect data for the study. A total of 448 copies of questionnaire were administered by the researcher with the help of four research assistants. A total of 448 copies of questionnaire were administered by the researcher with the help of four research assistants; two research assistants were used in each university.

The data collected from the field was analysed using descriptive and inferential statistical methods. Descriptive statistic was used to analyse the research questions displayed in tables and charts. While, inferential statistics using the independent sample *t-test* was used to test the null hypotheses at 0.05 level of significance, then the data was subjected to computer analysis using the Statistical Package for Social Sciences (SPSS), Version 23.0.

4.1 Results and Analysis of Findings

This section presented, analysed and discussed the data collected based on the three research questions raised in the study.

4.2 The Level of Undergraduate Students' Satisfaction with OPAC in University Libraries in Gombe State

Table 1: Level of Undergraduate Students' Satisfaction with OPAC

S/No.	Items	Level of Satisfaction	Universities			
			FUK, Library 192	%	GSU, Library 176	%
i .	OPAC helps in fast retrieval of information resources on shelve	Highly satisfied	72	37.5	60	34.09
		Lowly satisfied	84	43.75	72	40.91
		Not satisfied	36	18.75	44	25.00
ii .	OPAC helps in easy retrieval of information resources	Highly satisfied	57	29.69	64	36.36
		Lowly satisfied	117	60.94	96	54.55
		Not satisfied	18	9.37	16	9.09
iii .	OPAC provides hyperlink from the university website	Highly satisfied	69	35.94	36	20.45
		Lowly satisfied	69	35.94	72	40.91
		Not satisfied	54	28.13	68	38.64
iv .	Library staff assistance in the use of OPAC	Highly satisfied	57	29.69	24	13.64
		Lowly satisfied	90	46.87	68	38.64
		Not satisfied	45	23.44	84	47.73
v .	Colleague assistance in the use of OPAC	Highly satisfied	54	28.13	32	18.18
		Lowly satisfied	63	32.81	60	34.09
		Not satisfied	75	39.06	84	47.72
vi .	Overall satisfaction on OPAC	Highly satisfied	63	32.81	40	22.72
		Lowly satisfied	75	39.06	88	50.00
		Not satisfied	54	28.13	48	27.27

Mean Score According to University Library

FUK, Library	Mean Percent Score	GSU, Library	Mean Percent Score
Highly satisfied	32.29%	Highly satisfied	24.24%
Lowly satisfied	43.23%	Lowly satisfied	43.18%
Not satisfied	24.48%	Not satisfied	32.58%

