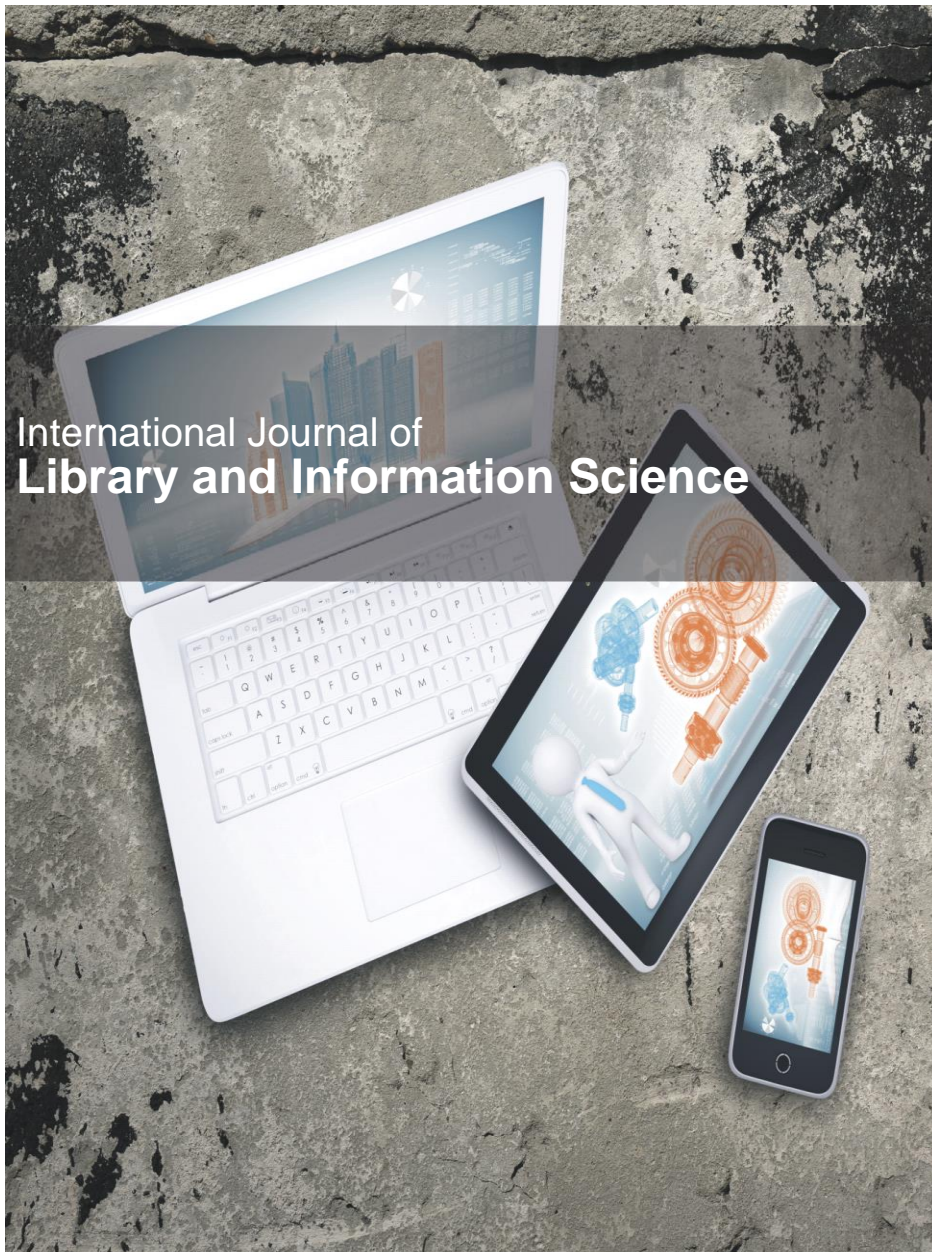


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Full Length Research Paper

Analysis of responsibilities of electronic readiness and software for museums online in national commission for museums and monuments in Nigeria

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This study was carried to identify level of electronic readiness in museums by assessing the uses of electronic readiness provision in museum services, and also to determine the factors responsible for ineffective use of electronic readiness in museums. Descriptive survey research was used for this study. Total enumeration sampling technique was adopted for the sampling procedure. This was chosen because of the small number of number of population of professional museum staff involved which is put at 784 as at 2012. Questionnaires were distributed to museum professionals at 16 museums, located in the South-West and North –Central geo-political zones of Nigeria to collect for the study. Questionnaires administered, the data collected were analysed with the use of statistics depicting the mean and standard deviation. Findings indicated the highest availability of e-readiness resources by respondents was the use of computer (Mean =2.55) and followed by use of e-mail (Mean =2.53), museum website (Mean=2.23), internet (Mean=2.20), the least was CD-Rom (mean =1.62) respectively. The overall result indicated that computer is the most available e-readiness resources use in museums. It was recommended that the country’s museums must be computerised

Key words: Electronic readiness, museums online, software for museums, national commission for museums and monuments, electronic resources, information communication technology.

INTRODUCTION

In the trend of electronic readiness world, few of the humanities have withstood the march of technology more tenaciously than museum. Museums tend to think of themselves more as custodians than communicators, now as long as electronic emerge. Museums, like other

institutions, have succumbed to the propensity of our society to amass data in all its forms. Information and Communication Technologies (ICT) are affecting the modus operandi of the entire industries (Crowston and Myers 2004).

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However, in recent years, museums have been given the opportunity to reach out to audiences beyond their physical vicinities with the help of the electronic readiness. Most museums maintain websites with varying degrees of museums services. With the inception of electronic, museums gained the ability to provide images and information about their collections online as a preview to the visit.

As it has progressively taken place in other areas, museums are increasing their use of electronic readiness, not only to support management operations through data collection and analysis but also to be directly used by visitors, in an attempt to enhance their experience of the exhibition (Sheldon, 1997).

A museum is a complex institution, one's definition would depend on either one's likes or dislikes for museums. Eboreime (2008) argued that museum was the cultural equivalent of the central bank of any nation. Museums are memory institution which organise cultural and intellectual record. Museum's collections contain the memory of peoples, communities, institutions and individuals, the scientific and cultural heritage, and the products throughout time of our imagination, craft and learning.

According to Dempsey (2000), museums have changed from the imposing sites designed to preserve relics and to exhibit collections, to places where a mix of enjoyment, learning and experience outcomes are also pursued. Moscardo (1996) opines that museums play a significant role in culture and tourism worldwide. Through museums, societies represent their relation to their own history and to that of other cultures and people. Lumley (1988) contends that in addition to preserving and studying collections, "museums exist for the purpose of serving the community."

Corroborating this fact, Ames (1986) submits that with increased levels of competition in the culture and tourism industry, it is becoming more important for museum professionals to identify the variables that will enhance the attraction and retention of museum visitors.

It is important to remember that digital databases of any kind are still a relatively new concept, and many, if not most, museums are still struggling to keep their in-house database updated (Sabin, 1997). In order for museums to make their databases available online, they first have to be sure they are up to date and useful and that they are updated regularly.

For many museums, this may be too intensive to be practical in light of limitations in financial and human resources but the advantage, when put in place, will be enormous in the long run. Research has shown that satisfaction is an important predictor of intention to revisit a place formally visited (Bowen, 2002).

However, Cosson (1991) thinks that regardless of growing pressure to become more competitive and self-reliant, museums, particularly in the public sector, have been slow in subscribing to the idea of customer

orientation. Museums, as a part of the cultural industry, give meaning to present lives by interpreting the past. Museums were expected to "provide the symbols through which a nation and a culture understand itself" (Hewison, 1987).

