

# Information Resources Availability and Accessibility on User Satisfaction: Case Study of Federal University of Technology, Minna Library

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## Abstract

**Purpose:** This study seeks to find out the role of information resources availability and accessibility on user satisfaction, it is limited to the Federal University of Technology Minna with undergraduate students as the target respondents.

**Methodology:** The survey research design was adopted and questionnaire was used as instrument for data collection. The study was anchored by five objectives which are, to find out if users are satisfied with the resources of the library; to identify available information resource in FUTMinna library; to find out if the resources are current, relevant and adequate; to find out if available information resources are accessible to users; to identify any challenges faced by users when accessing available information resources. A sampling fraction of 2.2% was used to select 376 undergraduates from the total population (19,090) using simple random sampling technique, two hypotheses were tested at 0.05 level of significance and data was presented in frequency, Tables and percentages. The hypotheses were analysed using T-test method.

**Findings:** The research finding reveals low level of user satisfaction, inadequacy and poor currency of available information resources, absence of current awareness services, printing and photocopying services as well as poor and non-functional information retrieval tools.

**Implications:** No library can be self-sufficient in satisfying users' needs also, the poor currency and inadequacy of available information resources has directly or indirectly led to poor user satisfaction

**Originality:** The study recommended that current and adequate information resources should be acquired to increase the level of user satisfaction which has been found to be poor, also, the librarians should use their knowledge of organisation of knowledge one and two, reference and bibliography, and media librarianship to provide access to effective information retrieval tools and audio-visual materials to help facilitate interactive learning.

**Key Words:** Availability, Accessibility, User-satisfaction, Information resources.

## Introduction

### Background to the study

A library is an organisation responsible for the acquisition, organisation, storage, retrieval, and dissemination of information to users and also the repackaging of such information into formats suitable to users. Saharan (2013) opined that the reason behind the existence of any library is to acquire and organise recorded information in such a way that permits access by users. Hameed (2010) described a library as "a social institution for the exploitation of knowledge contained in published matter", a collection of information materials that is not accessible to users cannot be considered a library. Librarians work hard to provide access to resources and services that can

satisfy users' needs and support the objectives of their parent organisation. (Saharan, 2013). Issa, Igwe, and Uzuegbu (2013) sees the library as a unique and strategic sector of any society due to their services to all segments of the same society for the advancement of man in all ramifications. In another study, Ahiauzu (2011) noted that the contents of libraries have undergone so much change over the years. Today, libraries do not only have books, they also have other materials that contain information as well as knowledge in libraries existing in different formats. (printed, audiovisual and electronic).

User satisfaction in Academic libraries has become an important goal to be achieved.

The library should as a matter of necessity provide information materials capable of satisfying users' needs. Users will learn to cherish beautiful buildings, experienced personnel, good catalogue, indexes, abstracts, bibliographies when their needs have been satisfactorily met. (Ifidon, 2006). Users will use the library more effectively if they find its services satisfactory. Users satisfaction have a significant influence on the use of library services. Thus, to justify the existence of any academic library, such library must provide and make accessible current, adequate and relevant information resources and services to satisfy all users. Successful user's satisfaction in the library is a function of how efficient the services are rendered as well as the degree of availability and accessibility of needed information resources.

Libraries must determine how to tailor their resources and services to cope with increasing user expectations for information. According Ikenwe and Adegbilero (2014) Satisfactory service cannot be delivered without seeking user's opinion. It is a healthy practice to seek for user's opinion regularly to help librarians make informed decisions about the quality of services to be rendered. Lamenting on user satisfaction Itumeleng, Malcolm and Anis (2014) opined that satisfied users can become habitual users and they can even invite other users to the library. However, dissatisfied users can discourage others from visiting the library. The academic librarian is left with the task of utilizing the tools (both human and material manpower) at their disposal and channelling them towards the achievement of effective user satisfaction because user satisfaction has now been considered by many to be a reliable standard for defining the effectiveness of library services. Patrick, Blessing and Ferdinand (2015) posited that the level of user satisfaction in any library depends on the volume of library resources, their relevance and adequacy to users' needs and the presence of effective information retrieval tools. Mohammed, (2006) as cited in Ikenwe and Adegbilero (2014) defined user satisfaction as a stage whereby users' needs have been satisfactorily met by the information resources and services of a library. Ikenwe and Adegbilero (2014) in their study believe that the librarian should have a prior knowledge of the availability and usability of relevant information resources in the library. They can accomplish this by assessing the entire resources of the library and also through the provision of library

user education and the effective use of information retrieval tools.