Source: Field Survey, 2018

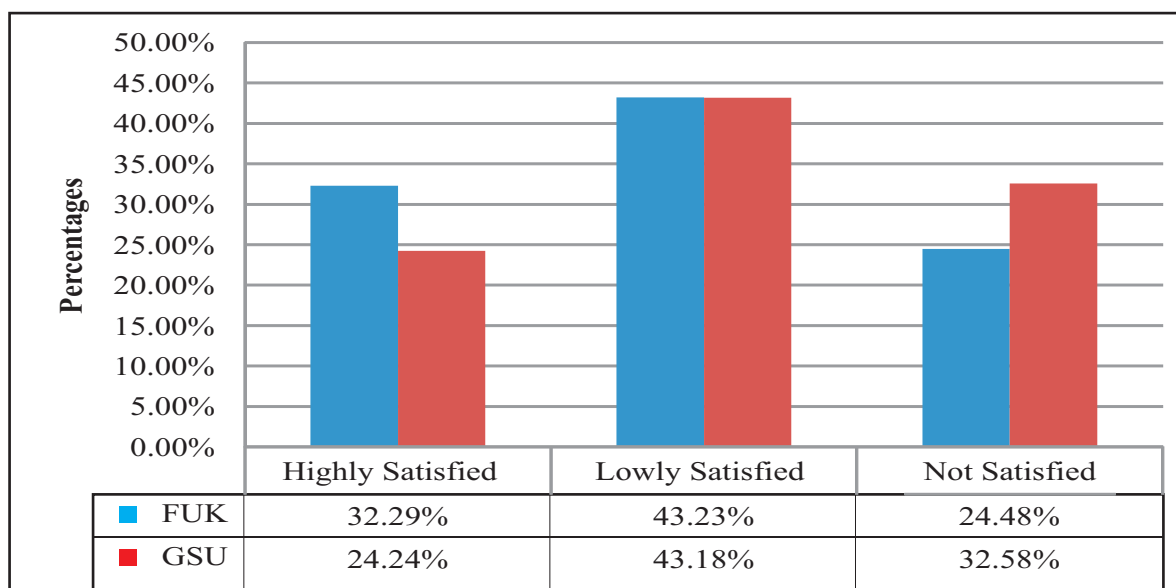


Figure 1: Level of Undergraduate Students’ Satisfaction with OPAC

Table 1 and figure 1 showed the level of undergraduate students' satisfaction of OPAC in University Libraries in Gombe State. In FUK Library, the mean percent score of 32.29% respondents are highly satisfied with OPAC, 43.23% indicated low level of OPAC satisfaction and 24.48% are not satisfied. While, in GSU Library, 24.24% respondents are highly satisfied, 43.18% indicated low level of OPAC satisfaction and 32.58% are not satisfied. Based on these responses received it could be inferred that the level of undergraduate students' OPAC satisfaction in University Libraries, Gombe State is low.

4.2 The Challenges Undergraduate Students' Encountered with the Use of OPAC in University Libraries, Gombe State

Table 2: Challenges Undergraduate Students’ Encountered with the use of OPAC

S/No.	Items	Universities			
		FUK, Library 192	%	GSU, Library 176	%
i.	Lack of skills to use OPAC independently	111	57.81	120	68.18
ii.	Network fluctuation	60	31.25	48	27.27
iii.	Inadequate OPAC terminals or workstations	135	70.31	107	60.80
iv.	Constant power failure	60	31.25	28	15.91
v.	No proper user education programme to enhance OPAC usage	123	64.06	104	59.09

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vi	Lack of proper guidance from the library staff	105	54.69	128	72.72
vii	No hyperlink to library OPAC from the university website	141	73.44	124	70.45
viii	Constant system breakdown	82	42.71	79	44.89
ix	Book not in proper place on the shelf as indicated in the OPAC	48	25.00	68	38.64
x	OPAC design is too difficult to use and not easy to understand	51	26.56	41	23.30