In a more contemporary context, a museum helps people to understand the world by using objects and ideas to interpret the past, the present as well explore the future. It helps to preserve and research collections, make access of object and information in actual and virtual environments possible. It helps, in the interest of the public, to establish permanent non-profit-making organisations that can contribute long-term value to the communities (A new definition of museums, 2002).

Visitors to museums do not buy the attractions, but rather pay for the experience generated by the visit. These categories remind us of the elements of an experience proposed by Pine and Gilmore (1999) which claimed that the realms of an experience include entertainment, education, escape, and aesthetics:

"Entertainment: Entertainment is not only one of the oldest forms of experience, but also one of the most developed and the most common place and familiar. To arouse visitor's interest, modern museums have incorporated more sensory aspects that involve "sight, sound and motion, and allow visitors to actively participate in the museum experience Kotler and Kotler (2007)

Education: Aside from entrainment functions museums also performs edutainment roles. Edutainment accords museums dual responsibilities involving entreating and educating visitors concurrently.

Escape: Escapist experiences involve greater immersion than entertaining and educational experience. "Escapist experiences immerse the visitors in activities" (Pine and Gilmore, 1999)".

Estheticism: In aesthetic experiences, individuals immerse themselves in an event or environment to absorb or appreciate beautiful things Pine and Gilmore (1999).

Entertainment, education, escapist and aesthetic experiences cannot be staged without the involvement of props, (for example facilities and people). The elements that influence visitor's experience include marketing mix products, price placed, promotion strategies and the aesthetic structure of the place (McLean, 1997).

The Museum and Library Services Act (2008) defines a museum as "a public or private non-profit agency or institution organised on a permanent basis for essentially educational or aesthetic purposes, which, utilizing professional staff, owns or utilizes tangible objects, cares for them, and exhibits them to the public on a regular basis".

Museums as cultural attractions are an important element of the tourism destination and must adjust to new consumers' needs (MacDonald and Alsford, 1997). Some authority consider that museums should maintain

strict guidelines in their exhibits, making sure that no place has been given to the misinterpretation of the past and react against a possible “over-interpretation” the present (Uzzel, 1989).

Therefore, in the trend of electronic readiness world, few of the humanities have withstood the march of technology more tenaciously than museum. Museums tend to think of themselves more as custodians than communicators, now as long as electronic emerge. Museums, like other institutions, have succumbed to the propensity of our society to amass data in all its forms. ICT are affecting the modus operandi of entire industries (Crowston and Myers, 2004).

In recent years, museums have been given the opportunity to reach out to audiences beyond their physical vicinities with the help of the electronic readiness. Most museums maintain websites with varying degrees of museums services. With the inception of electronic, museums gained the ability to provide images and information about their collections online as a preview to the visit. As it has progressively taken place in other areas, museums are increasing their use of electronic readiness, not only to support management operations through data collection and analysis but also to be directly used by visitors, in an attempt to enhance their experience of the exhibition (Sheldon, 1997).

This innovation therefore, where society will not only rely on the physical accessibility of the museums, they now have the opportunity to enjoy quite number of degree of museums activities online through electronic readiness as the focus of this research study.

Statement of the problem

Museums might have reached out to many audiences beyond their physical vicinities with the help of the electronic readiness. Many people who manage the museums, especially in developing nations of the world, do not realise that visitors have high expectation for and rely on online access for information than the rigour involved in searching for information in one museum complex to the other. Some do not realise that technological advancement has changed people's orientation tremendously to the extent that everybody prefers to receive services at the comfort of their home.

Objectives to the study

The broad objective of this study is to examine the influence of electronic readiness on museums in Nigeria. Specifically, the study intends to:

1. Identify the level of electronic readiness in museums.
2. Assess the use of electronic readiness provision in

museum services.

3. Determine the factors responsible for ineffective use of electronic readiness in museums.
4. Assess the future and anticipated plans of electronic use in museums.
5. Identify challenges of using electronic readiness resources in museums.

Research questions

The study will focus essentially on the following research questions:

1. What is the level of availability of electronic readiness in the Museums?
2. How often do you use electronic resources in the Museum?
3. What types of information services are available in the Museum?
4. What are the benefits of using electronic readiness resources in Museum?
5. What are the challenges of using electronic readiness resources in National Commission for Museums and Monuments of Nigeria?

LITERATURE REVIEW

The rise in knowledge intensity is being driven by the combined forces of the information technology revolution and the increasing pace of technological change. Globalisation is being driven by national and international deregulation, and by the Information Technology (IT) related revolution (Houghton and Sheehan, 2000) in order for a country to gain the benefits offered by IT, technology must be implemented and used effectively across society and the economy.

Moreover, countries face the threat of being left behind if they do not address the growing digital divides both between and within countries (Montazer et al., 2006). Many developing country leaders have embraced IT as an engine for growth and development to help their nations, and they are driving the necessary changes to make that happen (Montazer et al., 2006).

Decision-makers need to know where the country currently stands in terms of IT availability and use, so they can plan toward their goals to knowledge economy or knowledge society. Governments and development aid professionals often frame this discussion in terms of “e-readiness”, or how ready a country is to gain the benefits offered by IT in term of policy, infrastructure and ground-level initiatives (Montazer et al., 2006). An e-readiness process based on an objective assessment that leads to sound e-strategies can offer a path for converting good intentions into planned action that brings real changes to people's lives (Bridge.org, 2005).

E-readiness is a relatively new concept that has been given impetus by the rapid rate of internet penetration throughout the world, and the dramatic advances in uses of IT in business and industry (Choucri, 2003). The e-readiness concept was originated by the intent to provide a unified framework to evaluate the breadth and depth of the digital divide between more and less developed or developing countries during the latter part of 1990s (Mutulaa and Van Brakel, 2006).

The first efforts in defining e-readiness were undertaken in 1998 by the Computer Systems Policy (CSPP) when it developed the first e-readiness assessment tool known as Readiness Guide for Living in the Networked World (CSPP, 2001). CSPP defined e-readiness with respect to a community that had high-speed access in a competitive market; with constant access and application of ICTs in schools, government, offices, businesses, healthcare facilities and homes; user privacy and online security; and government policies which are favourable to promoting connectedness and use of the network (Bridges.org, 2001).

"E-readiness" is shorthand for the extent to which a country's business environment is conducive to internet-based opportunities (EIU, 2002). It is a concept that spans a wide range of factors, from telephone penetration to online security to intellectual property protection. It is an idea that has outlasted the Internet "bubble" that sparked such exuberance; and delivered such disappointment in the late 1990s EIU (2002).

E-readiness can mean different things to different people, in different contexts, and for different purposes (Bridges, org, 2001). E-readiness is also defined as the aptitude of an economy to use information and communications technologies to migrate traditional businesses into the new economy. E-readiness reaches its optimal level when the economy is able to create new business opportunities that could not be done otherwise (Koulopoulos and Palmer, 2001).

E-readiness in construction organisation also is defined as ability of an organisation, department or workgroup to successfully adopt, use and benefit from ICTs such as e-commerce (Ruikar, 2005). Since the development of the first e-readiness tool several e-readiness tools have emerged through efforts of development agencies, research organisations, academia, business enterprises and individuals (Mutulaa and Van Brakel, 2006). One of the museum's central roles is to make information about the natural world accessible to a growing audience, its pioneering website provides scientific data, educational programmes and resource materials to millions of internet user across the globe (Natural History Museum Annual Report, 1999).

Digital technologies, and particularly the World Wide Web, have great potential to serve the challenges faced by museums in relation to access and audience development, which involves reaching and nurturing both existing and new audiences. Once you have thought

about the likely implications of electronic for your museum, it is time to begin writing your electronic policy. The electronic policy is basically a written statement of how you are going to use ICT and what you are going to be using it for. The exact content of the policy will vary from museum to museum, but some broad headings we may want to think about include the following; Statement of intent – what you will be using ICT for:

1. Roles and responsibilities for managing ICT in your museum
2. Provision of technical support: There are three main ways of organising technical support:
3. As part of an on-going contract with the supplier of your ICT
4. As part of the terms of the warranty under which your equipment is supplied
5. As an on-going contract with a third party ICT services provider

Specification for software including operating system and productivity software having decided what you want your computer to do, you will need to identify the software which does it. You will also need to think about whether the computer will need to run specialist software such as image editing or a collections management system. You need to think about how you would like to use the computer to communicate – for example through the Internet or by email.