According to Bua, Terhile, and Yawe (2014) satisfying users needs involves making required information materials present at all times for users' consumption. Furthermore, they posited that staff quality determines the quality of services offered in any library; users are often encouraged to use the library when they realise that it is been run by qualified and experience filled personnel. Therefore, academic libraries must strive to serve their users anytime and to do this effectively, they must acquire and stock current and up-to date materials relevant to their users' curriculum. The library must tailor their resources and services towards achieving maximum user satisfaction. Abagai, (1998) cited in Bua et al (2014) opined that to ensure effective user satisfaction, it is important that the user acquire and possess necessary skills required to access information resources using available information retrieval tools, have a proper knowledge of the library routine, and knowledge of the information resources present in the library.

Nwachukwu et al (2014). Posited that the effectiveness of any library is a measure of how available, accessible and useable to users its information resources are. According to Agoulu and Agoulu (2002) as cited in Nwachukwu et al (2014) information resources may be available in the library yet inaccessible to users due to one reason or the other (poor organisation; cataloguing, classifying, indexing, abstracting) accessibility means the ability of users to identify and use information.

The task at hand is for the academic librarian to always ensure availability and accessibility of needed information materials which will consequently lead to user satisfaction. In their study, Onifade, Ogbuiyi, and Omeluzor (2013) opined that information resources availability does not mean accessibility and utilization; hence, academic libraries have to market their resources and services to invite users. Gohain, Saikia, and Anjan (2013) asserted that ICT application in library services is also providing opportunities to users to access and utilize both library online resources and services efficiently.

Information resource availability includes stocking the library shelf with current, adequate and relevant information materials for users' satisfaction. Among others, one of the most important obligation to any library is making

needed information available for use. Nwachukwu, Abdulsalami, and Lucky (2014) opined that information resource availability in any library can explain the need for it and why such library is important. In other words, the absence of relevant and up to-date materials will undermine the existence of any academic library. Furthermore, they described information resources availability as the existence of books, serials and journals publications, electronic source documents (non-print e.g. audio-visual) in the library. In an effort to ensure availability the library should provide adequate, current and relevant information resources that cuts across all user's discipline. This will support and help realise the goals of the parent institution. Awana (2008) posited that academic libraries must ensure they acquire and make available relevant information resources to users, this will help develop the library's collection and enhance user satisfaction.

The effectiveness of any library is a function of the quality of services rendered, that is, how available and accessible information resources are to users. Therefore, proper organisation of available information resources will no doubt ensure its accessibility and utilization by users and thereby ensuring user's satisfaction. The idea of librarianship in the twenty first century has laid more emphasis on the provision of, effective information retrieval strategies to meet the growing demand for easy accessibility to information resources by users. Ranganathan (1935) cited in Popoola (2011) viewed the library as a service organisation responsible for organising information resources in such a way that permits access to users and also turning passive users into committed users. Today's libraries should not just be a store house of information materials and their preservation but it should devise means by which the content of such materials can be rapidly and effectively be transmitted for use. This was the thought of Adomi (2009) in his study where he posited that today, there is more to libraries than being mere shelves with books. Libraries are increasingly providing access to a vast amount of electronic resources such as CD-ROMs as well as online services.

Accessibility is very important, because the relevant and available information resources have been an issue of concern coupled with the increasing rate of literature explosion leading to an abundance of scholarly research materials present on the internet. A library can be stocked

with relevant information materials but the absence of effective information retrieval mechanism could render them inaccessible. Often times, users' find this phenomenon frustrating whenever they visit the library; knowing that what they require is within the holdings of the library but having difficulties in accessing them. The above statement is true because there is trending effort by academic libraries worldwide towards digitization which implies that even the available printed materials are now been digitized and converted to their electronic equivalent for flexibility and ease of access. Users information needs will be satisfied if and when information resources are accessible.

Resource accessibility and availability are central to user satisfaction in any academic library setting. The significance of user satisfaction in the library cannot be over-emphasised. The availability of information resources in the library without their accessibility will render such library under-utilized however, easy accessibility of available information resources will consequently result to user satisfaction. These three variables work hand in hand hence they cannot be treated in isolation. The above view shows the relationship between "information resources availability, accessibility and user satisfaction", It is owing to the above that this study seeks to find out the role of information resources availability and accessibility on user satisfaction.