Source: Field Survey, 2018

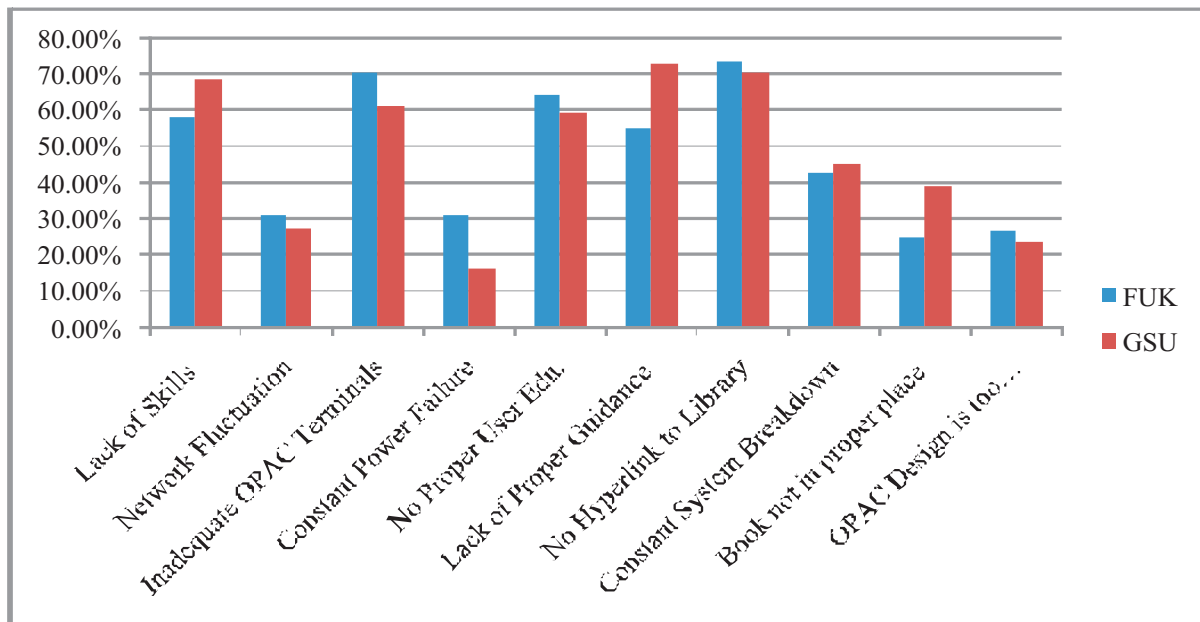


Figure 2: Challenges Undergraduate Students' Encountered with OPAC

Table 4 and figure 2 showed the challenges undergraduate students' encountered with the use of OPAC in University Libraries in Gombe State. In FUK Library, 111(57.81) indicated that lack of skills to use OPAC independently is the challenge they faced, 135(70.31%) indicated that inadequate OPAC terminals,

123(64.06%) indicated that no proper user education, 105(54.69%) indicated that lack of proper guidance from the library staff and 141(73.44%) indicated that no hyperlink to library OPAC from the university website. In GSU Library, 120(68.18%) indicated that lack of skills to use OPAC independently is the challenge they faced, 107(60.80%) indicated

that inadequate OPAC terminals, 104(59.09%) indicated that no proper user education, 128(72.72%) indicated that lack of proper guidance from the library staff and 124(70.45%) indicated that no hyperlink to library OPAC from the university website as the challenge they faced.

Based on these responses, the unique challenges undergraduate students' faced in University Libraries in Gombe State are: lack of skills to use OPAC independently, lack of proper guidance from the librarian/library staff, inadequate OPAC terminals, no proper user education programme to enhance OPAC usage and no hyperlink to library OPAC from the university website. This implies that no matter what is being put in place to satisfy needs there must be one challenge or the other.

The finding agrees with the work of Wanigasooriya (2007), which identified that the library users are faced with the problem of no proper user education programme to boost

up the OPAC usage, no direct link for the OPAC from the university home page, and lack of enough terminals. Also, the work of Mulla and Chandrashekara (2009), revealed that lack of awareness between user communities is one of the challenges coupled with lack of computer literacy skills needed to facilitate the use of OPAC.

4.3 Hypothesis Testing

This section presented the result of the inferential statistics used to test the null hypotheses formulated for this study. The hypothesis was tested using independent sample t-test.

4.4 Hypothesis

Ho¹: There is no significant difference in the level of undergraduate students' satisfaction with OPAC in University Libraries in Gombe State.

Table 5: Two-tailed Test on the Level of Undergraduate Students' Satisfaction with OPAC in Federal University Kashere and Gombe State Libraries

University	N	Mean	SD	SE	t - cal	t - cri	P	Df	Decision
FUK	192	13.8854	7.13574	0.51498	-2.333	1.978	0.020	366	Significant
GSU	176	15.6364	7.25405	0.54679					

Source: Research's Computation, 2018

Table 4.9 showed that the t-calculated value of -2.333 is greater than the t-tabulated value of 1.978. This showed that the statistical test is significant as the observed significant level is 0.020 which is less than 0.05 ($P < 0.05$). The null hypothesis which stated that there is no significant difference in the level of OPAC satisfaction by undergraduate students in FUK and GSU Libraries is therefore rejected. This means that there is significant difference between the undergraduate students in FUK and GSU Libraries in their level of OPAC satisfaction.

Recommendations

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

1. In order to make undergraduate students

fully satisfy with OPAC, university libraries in Gombe State should provide different marketing strategies or services to make users satisfy with OPAC and

thereby the undergraduate students will appreciate the services provided, this is because OPAC is an information retrieval device that helps users to locate information resources easily.

2. The University Libraries should undertake an intensive training to undergraduate students on how to use OPAC practically, provide user guide near OPAC terminals or on the university web page, provide adequate OPAC terminals for the undergraduate students so as to reduce the time students have to wait before using the OPAC. Both professional and non-professional library staff should be properly trained on OPAC so that they will have skills and render maximum assistance to undergraduate students. The libraries should create hyperlink to the OPAC and a web-based OPAC should be deployed so that undergraduate students can have access to library resources right from their homes, hostels, lecture halls or laboratories at anytime, anywhere and not necessarily coming to the library physically because it is the current trend.

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