METHODOLOGY

The research design employed for this was descriptive survey research of correlation type. According to Landman (1988), descriptive research is primarily concerned with describing the nature or conditions and degree in detail of the present situation, and the emphasis was to describe rather than judge or interpret. Inferences about relations among the variables were made without any direct intervention from concomitant variation of independent and dependent variables.

The study carried out the influence of the independent variable on electronic for the dependent variable which was museum. The target population for the study was seven hundred and eighty-four (784) museum professional employees used were between grades level 08 to 15 with minimum of bachelor degree or its equivalent. Out of the six-geopolitical zones which made up of Nigeria, two geopolitical zones were selected on random sampling which was southwest and north central geopolitical zones of national museum.

The study was limited to conservators, ethnographers, museum educators, curators, archaeologist, museum visitors and tourists because they belonged to the category of museum staff who, by the virtue of their professional calling, education and experience.

Total enumeration sampling technique was adopted for the purpose of the study and sampling procedure respectively. It is chosen because of the small number of population of professional museum staff involved which is put as at 784 as at 2012 (National Commission for Museums and Monuments of Nigeria, Staff nominal roll, 2012). At least, 16 National Museum were involved in the geopolitical zones examined. This appears to be well informed to be able to respond well to the research instrument. The research

Table 1. Population of the study: Museum stations in south-west and north-central.

Town	Number
Lagos	112
Abeokuta	14
Ibadan	77
Ile – Ife	60
Osogbo	54
Oyo	13
Esie	26
Ilorin	59
Lokoja	33
Markudi	10
Minna	50
Lafia	13
Jos	150
FCT, Abuja	49
Akure	41
Owo	23
Total	784

Source: National commission for museums and monuments of Nigeria, staff nominal roll as at April 2012.

Table 2. Research question one: What is the level of availability of e-readiness in the museums?

E-readiness resources	NA (%)	MA (%)	A (%)	ADA (%)	Mean	S.D
Computer	24 (12.0)	83 (41.5)	51 (25.5)	42 (21.0)	2.55	0.95
Email	27 (13.5)	80 (40.0)	52 (26.0)	41 (20.5)	2.53	0.97
Museum website	47 (23.5)	82 (41.0)	49 (24.5)	22 (11.0)	2.23	0.93
Internet	47 (23.5)	90 (45.0)	39 (19.5)	24 (12.0)	2.20	0.94
Website	60 (30.0)	87 (43.5)	33 (16.5)	20 (10.0)	2.07	0.93
Software	105 (52.5)	39 (19.5)	39 (19.5)	17 (8.5)	1.84	1.02
Online databases	126 (63.0)	31 (15.5)	29 (14.5)	14 (7.0)	1.66	0.97
CD-ROM	131 (65.5)	26 (13.0)	32 (16.0)	11 (5.5)	1.62	0.94

instrument used consist of 200 questionnaires distributed to the museum staff and tourist who were adult of 18 years and above that pay visit to museums (Table 1).

DATA ANALYSIS AND FINDINGS

Findings of this study were based on users and their perception of availability of electronic readiness and use of electronic readiness by professional museum staff of National Commission for Museums and Monuments performance. Questionnaires were designed and administered to museum users respectively. Answers to the research questions were as follows as administered to the respondents.

Answers to research questions

Table 2 indicated the ranking of the level of availability of e-readiness resources in the Museums as perceived by the respondents as follows; computer (Mean=2.55) was ranked highest by their mean score rating and was followed by e-mail (Mean=2.53), museum website (Mean=2.23), internet (Mean=2.20), website (Mean=2.07), software (Mean=1.84), Online databases (Mean=1.66) and lastly by CD-ROM (Mean=1.62) respectively. The result indicated that computer was the most available e-readiness resources used in museums.

Table 3 indicated the use of electronic resources in the Museum as follows: - CD-ROM (Mean= 4.09) was ranked highest among other electronic resource in museum such

Table 3. Research question two: How often do you use electronic resources in the museums?

Utilization of electronic resources	Never (%)	Occasionally (%)	Once a month (%)	Twice a month (%)	Once a week (%)	Daily a week (%)	Mean	S.D
CD-ROM	91 (45.5)	31 (15.5)	4 (2.0)	4 (2.0)	19 (9.5)	51 (25.5)	4.09	2.16
Website	17 (8.5)	115 (57.5)	4 (2.0)	7 (3.5)	2 (1.0)	55 (27.5)	3.87	1.86
Internet	10 (5.0)	106 (53.0)	5 (2.5)	2 (1.0)	14 (7.0)	63 (31.5)	3.54	1.91
Email	11 (5.5)	91 (45.5)	4 (2.0)	8 (4.0)	14 (7.0)	72 (36.0)	3.31	1.94
Computer	3 (1.5)	90 (45.0)	2 (1.0)	4 (2.0)	4 (2.0)	97 (48.5)	2.97	1.98

Table 4. Research question three: What types of information services are available in the museums?

Services delivery	D (%)	SD (%)	A (%)	SA (%)	Mean	S.D
Guided tour services	10 (5.0)	3 (1.5)	50 (25.0)	137 (68.5)	3.57	0.76
Outreach services	17 (8.5)	3 (1.5)	55 (27.5)	125 (62.5)	3.44	0.89
Users education	21 (10.5)	2 (1.0)	59 (29.5)	118 (59.0)	3.37	0.94
Cultural awareness services (CAS)	10 (5.0)	-	108 (54.0)	82 (41.0)	3.31	0.72
Selective Dissemination of information	29 (14.5)	8 (4.0)	108 (54.0)	55 (27.5)	2.94	0.95
Internet services	38 (19.0)	77 (38.5)	57 (28.5)	28 (14.0)	2.38	0.95
Photocopy services	111 (55.5)	5 (2.5)	51 (25.5)	33 (16.5)	2.03	1.22

as website (Mean=3.87), internet (Mean=3.54), e-mail (Mean=3.31) and computer (Mean=2.97) respectively. The result showed that CD-ROM was the mostly used electronic resources in the museums.

Table 4 showed that the ranking of types of information services available in the museum is as follows; guided tour services (Mean=3.57) was ranked highest by their mean score rating and was followed by outreach services (Mean=3.44), users education (Mean=3.37), cultural awareness services (CAS) (Mean=3.31), selective dissemination of information (Mean=2.94), internet services (Mean=2.38) and lastly by photocopy services (Mean=2.03). This implies that guided tour services were mostly information services used in the museums.

Table 5 ranked the benefits of using electronic resources is as follows; faster delivery of information (Mean=3.53) was ranked highest by their mean score rating and was followed by effective service delivery by museum staff (Mean=3.40), bringing visitors into interactive with museum objects (Mean=3.40), easy access to electronic resources (Mean=3.39), better user satisfaction (Mean=3.34), save visitors' time on searching (Mean=3.34), access to museum services off location (Mean=3.30) and lastly by access to more web based resources (Mean=3.27) respectively. The mean of ranking indicated that electronic resources makes information delivery faster in museums. This implies that electronic resources will be of the benefits of e-readiness of using electronic resources.