### **Statement of the problem**

Academic libraries all over the world are concerned with increasing user satisfaction hence new policies are being adopted, effective strategies are being put in place to achieve such goal. It is the primary duty of professional academic librarians to acquire, process preserve and disseminate current, adequate and relevant information resources in such a way that it will ensure availability and easy accessibility for maximum user satisfaction. However, despite all the above, user satisfaction is still not adequate. Is it because the facilities required to deliver the qualitative services are unavailable? or insufficient in quantity and quality? According to Nnadozie (2006) Funding for academic libraries in Nigeria is largely through government allocations, through their parent organisation. In support Okiy (2005) agreed that government funding has been poor, requiring libraries to look for alternative sources of

income in order to meet the increasingly sophisticated demand of library users. Lamenting on user satisfaction Simmonds (2001) cited in Sivathaasan (2013) stated several factors that can influence users' satisfaction; these factors include responsiveness and competencies of the librarians as factors that enhance user satisfaction.

It is against this backdrop that the researcher embarked on the study to find out the role of information resources availability and accessibility on user satisfaction, because adequate user satisfaction would boost the image of the library before the parent organisation and encourage institutional goal attainment.

### **Objective of the study**

The general purpose of this study is to find out the role of information resources availability and accessibility on user satisfaction. The specific objectives of the study are:

1. To find out if users are satisfied with the resources of the library in Federal University of Technology Minna library.
2. Identify available information resources in Federal University of Technology Minna library.
3. To find out if the resources are current, relevant and adequate.
4. To find out if the available resources are accessible to users.
5. To identify any challenges faced by users in accessing information resources available in the library.

### **Research questions**

The following research questions guided the study:

1. Are users satisfied with the library resources in federal university of technology Minna library?
2. What are the available information resources?
3. Are available information resources current, relevant and adequate?
4. Are the available information resources readily accessible to users?
5. What are the challenges faced by users when accessing available information resources available in the library?

### **Hypotheses**

The following null hypothesis would be tested at 0.05 level of significance.

1. There is no significant relationship between information resource availability and user satisfaction.
2. There is no significant relationship between information resource accessibility and user satisfaction.

### **Significance of the study**

This study will help librarians in their effort to satisfy the users, to understand the underlying relationship and interdependencies between availability and accessibility as variables that determine user satisfaction in the library, putting adequate effort to ensure the availability and accessibility of required information resources to enhance user satisfaction. The librarian will also know the extent of available information resource and the reason why users consult or fail to consult the library often. It will also be of benefit to users when they know that their interest is being taken care of.

The findings of this study shall provide the librarian with ideas and methods that will help increase accessibility to available information resources which shall no doubt in extension maximize users' satisfaction.

It will help the user gain easy access to available information resources within the holdings of the library under study thereby enhancing user satisfaction. Also, it will help the librarian in his choice of needed materials during annual acquisition. Finally, the study will contribute meaningfully to the increasing volume of literature available in the field of library and information science.

### **Scope of study**

This study covers the role of information resources availability and accessibility on user satisfaction. It is however limited to the Federal University of Technology Minna library with undergraduate students as the target respondents.

### **Methodology**

#### **Research design**

This research work adopt the survey research method as means of gathering data because it deals with the behaviour, attitude and believe of people in real life situations. According to Osuala (1982) as cited in (Isiaka, 2014) "A survey research is a study that collect information by asking people questions. The information collected by data is generally numerically suitable for statistical analysis". Similarly, Trochim (2016) defines survey

research as one of the most important areas of measurement in applied social research also, Ekere et al(2016) explained that survey research is often being used as a tool for assessing service quality and user satisfaction. The broad area of survey research covers any measurement procedures that involve asking questions of respondents. A "survey" can be anything from a short paper-and-pencil feedback form to an intensive one-on-one in-depth interview. In view

of the above definitions, the survey research has been considered appropriate for this research and hence it was adopted.

**Population of the study**

The total population of undergraduate library users of Federal University of Technology Minna is 17,090 students as at 2015 /2016 academic session.

**Table 3.1: FUT Minna population of undergraduate library users**

Name of school	Population of school								TOTAL
FUT Minna	SAAT	SEET	SEMT	SET	SLS	SICT	SPS	SSTE	
Library users	1829	3458	978	3119	841	1253	2836	1826	17,090

**Key:**

- School of agricultural and agricultural technology = SAAT
- School of Engineering and Engineering Technology = SEET
- School of Entrepreneurship and Management Technology = SEMT
- School of Environmental Technology = SET
- School of life Science = SLS
- School of Information and Communication Technology = SICT
- School of Physical Science = SPS
- School of Science and Technology Education = SSSE

Source: Information Technology service department, Federal University of Technology, Minna.

**Sampling technique and sample size**

The total number of undergraduate student of Federal University of Technology, Minna is seventeen thousand and ninety (17,090). However, the researcher used Krejcie and Morgan Table (1970) which states that for a population of (15000 to 20000) a sample size of three hundred and seventy-six (376) should be used. The researcher used a sampling fraction of 2.2% to select 376 undergraduates from the total population using simple random sampling technique

**Table 3.2: Sample size**

Name of school	Population of school								TOTAL
FUT Minna	SAAT	SEET	SEMT	SET	SLS	SICT	SPS	SSTE	
Library users	48	55	41	53	37	44	51	47	376

**Instrument for data collection**

The instrument used for the data collection is questionnaire. The questionnaire was designed under three different subscales known as user satisfaction questionnaire (USQ) availability of information resources questionnaire(AIRQ), accessibility of information resources questionnaire (AIRQ).They all have one section which is section B, while section A focused on the background information of the undergraduate students which is their demographic variables. These are information on gender ,department and academic level.

used was validated by experts in library and Information science of the university, who examined and made necessary correction in terms of the structural and grammatical design of the questionnaire. The Cronbach Alpha method was used to determine the reliability coefficients of the instrument. The values obtained were 0.75 for user satisfaction, 0.81 for availability and 0.71 for accessibility.

**Method of data collection**

The method of data collection for the study is through the administration of questionnaire which were personally distributed by the researchers. They were given to three hundred and seventy-six (376) respondents from both campuses of the Federal University of Technology, Minna which are Bosso and main

**Validity and reliability of the instrument**

The research instrument used by the researchers in this study is the questionnaire. The instrument

campus Gidan Kwano. However, only three hundred and seven (307) were retrieved.

**Method of data analysis**

All data collected were analysed using simple descriptive statistics and the data was presented in frequency, Tables and percentages. The hypotheses were analysed using T-test method.

Table 1: Library usage

Options	Number of respondents	Percentage of respondents (%)
Yes	301	98
No	6	2
Total	307	100

Table 1 above shows that 301 (98%) of the respondents make use of the library while 6 (2%) of the respondent does not make use of the library.

Table 2: User satisfaction

Options	Number of respondents	Percentage of respondents (%)
Yes	139	45
No	168	55
Total	307	100

Table 2 shows that 139 (45%) of the respondents are satisfied whenever they use the available library resources while 168 (55%) of the respondents are not satisfied whenever they make use of the Available library resources.

Table 3: Satisfaction level

Options	Number of respondents	Percentage of respondents(%)
Strongly Agreed	2	1
Agreed	137	44
Disagreed	144	47
Strongly disagreed	24	8
Total	307	100

Table 3 above shows that 139 (45%) of the respondents indicated strongly agreed and agreed, while 168 (55%) indicated Disagreed and strongly disagreed that their level of

Table 4: Users assessments

Options	Number of respondents	Percentage of respondents (%)
Average	155	51
Satisfactory	108	35
Poor	44	14
Total	307	100

Table 4 shows that 155 (51%) of the respondents indicated Average, 108 (35%) indicated satisfactory, 44 (14%) of the respondents indicated poor for the overall assessment of the information resources in meeting their curriculum need.

**Data analysis according to research questions:**

**Research question 1: Are users satisfied with the information resources in Federal University of Technology, Minna Library?**

Questionnaire item 1: Do you make use of the library?

Questionnaire item 2: Are you satisfied whenever you make use of the available library resources?

Questionnaire item 3: Your level of satisfaction whenever you use the available resources is quite high

satisfaction when using the information resources is very high

Questionnaire item 4: what is your overall assessment of the information resources in meeting your curriculum needs

**Research question 2: What are the available information resources in Federal University of Technology, Minna**

Questionnaire item 5: What kind of information resources does the Federal University of Technology, Minna library provides.

Table5: Available information resources in FUT Minna library

Resources	Number of respondents	Percentage of respondents (%)
Journals and serial materials	11	4
Books	51	17
Electronic materials	23	7
All of the above	222	72
Total	307	100

Table 5 shows that 11 (4%) of the respondents indicated journals and serials materials, 51 (17%) of the respondent indicated books, 23 (7%) indicated electronic materials and 222 (72%) indicated all of the above as the type of information resources that Federal university of Technology, Minna provides.

Questionnaire item 6: Does the Federal University of Technology library subscribe to electronic scholarly journals.