Table 6 ranked challenges of using electronic resources in the museums as follows; erratic power supply (Mean = 3.28) was ranked highest by their

mean score rating and was followed by poor internet connectivity (Mean=3.19), lack of software resources in museum (Mean=3.17), computer malfunctioning and access to database (Mean=3.11), lack of ICT skills (Mean=3.08), costly to access and use (Mean=3.07), technological constrains (Mean=3.05), difficulty to access (Mean=3.02), lack of training and support of staff and visitors (Mean=3.02), lack of technical know-how (Mean=2.97) and lastly by social factors (Mean=2.94) respectively. It indicated that erratic power supply was the most challenging problem faced while using electronic resources readiness in the museums. The implication is that e-readiness will continue to suffer until the electricity is stabilized.

Table 7 ranked the level of electronic readiness in the museums was as follows; e-mail (Mean=2.31) was ranked highest by their mean score rating and was followed by Museum website (Mean=2.28), internet (Mean=2.19), Purchase of ICT equipment (Mean=2.16), e-readiness policy (Mean=1.94), software (Mean=1.92), online database such as WEB, FLICKR, TWITTER, FACEBOOK (Mean=1.78) and lastly by CD-ROM (Mean=1.77). This implied that e-mail was the only e-readiness resource which was mostly used by museums professionals.

DISCUSSION

Findings of this study were based on users and their perception of availability of electronic readiness and use of electronic readiness by professional museum staff of

Table 5. Research question four: What are the benefits of using electronic resources in museums?

Benefits of using electronic resources	D (%)	SD (%)	A (%)	SA (%)	Mean	S.D
Faster delivery of information	18 (9.0)	4 (2.0)	33 (16.5)	145 (72.5)	3.53	0.91
Effective service delivery by museum staff	22 (11.0)	2 (1.0)	51 (25.5)	125 (62.5)	3.40	0.96
Bringing visitors into interactive with museum objects	20 (10.0)	2 (1.0)	55 (27.5)	123 (61.5)	3.40	0.93
Easy access to electronic resources	25 (12.5)	1 (0.5)	44 (22.0)	130 (65.0)	3.39	1.00
Better user satisfaction	26 (13.0)	7 (3.5)	41 (20.5)	126 (63.0)	3.34	1.04
Save visitor's time on searching	27 (13.5)	3 (1.5)	45 (22.5)	125 (62.5)	3.34	1.03
Access to museum services off location	24 (12.0)	4 (2.0)	60 (30.0)	112 (56.0)	3.30	0.99
Access to more web based resources	30 (15.0)	6 (3.0)	44 (22.0)	120 (60.0)	3.27	1.08

Table 6. Research question five: What are the challenges of using electronic resources in the museum?

Challenges of using electronic resources	D (%)	SD (%)	A (%)	SA (%)	Mean	S.D
Erratic power supply	27 (13.5)	14 (7.0)	35 (17.5)	124 (62.0)	3.28	1.08
Poor internet connectivity	36 (18.0)	11 (5.5)	32 (16.0)	121(60.5)	3.19	1.16
Lack of software resources in museum	37 (18.5)	8 (4.0)	38 (19.0)	117 (58.5)	3.17	1.16
Computer malfunctioning and access to database	28 (14.0)	26 (13.0)	43 (21.5)	103 (51.5)	3.11	1.10
Lack of ICT skills	37 (18.5)	15 (7.5)	44 (22.0)	104 (52.0)	3.08	1.16
Costly to access and use	34 (17.0)	22 (11.0)	41 (20.5)	103 (51.5)	3.07	1.14
Technological constrains	38 (19.0)	16 (8.0)	44 (22.0)	102 (51.0)	3.05	1.16
Difficulty to access	45 (22.5)	13 (6.5)	36 (18.0)	106 (53.0)	3.02	1.23
Lack of training and support of staff and visitors	38 (19.0)	24 (12.0)	34 (17.0)	104 (52.0)	3.02	1.19
Lack of technical know-how	41 (20.5)	19 (9.5)	46 (23.0)	94 (47.0)	2.97	1.18
Social factors	38 (19.0)	29 (14.5)	41 (20.5)	92 (46.0)	2.94	1.17

Table 7. Research question six: What is the level of electronic readiness in your museum?

Appraisal of e-readiness	NA (%)	NRA (%)	RA (%)	VRA (%)	Mean	S.D
Email	39 (19.5)	80 (40.0)	61 (30.5)	20 (10.0)	2.31	0.90
Museum website	39 (19.5)	84 (42.0)	59 (29.5)	18 (9.0)	2.28	0.88
Internet	43 (21.5)	97 (48.5)	40 (20.0)	20 (10.0)	2.19	0.89
Purchase of ICT equipment	44 (22.0)	96 (48.0)	45 (22.5)	15 (7.5)	2.16	0.85
e-readiness policy	73 (36.5)	78 (39.0)	36 (18.0)	13 (6.5)	1.94	0.90
Software	95 (47.5)	37 (18.5)	56 (28.0)	12 (6.0)	1.92	1.00
Online database such as WEB, FLICKR, TWITTER, FACEBOOK	111 (55.5)	36 (18.0)	40 (20.0)	13 (6.5)	1.78	0.98
CD-ROM	105 (52.5)	45 (22.5)	41 (20.5)	9 (4.5)	1.77	0.93

National Commission for Museums and Monuments performance. Questionnaires were designed and administered to museum users respectively. The study examines the demographic variables of museum professionals; individual human behaviour tends to vary with demographic factors. It is therefore pertinent to understand their demographic variables.

However, findings identified aforementioned from the various tables showed that analyses of responsibilities of e-readiness resources are prerequisite to the e-readiness study. The use of e-readiness resources such as software is important to museum because its level of

availability has strong predictor on how well a museum can perform in the service delivery. One the results indicated that computer was the most available e-readiness resources used in museums. This implied that museum professionals need to adequately and effectively use electronic resources. This was supported by several studies which have linked e-readiness appraisal with use of e-readiness resources, (Donovan, 1997). In the course of establishing the significance effect of e-readiness on the utilization of service delivery or otherwise, it is discovered that there is significant relationship between appraisal of e-readiness and Information services

delivery.

This brings into the focus that the increased prevalence of electronic will allow museums to consider and use of ICT as a channel, to disseminate objects, exhibitions and museums services to current or potential visitors and researchers; however little is known of the user attitude toward this practice before now. Also, available services in the museums had shown that, guided tours has the highest mean of scoring, this implies that guided tour services were mostly information services used in the museums.

The findings also substantiate the complement roles of analysis of e-readiness recourses and the benefits of using the available e-resources. This means that an e-readiness would provide policy makers with a detailed scorecard of their economy's competitiveness relative to its international counterparts. This fact corroborates Bui (2003) findings in which he asserts that countries are striving to become inclusive global information societies where all persons without distinction are empowered to create, receive, share and utilize information for their economic, social, cultural and political development. Therefore any country that is not electronically advanced is lagging behind in world trend.

Computer is the most available e-readiness resources used in museums by museum professionals despite all other electronic readiness resources to preserve objects as evidence of the past. As a representation of a museum collection, the records database itself has become a new entity. In a digital environment like CD-ROM or the internet a museum object is subject to new physical characteristics. The users now interact with not a collection of objects but an electronically coordinated collection and records. Taking into account the importance of autonomy and single visitors in a museum context, electronic is not only proposed to be able to personalize the experience and allow the consumer to move beyond the constraint of museum managers and interact with museum professionals but also enhances multiple-users access concurrently.

Interactive concepts of edutainment and entertainment will enhance service provision as noted by Pierroux (1998). Electronic can provide a mix of standardized services, and personalized services. Electronic readiness fast-tracks information delivery in the museums as confirmed by Ross (2001) in the review of related literature to this study in more than 70% of UK population has access to web technologies, from their homes, schools or offices.

Conclusion

Traditional museums are expected to engage in electronic readiness to enhance learning experience and entertainment, the sector still needs more innovative ideas and further research. Museums certainly not have

sufficient in-house expertise to launch an electronic readiness project services without some external help. However, it can be argued that an electronic readiness services in museums does not necessarily involve great costs.

RECOMMENDATION

1. The country's museums must be electronically technology talking into account the importance of autonomy and single visitors in a museum context.
2. Electronic is proposed to be able to personalize the experience and allow the consumer to move beyond the constraint of museum managers.
3. Interactive concepts of edutainment and entertainment will enhance service provision.
4. There is need for adequate infrastructural commensurate to electronic capacity must be provided to the museums.
5. There must be improved funding of the museums. Museums managers should source fund rather than relying on government for grants all of the time.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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Full Length Research Paper

Library value through user satisfaction: The case of academic libraries in Ghana

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The study is an investigative survey of library users' satisfaction of library services, resources, staff conduct and impact of the library on the academic achievements of users. Qualitative data was collected from College students, faculty and library staff of two academic libraries in Ghana using questionnaires and interview instruments. The survey established that library services, information resources and the physical library environment have value because users have shown high satisfaction of them. Material lending, photocopying, library space and staff conduct recorded higher level of satisfaction. It is however recommended that academic libraries in Ghana should be equipped with online resources, adequate and knowledgeable staff, and computer systems with high broadband. Also, libraries should endeavor to market library services and resources in order to demonstrate value among stakeholders.

Key words: Library value, library impact, user satisfaction, Ghana, information resources, service quality, staff conduct.

INTRODUCTION

Value creation is an exercise engaged in mostly by businesses in highly competitive industries with the aim of providing customers with a defined notion of value and the reasons to choose their products and services over that of their competitors (Zhang and Chen, 2008). The value of the academic library to its users has become a critical issue in the management of academic libraries. Librarians are now concerned with how the library services and resources benefit the students' success, faculty and the overall institutional aim. For academic libraries to be successful, not just in these uncertain times, but in the future, Thomas (2010) succinctly stated that:

We must reinterpret our organisations to reflect contemporary needs and values. This means charting a course that remains true to principles that have guided us since the development of librarianship as a profession, but which also looks to the services we can provide that represent the greatest value for our clients.

Academic libraries are in competition with other sectors of their institutions for limited funding due to budgetary pressures (Tripathi and Jeevan, 2013) as cited in Tetteh (2018). This confirms Heider et al. (2012)'s claim that due to financial challenges, departments and divisions in higher education institutions are being examined for their

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impact on the overall performance of their institutions. As a result, many academic libraries too have been asked to assess the value of their resources and services to teaching, learning and research. This supports a report that due to financial constraints, libraries in developing countries have difficulty paying for e-resources (Asamoah-Hassan, 2014). Besides, the emergence of new sources of information as a result of technological innovations has negatively affected the image of libraries (Hinchliffe, 2011; Ribble, 2011) In view of these, academic libraries are being called upon to demonstrate their value in order not to become peripheral to the activities of the institutions they serve.

Germano (2011) investigating cause of and remedy for the decline value of libraries, asserted that lack of competition is the underlying factor for the decline of library's value. However, this is not a problem with products and services, instead a lack of marketing of library's usefulness. Libraries are therefore being called upon to establish a 'societal, cultural and educational benefits of libraries' that is reflective of user needs. Also, a more sophisticated marketing, customer communication and service delivery which is based on users' needs should be employed to justify library usefulness, and demonstrate their impact and value by evaluating their resources, their services, their contribution to the realization of their institutions' mission and goals as well as their return on investment in order to find out practical ways to ensure continuous improvement in service performance (McCreadie, 2013). According to McCreadie (2013), libraries are well perceived by faculty. In developing countries, the value of the library is determined by the quality of the collection. However, in the developed world, it has been realised that access to materials is no longer critical, rather collaborative relationship between librarians and faculty through general marketing of library's support for teaching and research is key to demonstrating value. This confirms the assertion that library marketing raises the library's profile among teaching and research staff (Creaser and Spezi, 2012). Besides, Albert (2014) established that libraries are able to demonstrate value when they collect data on usage and impact of their support to their institutions. This supports the claim that libraries must go beyond evaluating their services to communicate the results of the evaluation in order to demonstrate value (Hinchliffe, 2011).

The study aims to assess the value of the Ghana Institute of Journalism (GIJ) and Ashesi University libraries based on user satisfaction. This research used the explicit approaches to measure the value of library resources, services and physical environment. This is done by investigating the following:

1. Users' satisfaction with library services,
2. Users' satisfaction with library resources
3. Users' satisfaction with staff conduct.

4. Contribution of the library to the academics of users

The motivation for this study is to demonstrate the value of the library in order to justify funding for resources, as well as identify users' needs towards better service provision. Putting this study into perspective, some existing literatures have been reviewed.

Demonstrating the value of academic library

Throughout history, academic libraries have served their institutions as repository, information provider, recreational facility, computer and information literacy training provider, and advocator among others. These services evolved as a result of changing needs of users and community. In spite of these achievements, libraries are said to be struggling with expressing and quantifying their value to stakeholders (Jaeger et al., 2011).

Tenopir (2011), discussing ways of measuring the value of library products and services mentioned:

1. The implicit value where focus is put on downloads or usage logs. This approach assumes that because the library is used, it has value. This however does not show purpose, satisfaction or outcome.
2. Explicit value focuses on the impact or the outcome on research, teaching and learning,
3. Derived value deals with the cost benefits of library resources. This is also referred to as Return on Investment (ROI).

According to Tenopir (2011), Tenopir et al. (2009b) and Tenopir et al. (2009a), most libraries have demonstrated implicit value for some time using usage statistics. For instance, Tenopir (2011) stated that usage logs revealed increase in downloads of e-resources over the last decade. Besides, a reading survey showed that reading among academics increased steadily from 150 articles in 1977 to about 280 by 2006 over the past. Implicit value assessment however does not demonstrate purpose, satisfaction or outcome of use, hence Tenopir (2011) advocated that the value of library should not only focus on implicit value where focus is put on downloads or usage logs but also on the explicit and derived values where impact on research, teaching and learning, and the cost benefits of library resources are assessed.

Some researches built upon this approach by not just collecting frequency of use but also assessing the purpose, motivations and outcomes. In a study of seven universities in the USA and Australia in 2004 to 2006, it was discovered that half of the scholarly article readings were for research purpose. Furthermore, Cobblah and Van Der Walt (2016), Dunne et al. (2013) and Botha et al. (2009) demonstrated explicit value of libraries by assessing user satisfaction of library services, resources and expertise. A survey conducted by the School of

Library and Information Science at the University of South Carolina reported that 92% of users think that library improves the overall quality of life and 73% feels that the library enhances personal fulfilment (Jaeger et al., 2011). Similarly, Sriram and Rajev (2014) and Poll (2012) posited that impact and outcome is required to establish value. Moreover, Chandrashakara and Adithya (2013), Arinawati (2011) and Harvey (2004) demonstrated library value by assessing the acquisition process of library materials, use of budget and maintenance of stock.

The popularity of the explicit value approach was due to the development of some methods and standards of assessing library services and resources. Markless and Streatfield (2006) identified four criteria for measuring users' satisfaction with library resources:

1. Attitudinal change or change of perception
2. Knowledge about sources of relevant information.
3. Behavioural change – doing things differently
4. Doing things more effectively.

Furthermore, the SCONUL Impact Initiative also proposed stages in assessing the impact of higher education libraries (Payne, 2006). Also, library collaborations have developed toolkits, methods and procedures such as the ACRL Standards 2011, LQAF (Library Quality Assessment Framework) for NHS libraries in England, the new international standard, and the ISO 16439 to provide clarity and consistency to library assessments (Hiller, 2013; Poll, 2013, 2012; Dunne et al., 2013). Moreover, Weightman et al. (2009) and Abels et al. (2002) made separate contributions on measuring the impact of health libraries.