Table 6: Types of journals in FUT Minna library

Options	Number of respondents	Percentage of respondents (%)
Yes	282	92
No	25	8
Total	307	100

Table 6 shows that 282 (92%) of the respondents indicated yes while 25 (8%) of the respondents indicated No that the federal university of technology, Minna library subscribe to electronic scholarly journals

Questionnaire item 7: Does Federal University of Technology, Minna library provides audio-visual materials

Table 7: Audio-visual materials

Options	Number of respondents	Percentage of respondents (%)
Yes	150	49
No	157	51
Total	307	100

Table 7 shows that 150 (49%) of the respondents indicated that Federal University of Technology, Minna library provides audio-visual materials while 157 (51%) indicated that Federal University of Technology, Minna library does not provides audio-visual materials

Questionnaire item 8: What is the format of the information resources used by Federal University of Technology, Minna library?

Table 8: Formats

Information resources	Number of respondents	Percentage of respondents (%)
Printed format	81	26
Electronic format	6	2
All of the above	220	72
Total	307	100

Table 8 shows that 81 (26%) of the respondents indicated books, 6 (2%) indicated electronic format, and 220 (72%) indicated all of the above as the format of the information resources used by Federal University of Technology, Minna library

**Research question 3: Are the information resources current, relevant and adequate?**

Questionnaire item: Are the information resources relevant to your curriculum?

Table 9: Relevance

Options	Number of respondents	Percentage of respondents (%)
Yes	279	91
No	28	9
Total	307	100

Table 9 shows that 279 (91%) of the respondents indicated that the information resources are relevant to their curriculum while 28 (9%) of the respondents indicated that the information resources are irrelevant.

Questionnaire item 10: Are the information resources in Federal University of technology, Minna library current and up to date?

Table 10: Currency

Options	Number of respondents	Percentage of respondents (%)
Yes	33	11
No	274	89
Total	307	100

Table 10 shows that 33 (11%) of the respondents indicated that the information resources in Federal University of technology, Minna library are current and up to date while 274 (89%) of the respondents indicated that the information

resources in Federal University of Technology, Minna library are not current and up to date

Questionnaire item 11: Are the information resources adequate to the respective user?

Table 11: Adequacy

Options	Number of respondents	Percentage of respondents (%)
Yes	51	17
No	256	83
Total	307	100

Table 11 shows that 51 (17%) of the respondents indicated that the information resources are adequate to the respective user while 256 (83%) of the respondents indicated that the information resources are inadequate to the respective user

Questionnaire item 12: What is your overall assessment of the information resources in terms of currency, relevance and adequacy?

Table 12: Overall assessment

Options	Number of respondents	Percentage of respondents (%)
Average	65	21
Satisfactory	61	20
Poor	181	59
Total	307	100

Table 12 shows that 65 (21%) of the respondents indicated average, 61 (21%) indicated satisfactory, and 181 (59%) of the respondents indicated poor for the overall assessment of the information resources in terms of currency, relevance and adequacy.

**Research question 4: Are the information resources readily accessible to users?**

Questionnaire item 13: Are you able to access information resources from Federal University of Technology, Minna library?

Table 13: Accessibility

Options	Number of respondents	Percentage of respondents (%)
Yes	293	95
No	14	5
Total	307	100

Table 13 shows that 293 (95%) of the respondents indicated that they are able to access information resources from Federal University of Technology, Minna library while 14 (5%) of the respondents indicated that they are not able

to access information resources from Federal University of Technology, Minna library.

Questionnaire item 14: Do you make use of the information retrieval tools present in Federal university of Technology Library?



Table14: Usage of information retrieval tools

Options	Number of respondents	Percentage of respondents (%)
Yes	29	9
No	278	91
Total	307	100

Table 14 shows that 29 (9%) of the respondents indicated that they make use of the information retrieval tools present in Federal university of Technology Library while 278 (91%) of the respondents indicated that they do not make use

of the information retrieval tools present in Federal university of Technology Library

Questionnaire item 15: How do you rate the usability of accessed information resources?

Table 15: Information usability

Options	Number of respondents	Percentage of respondents (%)
Average	120	39
Satisfactory	151	49
Excellent	36	12
Total	307	100

Table 15 shows that 120 (39%) indicated averagely, 151 (49%) indicated satisfactory and 36 (12%) indicated excellent in their rating of the usability of accessed information resources

Questionnaire item 16: How do you score the accessibility of information resources in federal university of Technology, Minna library

Table: 16: Level of accessibility

Options	Number of respondents	Percentage of respondents (%)
Average	91	30
Satisfactory	168	55
Excellent	48	15
Total	307	100

Table 16 shows that 91 (30%) of the respondents indicated average, 168 (55%) indicated satisfactory and 48 (15%) indicated excellent for their scoring of the accessibility of information resources in federal university of Technology, Minna library

**Research question 5: what are the challenges faced by users when accessing available information resources?**

Questionnaire item 17: Does federal University of Technology, Minna library provide current awareness service?

Table 17: Provision of current awareness services

Options	Number of respondents	Percentage of respondents (%)
Yes	-	-
No	307	100
Total	307	100

Table 17 shows that the 307 (100%) of the respondents indicated that Federal University of Technology, Minna library does not provide current awareness service

Questionnaire item 18: Does Federal University of Technology, Minna library provide printing and photocopying service?

Table 18: Provision of printing and photocopying services

Options	Number of respondents	Percentage of respondents (%)
Yes	-	-
No	307	100
Total	307	100

Table 18 shows that the 307 (100%) of the respondent indicated that federal University of

Technology, Minna library does not provide printing and photocopying service.

Questionnaire item 19: How effective do you use catalogue, bibliography, indexes and abstracts?

Table 19: Effectiveness in using bibliographic tools

Options	Number of respondents	Percentage of respondents (%)
Averagely	47	15
I don't use any of the above	260	85
Total	307	100

Table 19 shows that 47 (15%) of the respondents indicated that the effective use of catalogue, bibliography, indexes and abstracts is average while 260 (85%) of the respondents indicated

that they do not use catalogue, bibliography, indexes and abstracts

Questionnaire item 20: Were you given library user education on the use of information retrieval tools?

Table 20: Provision of library user education

Options	Number of respondents	Percentage of respondents (%)
Yes	278	91
No	29	9
Total	307	100

Table 20 shows that 278 (91%) of the respondent indicated that they were given library user education on the use of information retrieval tools while 29 (9%) of the respondents indicated that they were not given library user education on the use of information retrieval tools.

### Hypotheses testing

Two hypotheses were tested at 0.05 level of significance the results are shown in table 21-22.

**Ho1: There is no significant relationship between information resource availability and user satisfaction.**

Table 21: The t-test relationship between information resource availability and user satisfaction.

	Information resource availability	Users satisfaction
Mean	2.3075	1.7425
Variance	1.439092	0.443492
Observations	4	4
Pooled Variance	0.941292	
Hypothesized Mean Difference	0	
Df	6	
t Stat	0.823572	
P(T<=t) one-tail	0.220841	
t Critical one-tail	1.94318	
P(T<=t) two-tail	0.441682	
t Critical two-tail	2.446912	

Table 22 reveals that there is a significant relationship between information resource availability and user satisfaction. Because, at an alpha level of 0.05, the t Stat value 0.82357 is < the t Critical one-tail value 1.94318 and also, the Probability P(T<=t) two-tail value 0.441682 is

greater than 0.05 significant. Thus, the independent null hypothesis is rejected.

**Ho2: There is no significant relationship between information resource accessibility and user satisfaction.**

Table 22: The t-test relationship between information resource accessibility and user satisfaction.

	Information resource accessibility	Users satisfaction
Mean	1.6375	1.7425
Variance	0.159158	0.443492
Observations	4	4
Pooled Variance	0.301325	
Hypothesized Mean Difference	0	
Df	6	
t Stat	-0.27051	
P(T<=t) one-tail	0.397915	
t Critical one-tail	1.94318	
P(T<=t) two-tail	0.795831	
t Critical two-tail	2.446912	

Table 22 reveals that there is a significant relationship between information resource availability and user satisfaction. Because, at an alpha level of 0.05, the t Stat value -0.27051 is < the t Critical one-tail value 1.94318 and also, the Probability P(T<=t) two-tail value 0.795831 is greater than 0.05 significant. Thus, the independent null hypothesis is rejected.

#### Discussion of Findings based on research questions

##### Research question 1: Are users satisfied with the library resources in Federal University of Technology Minna library?

Table 1 shows that the students of Federal University of Technology, Minna use the library with the frequency of 301 (98%), Table 2 shows that the users are not satisfied when they make use of the library with frequency of 168 (55%), Table 3 shows that the Federal university of Technology Minna students disagreed and strongly disagreed with frequency of 168 (55%), and Table 4 shows that the overall assessment of the information resources in meeting the users curriculum need is average with frequency of 155 (51%). The response from all the respondents shows that the students of Federal University of Technology, Minna use the library, that the users are not satisfied when they make use of the library and the overall assessment of the information resources in meeting the users' curriculum need is average.