Despite the above measures, Dunne et al. (2013) asserted that measuring satisfaction is problematic because:

1. LIS impact studies tend to rely on users subjective views.
2. It is difficult to isolate cause and effect as they apply to use of service and subsequent change.

This notwithstanding, LIS impact study can still be useful as long as researchers accept their limitations, reduce bias and make the study relevant to learn from Urquhart (2004).

In recent times, policy makers and business minded stakeholders especially sponsors require library value measurement based on fiscal benefits of resources. In response to this, libraries especially public libraries adopted the Return on Investment (ROI) approach to demonstrating value, which associates library services with costs or potential prices. Libraries in Wisconsin, Pennsylvania, Florida and South Carolina have used the ROI model (Jaeger et al., 2011). Also, Sykes (2003) asserted that "library value is often seen through the lens of a business model particularly a Return on Investment

perspective". The approach involves the use of 'value calculators' which quantifies library value into the amount of money saved when a user borrows from the library rather than paying for the material. The problem with these concepts is that, the accuracy of services listed and corresponding prices quoted cannot be established. The risk associated with this therefore is that, 'the services could appear too expensive or simply cost-inefficient' thus 'creating negative reactions' (Germano, 2011). Jaeger et al. (2011) also argued that since libraries are social institutions, translating their services and products into monetary terms becomes unsuccessful. Explaining further, the research stated that information, knowledge and data do not have monetary value unless they are used to create a commodity then perhaps monetary figure can be imposed.

Another way by which library (especially public library) value has been demonstrated was by looking at library usage during times of economic crisis such as the Great Depression and the decade old economic crunch. Jaeger et al. (2011) citing Griffiths and King (2011); Carlton (2009); Yates (2009), Gwinn (2009), Jackson (2009), and van Sant (2009) reported that in the USA during the economic crunch, library usage increased significantly as patrons sought internet access, assistance to apply for jobs, social services and options for entertainment among others. Statistics collected shown that there was 5% increase in library cards issues, 10% increase in library visits and 17% increase in visits to library websites. In the studies, internet service revealed great potential to measure and express the economic value of public libraries by enabling assistance in education, technological literacy, job seeking, applications for social services, and other measurable contributions to the economy. About 3.7 million people have been reported to have successfully obtained employment through the use of library computer service (Jaeger et al., 2011).

In view of the limitation with measuring library satisfaction, Tanner (2012) suggested both the economic value and the social value approaches for demonstrating library value. It is also necessary for libraries to share assessment data with stakeholders to facilitate funding. Consequently, libraries should demonstrate value by establishing the intrinsic worth of their services based on patrons' needs. This can be done by assessing the need of users and understanding the industry in which libraries operate so as to offer more attractive options for potential users who patronise other information providers.

User satisfaction as an indicator of library value

According to Herson and Altman (2010), "satisfaction is an emotional reaction, the degree of contentment or discontentment with a specific transaction or service encounter". If the service performance falls below users'

expectations, they become dissatisfied. However, if service performance matches expectations, users become satisfied (Bua and Yawe, 2014). Therefore, satisfaction can be personal and it is the degree at which users are pleased with the library services, with staff attitudes, and the library environment in fulfilling their needs and expectations. Giese and Cote (2000) explained that a user's response while a service is being delivered or after service delivery is indicative of user satisfaction. It can therefore be inferred that satisfaction is an individual response to a service and it can be subjective depending on the time and needs of a user. It may or may not directly relate to the performance of the library. In service organisations, satisfaction plays a major role, and according to Alasandi and Bankapur (2014), it is the positive feeling created after receiving a service that makes users desire to use the service again. In view of this, all libraries strive to satisfy the information needs and expectations of users (Warraich and Ameen, 2011). According to Bua and Yawe (2014), the extent to which an academic library services satisfy its users defines how effective or efficient that library is. For the purpose of this study, user satisfaction shall mean the fulfilment of users' (students and faculty staff) expectations and needs as they use the library services and resources for learning, teaching, research and other purposes.

Academic libraries provide services and information resources ranging from print publications, e-resources, conducive environment, book lending, reference services, catalogue, photocopying, printing, study desks, computer and ICT facilities, information retrieval and delivery services, user information alert, interlibrary loan, research support, publishing support, technical support, information literacy, advocacy and policy formulation functions among others. These have been identified as key determinants of service quality in the libraries. Sriram and Rajev (2014) cited Abagai (1993) who also ascertained that the availability of the skilled staff, knowledge materials and physical environment can guarantee user satisfaction. Onuoha (2010) also assessed library services at Babcock University in Nigeria, and the findings revealed that circulation service, reference, photocopy and binding services were considered by the majority of the respondents to be effective, while compilation of bibliographies, indexing and interlibrary loan services were considered to be ineffective. Biradar et al. (2009) and Martin (2003) investigated the quality of library services and their findings revealed that the users were generally satisfied with library services but had specific concerns with areas such as access to electronic resources, catalogues and insufficient space.

Also, in a study conducted by Mohindra and Kumar (2015) to assess library service quality (LSQ) base on user satisfaction of AC Joshi Library, Panjab University in Chandigarh, India, found that library environment and

library services outscored library collections in predicting user satisfaction. The findings of another study on a Malaysian University also revealed that (i) academic staff perceive the quality of library services to be just above average, (ii) library staff are considered quite helpful and able to instil confidence in library users, (iii) academic staff also believe that the library has a positive impact on their teaching, learning and research, and (iv) the overall satisfaction with the library services received a satisfactory rating (Kiran, 2010). Besides, Heider et al. (2012) recorded that studies have shown that library materials contribute to faculty's publications as a result, faculty's comment on their evaluation of resources and services was that libraries should expand access to e-resources and e-services. Other researches on the value of libraries based their assessment on the relevance of libraries' collections – both print and electronic (Heider et al., 2012).

Furthermore, printing and photocopying facilities were found to have significant impact on user satisfaction in the Sur University College Library, Sultanate of Oman (Sriram and Rajev, 2014). Also, Cobblah and Van Der Walt (2016) investigated the contribution of effective library and information services to academic achievements at universities in Ghana and concluded that there was a correlation between effective library and information services, and academic achievements at the universities in Ghana. The study also established that library users were generally satisfied with the services provided. The provision of study space, book lending and internet services were the most effective and highly patronised services. The study also indicated that inadequate staff training programmes affected the ability of library staff to deliver effective library services.

These literatures have established that library collections, services and facilities include space, are key to user satisfaction. As stated earlier, user satisfaction is a personal response which can be determined by the needs and expectations of the user, hence even though some found satisfaction in library collections, others were impressed with services and yet others were pleased with library facilities such as computer, internet and space. It can also be realised that while earlier researches employed user satisfaction to determine implicit value of libraries, later publications established the explicit value of libraries which focuses on the impact of library services and products, to establish user satisfaction.

Effects of library use on student's academic achievement

Academic libraries are essential in providing information resources and services to support teaching, learning and research. Vichea et al. (2017) supported this statement with the assertion that information is very important in order to achieve academic success. In view of this, many

researches have established a strong correlation between library use and students performance. Investigating library use at Huddersfield University, West Yorkshire, Goodall and Pattern (2011) acknowledged that students who read more; as measured in terms of borrowing books and accessing electronic resources attain better grades. In addition, Cox and Jantti (2012) and Wells (1995) assessed the impact of library use at the University of Wollongong, New South Wales and the University of Western Sydney, Macarthur respectively and established that there was strong correlation between students' grades and use of library information resource. This is supported by a study done to evaluate the impact of library on students' retention and performance in the University of Minnesota, Minneapolis. The findings of the study suggested that "first-time, first-year undergraduate students who used the library had higher GPA for their first semester and higher retention from fall to spring than non-library users (Soria et al., 2017).