User satisfaction has been found to be poor, this was supported by the users' overall assessments of library resources which is average; this is unacceptable because it has a negative effect on user satisfaction. However, the findings agree with Bua, Terhile and Yawe (2014) who reported a decline in the level of user satisfaction caused by inadequate information resources, staff attitude towards users, poor ventilation, and an unsuitable library environment.

##### Research question 2: What are the available information resources?

Table 5 revealed that all the information materials, Journals and serial materials, Books, Electronic materials are information resources provided by the Federal University of Technology, Minna library with frequency of 222 (72%), Table 6 shows that Federal University of Technology, Minna library subscribe to electronic journal with frequency of 282 (92%), Table 7 shows that Federal University of Technology, Minna, library does not provide audio visual materials with frequency of 157 (51%) and Table 8 shows that all the format that is printed format, electronic format and digital format are the format of information resources used by Federal University of Technology, Minna library with frequency of 220 (72%). The response from all respondents indicated that Journals and serial materials, Books, Electronic materials are information resources provided by FUTMinna library, FUTMinna library subscribe to electronic journal, does not provide audio visual materials and all the format that is printed format, electronic format and digital format are the format of information resources used by Federal University of Technology, Minna library.

The different formats of information resources used is commendable as it permits usability and easy access thereby encouraging user satisfaction. The presence of subscribed academic scholarly journals by the university implies access to quality publications by users in their respective fields or discipline available in electronic and digital formats. This development contributes significantly to user satisfaction and it contrast with the views of Tiefel (2004) as cited in Patrick et al (2015) who noted that many users are unaware of the availability of abundant information and their value but agrees with the

study of Itumeleng et al (2014 )who explained that in order for academic libraries to achieve maximum user satisfaction there is need for an abundance of books and journals collections, photocopy machines and upgrading of internet facilities and service.

**Research question 3: Are available information resources current, relevant and adequate?**

Table 9 shows that the information resources provided are relevant to their curriculum with frequency of 279 (91%), Table 10 show that the information resources provided are not current and up to date with frequency of 274 (89%), Table 11 shows that the information resources provided are not adequate to the respective user with frequency of 256 (83%), and Table 12 show that the overall assessment of information resources in terms of relevance, currency and adequacy is poor with frequency of 181 (59%). The responses from all respondents therefore revealed that the information resources provided are relevant to their curriculum, the information resources provided are not current and up to date, information resources provided are not adequate to the respective user and that the overall assessment of information resources in terms of relevance, currency and adequacy is poor.

It is one thing for users to identify information resources relevant to their curriculum and another for these materials to be adequate and current. The scenario we have at hand is that which the users are able to access relevant information resources but these resources are inadequate and non-current which implies poor user satisfaction because even their overall assessment of available information resources in terms of relevance adequacy and currency is poor. Relevance alone cannot guarantee user satisfaction, this is in partial agreement with the findings of Peter and Altman (2010) who observed that libraries are now more pre-occupied with the provision of information to users and the constant re-evaluation of their services in terms of relevance, currency and adequacy. It conforms with the study of Awana (2008) who posited that the success of any library depends of the adequacy of service its offers.

**Research question 4: Are the available information resources readily accessible to users?**

Table 13 shows that the users are able to access information resources from Federal University of Technology, Minna library with frequency of 293 (95%), Table 14 shows that the user does not make use of information retrieval tools present in Federal University of Technology, Minna library with frequency of 278 (91%), Table 15 shows that the rate of the usability of accessed materials is satisfactory with frequency of 151(49%) and Table 16 shows that the overall score of accessibility of information resources in Federal University of Technology, Minna library is satisfactory with frequency of 168 (55%). The overall responses from all the respondents indicated that the users are able to access information resources from Federal University of Technology, Minna library, that the user does not make use of information retrieval tools present in Federal University of Technology, that the rate of the usability of accessed materials is satisfactory and that the overall score of accessibility of information resources in Federal University of Technology, Minna library is satisfactory

Some of the available information retrieval tools are; accession register and catalogue which is not functional. Since the level of accessibility is high, and yet from the finding of research question one user satisfaction is poor it disagrees with the findings of John (2014) who identified poor access to information resources as one of the major challenges facing academic libraries in Africa but agrees with Ugah (2008) who opined that information resources will be more useful if they are accessible and Aguolu and Aguolu (2002) as cited in Popoola and Oladele (2011) who maintained that, information resources tend to be more useful when they are accessible.