In another study however, the relationship between academic performance of students and library use could only be established partially (De Jager, 1997). This raised the question as to whether books borrowed from library were always read or understood by students. This notwithstanding, majority opinion still established that library use positively impacts students' academic success. It has also been established that, "undergraduates attending research universities with greater academic library resources had higher self-reported gains in critical thinking" (Whitmire, 2002). Moreover, Atta-Obeng (2016) citing Amusan et al. (2012), Wijetunge (2000), Haggstrom (2004), Igbinovia (2016) and Eve et al. (2007) ascertained the contributions of academic libraries in promoting lifelong learning skills such as information literacy skills, research publishing, communication, presentation skills, ICT skills, and students' ability to collaborate and share knowledge. Through this, libraries would be able to resolve the demand for accountability for students' achievements. In essence, libraries should not only focus on usage and download counts as well as users impressions to determine library value. The trends are changing where libraries are being required to also establish value through impact. In this study, user satisfaction has been used to establish both the implicit and explicit values of libraries.

RESEARCH DESIGN

The study is a survey of two university libraries namely, the Ghana Institute of Journalism (GIJ) Library, and Todd and Ruth Warren Library, Ashesi University College (AUC), Ghana. The researchers used questionnaires and interviews to collect qualitative data from third year students, faculty and library staff on their perceptions of the libraries' resources and services. Faculty and library staff were interviewed while third year students were given questionnaires consisting of open and close-ended questions to complete. The reasons for choosing third year students are because most of them

were continuing students who had the opportunity to use the library for a long period. Also, from observation, unlike final year students who due to the intensity of their academic work are not willing to participate in other activities, third year students are more available and willing.

Four hundred and ninety-six (496) third year continuing students were proportionally sampled from a total student population of 2,216 from both universities. This constitutes 349 out of 1,697 students from GIJ and 147 out of 619 students from Ashesi University College (AUC). Since not all the 349 GIJ students were continuing students, purposive sampling was used to further select the 185 continuing students out of a total of 349 third year students. To enhance the response rate and also to have different opinions of the quality and value of the library's services, 30 out of 45 faculty staff were sampled from both institutions base on their availability at the time of data collection. This constitutes 15 out of 26 faculty staff from GIJ and 15 out of 19 faculty staff from AUC. Eight (8) out of 10 professional and para-professional library staff were also sampled purposively for interview. This constitutes 5 out of 6 GIJ library staff and 3 out of 4 AUC library staff. In all, data was collected from a total of 370 respondents sampled out of a population of 2,271 students, faculty and library staff.

The response rate for the questionnaires was 73% (135) for GIJ and 83% (120) for AUC while that of faculty and library staff was 100% for each of the institutions.

The researchers used both open-ended and close-ended questions. The close-ended question comprises both multiple options and rank scaled questions. The questionnaires for GIJ differ slightly from that of AUC in that, questions on e-resources and reprographic services are excluded because the library did not offer those services.

The questionnaire constitutes questions on (a) requested background data of respondents, (b) availability and evidence of usage of services and purposes for which the services are used, (c) the awareness of the various services provided by the libraries, (d) users' perceptions of service quality, and (e) perceptions of the value of using the library services.

Some of the questions were adopted from the data collection instruments employed by McCreadie (2013) in her investigation into library value in selected developing countries. McCreadie's study used instruments such as quantitative questions for both library staff and faculty, qualitative telephone interviews with selected librarians and qualitative open-ended questions which were e-mailed to faculty staff. The purposes for adapting these questions for the present study were that they are appropriate for the investigation. Examples of questions adopted from McCreadie are: On a scale of 1 to 10 how do you value your library? Which of the services provided by your library is of most value to you? What do you value most about the services of your library?

The questionnaires were self-administered at the libraries and lecture halls of both institutions because the respondents were within reach.

Unstructured interviews were conducted in the offices of the respondents (faculty and library staff) by the researcher after booking appointments with the lecturers and library staff. The interviews were recorded and later transcribed.

SPSS 21.0 was used to organize and analyse the data. Data was analysed using the descriptive and frequency distribution methods of data analysis. Findings were illustrated using tables and graphs.

RESULTS AND DISCUSSION

Users' satisfaction with library services

According to Albert (2014), libraries are able to

Table 1. Users' perception of library services.

Grading	Orientation	Bibliographic instruction	Computer/Internet services	Lending	Reference services	Photocopying	Total frequency
Very satisfied	32	14	18	59	23	59	205
Satisfied	102	95	130	135	123	55	640
Dissatisfied	42	39	67	26	45	5	224
No response	79	107	40	35	64	1	326
Total	255	255	255	255	255	120	1905

Table 2. Mean distribution of service variables.

Variable	Minimum	Maximum	Mean	Std. deviation
Orientation	1.00	4.00	2.3412	1.04865
Bibliographic instruction	1.00	4.00	2.0627	1.00588
Computer/ internet services	1.00	4.00	2.4941	0.84121
Lending	1.00	4.00	2.8549	0.92989
Reference services	1.00	4.00	2.4118	0.96344
Photocopying	1.00	4.00	3.4333	0.61812

demonstrate value when they collect data to assess library usage and impart. Also, according to Cobblah and Van Der Walt (2016), academic libraries need to critically examine the effectiveness of their services in order to judge their performance. In view of this, students, faculty and library staff of the GIJ and AUC were asked to value the quality of services offered in their libraries. The results are displayed in Tables 1 and 2.

It can be realised from Table 1 that photocopying services has less responses (120). This is because only one institution offered photocopying services. With a scale rating of 1 - 4 where 1 = 'no response', 2 = 'dissatisfied', 3 = 'satisfied' and 4 = 'very satisfied', the mean distribution of the variables for library services are captured in Table 2. As shown, orientation service records a mean of 2.3412, bibliographic records 2.0627, computer/internet services records 2.4941, lending service records 2.8549, reference services records 2.4118 and photocopying records 3.4333.

Comparing the means, it is obvious from the analysis that photocopy service has the highest level of satisfaction ($m = 3.4333$). The next level of satisfaction is scored by lending service ($m = 2.8549$). Comparatively, users derive the least level of satisfaction for bibliographic instruction service ($m = 2.0627$). In view of this, measures have to be taken to enhance bibliographic instruction. That notwithstanding, the mean of 2.0627 is moderate since it is within the middle of the scale (1-4). It can therefore be posited that, the general overview of users' perception of library services is satisfactory.

The findings support the research of Sriram and Rajev (2014) that printing and photocopying facilities have

significant impact on user satisfaction in the Sur University College Library, Sultanate of Oman. Cobblah and Van Der Walt (2016) also confirms this by asserting that "...library users were generally satisfied with the services provided by the university libraries".

Again, the findings confirmed results from a survey conducted in 2012 about users' expectations of the GIJ library. In that study, students were more satisfied with the services than with the physical library and their access to information (Nyantakyi-Baah and Afachao, 2012).

In spite of the generally high satisfaction for service, the study recorded some dissatisfaction. Figure 1 reveals the general perception of users on library services.

A total of 34% of users gave no response or were dissatisfied with library services offered. The reason for not responding could probably be due to lack of awareness of the existence of the services, which equally shows poor service. Reasons for users' dissatisfaction are revealed by responses from the interview where users complained that:

1. The libraries have few computers,
2. Slow internet,
3. No information literacy training for users and
4. Poor assistance for students' projects.

This therefore requires necessary action to increase the computer systems and the broadband. Also, more library staff should be employed and trained to offer information literacy training and better assistance for students' projects.