**Research question 5: What are the challenges faced by users when accessing available information resources available in the library?**

Table 17 shows that Federal University of Technology, Minna library does not provide current awareness service with frequency of 307 (100%), Table 18 shows that Federal University of Technology, Minna library does not provide printing and photocopying service with frequency of 307 (100%), Table 19 shows that the user does not make use of catalogue, bibliography, abstracts and indexes with

frequency of 260 (85%) and Table 20 shows that the users were given library user education on the use of information retrieval tools, with frequency of 278 (91%). From the Table, the overall response from all respondents shows that Federal University of Technology, Minna library does not provide current awareness service, that Federal University of Technology, Minna library does not provide printing and photocopying service, that the user does not make use of catalogue, bibliography, abstracts and indexes and that the users were given library user education on the use of information retrieval tools.

It could be said that the absence of current awareness services, photocopying and printing services has directly or indirectly contributed to the lack of current and adequate information resources as identified in the findings of research question three. Also, it is alarming to learn that among other information retrieval tools mentioned, the library has only one which is the catalogue and it is not functional. The need for libraries to make available effective and functional information retrieval tools, current awareness services, agrees with Itumeleng et.al (2014) who explained that in order for academic libraries to achieve maximum user satisfaction there is need for an abundance of books and journals collections, photocopy machines and upgrading of internet facilities and service.

#### Findings based on the tested hypotheses

**Hypothesis 1:** There is no significant relationship between information resource availability and user satisfaction.

Table 21 reveals the T-test Table showing the relationship between information resource availability and user satisfaction. From the result got, a statistically significant relationship was found between information resource availability and user satisfaction in Federal University of Technology, Minna. ( $P(T \leq t) = 0.441682$ ,  $P < 0.05$ ). Since there is a significant relationship between information resource availability and user satisfaction., it implies that information resource availability has positive relationship with user satisfaction. For this reason, the null hypothesis was rejected, which stated that there is a significant relationship between information resource availability and user satisfaction. The significant positive relationship revealed by hypothesis 1 is in agreement with the questionnaire statement, for example the availability of Journals and serials, Books,

electronic materials and electronic journal encourage the patrons to use the library.

**Hypothesis 2:** There is no significant relationship between information resource accessibility and user satisfaction.

Table 22 reveals the T-test Table showing the relationship between information resource accessibility and users satisfaction. From the result presented, a statistically significant relationship was found between information resource accessibility and users satisfaction in Federal University of Technology, Minna ( $P(T \leq t) = 0.795831$ ,  $P < 0.05$ ). Since there is a significant relationship between information resource accessibility and user satisfaction, it means that information resource accessibility has positive relationship with user satisfaction. For this reason, the second null hypothesis was rejected, which means that there is a significant relationship between information resource accessibility and users satisfaction. The significant positive relationship revealed by hypothesis 2 is in agreement with the questionnaire statement, which says that accessibility creates satisfactory and excellent user satisfaction as corroborated by Taylor (2011).

#### Conclusion

Based on the finding of the study, one would conclude that no library is self-sufficient in satisfying users' needs and making available and easily accessible the needed information resources for the users. Federal University of Technology, Minna library as an example have information resources available in their library, and these resources are relevant and accessible. However, the poor currency and inadequacy of the available information resources has directly or indirectly led to poor user satisfaction which has been revealed by the findings of the study. The researchers observed that libraries are now more pre-occupied with the provision of information to user and not keen on the constant re-evaluation of their services in terms of relevance, currency and adequacy. The success of any library depends on the adequacy currency and relevance of the services it offers.

#### Recommendations

The following recommendations were proffered based on the findings.

1. The library should acquire information resources capable of meeting their user's

curriculum, to achieve this, the library must sample users' opinion to find out their needs and repackaging their resources and services to suite that need.

2. The library should make available audio visual materials like still projectors, DVD, CD to facilitate interactive learning and to be in line with global best practices.
3. The library should acquire up to date, current and relevant information resources to improve the quality of their collection in terms of adequacy, relevance and currency.
4. Information retrieval tools should be made available and accessible to the users by the library so as to ensure easy accessibility of needed information resources.
5. The library should provide current awareness service to their users, this will make the users aware of what is available in their field of study. The library should also provide photocopying and printing service as means of generating funds and to enhance user's satisfaction
6. The library should embrace the use of information retrieval tools and train users on their use
7. The library should as a matter of deliberate policy make their catalogue functional because that is the easiest bibliographical tool any one can use.
8. The library should adopt resources sharing initiative to help increase the volume and quality of information resources available and accessible to users. This is in line with global best practices as the world today is a global village.

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