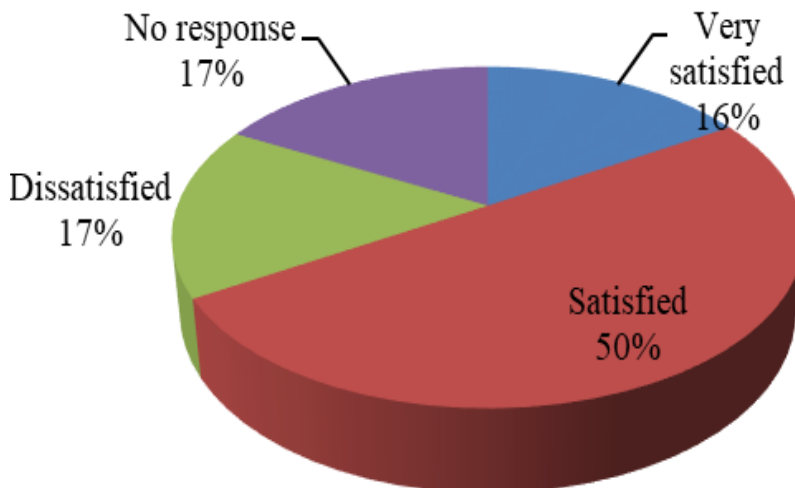


Figure 1. Students' satisfaction with services offered by library.

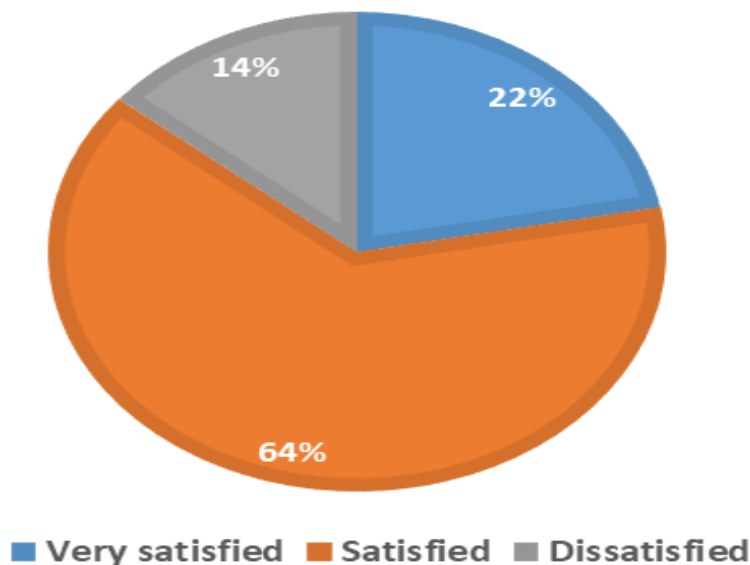


Figure 2. Satisfaction with staff conduct.

Satisfaction with staff conduct

With respect to staff conduct, a total of 86% of the respondents indicated satisfaction (Figure 2). The above perception was supported by a positive response from faculty staff. They were pleased with staff conduct and hard work irrespective of the challenges staff faced. Some lecturers commented as follows:

I have been contacting the library to teach my English class on how to use library and the Internet for searching for information.

I haven't met all the library staff but the ones who have served me, I will say their conduct was very satisfactory and I am very satisfied.

I am very satisfied because the staffs are doing a good job, they are helpful.

I am satisfied because they keep updating us on new resources all the time.

Reasons for their satisfaction were that they offered instructional services, and library staff was dynamic, very helpful, update faculty on available materials, and they made it easier for faculty to access information.

These responses were confirmed by an annual satisfaction survey and feedback undertaken at the AUC. However, two of the library staff stressed that their users were satisfied but not completely satisfied, because of some challenges. In confirmation, library staff member

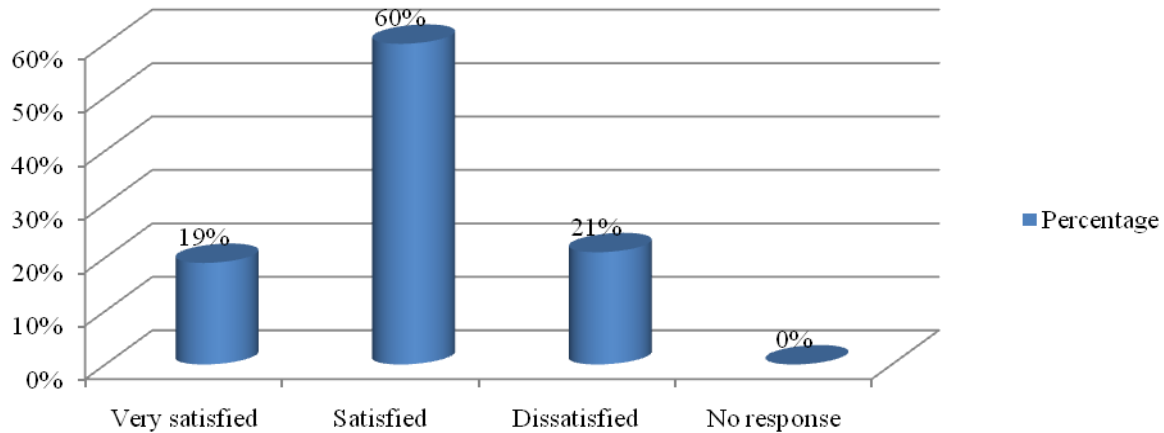


Figure 3. Satisfaction with library environment.

remarked that:

They are satisfied but I wouldn't say they are 100% because there are certain things that they are looking for which we are not able to provide, but they are okay.

Library staff from GIJ confirmed that users are satisfied with the services because they receive fewer complaints now from students.

This finding confirms the assertion of Hernon and Altman (2010) that the attitude of library staff when delivering service affects user satisfaction. It is clear that satisfaction with service was regarded as synonymous with how service providers conduct themselves in the process of service delivery.

On the other hand, 14% minority as shown in Figure 2 expressed dissatisfaction. This is probably due to complaint that staff do not interact with faculty to know their information needs. Also interview responses from faculty and library staff revealed that the number of library staff is too small and some library staff show bad attitude towards users. In response to poor attitude of staff, customer relation trainings have been undertaken with the hope of improving staff conduct. In effect the institutions surveyed would have to hire more library staff and train them to build the needed capacity to serve. This supports Cobblah and Van Der Walt (2016)'s claim that inadequate staff training affects library staff's ability to deliver efficient service. The libraries should collaborate with faculty by introducing liaison librarianship service in the institutions.

Satisfaction with information resources

As indicated by Saikia and Gohain (2013), the collection of a library plays a major role in determining the effectiveness of the library. Therefore, the collection should be selected in a way that will meet the

expectations of users and satisfy their information needs. Adeniran (2011) had also emphasised that meeting the information needs of library users demanded the provision of actual information resources that satisfy users. When students were asked to appraise the relevance of books, magazines, journals, online information resources, newspapers and other information resources in their libraries, Figure 3 shows that 80% majority respondents were satisfied with the information resources while 20% were dissatisfied.

In GIJ, staffs were divided on their opinion about information resources. Some faculty staff were satisfied with the information resources in the library, because they perceived the materials available to be relevant and meeting their information needs. The Dean of Communications and Social Science, who was one of the interviewees shared his view:

I have noticed that you have relevant books in my field of studies, communication studies and I am also conscious of the fact that you are always sending us list of new additions, so for me I think I am satisfied.

On the other hand, others were not satisfied and they were of the opinion that the library is not sufficiently well resourced. For instance, they mentioned that the library does not have e-books and e-journals and some of the materials were out-dated. These were the same reasons they gave for not considering the library materials as of high quality. A comment from a faculty staff who was dissatisfied was:

No, I am not satisfied because there are no journals, e-books and e-journals and some of the books are old, a lot more room for improvement.

Fortunately, this complaint of lack of e-journals and e-books have been resolved since the GIJ library has recently joined the Consortium of Academic and Research Libraries in Ghana (CARLIGH) and now have

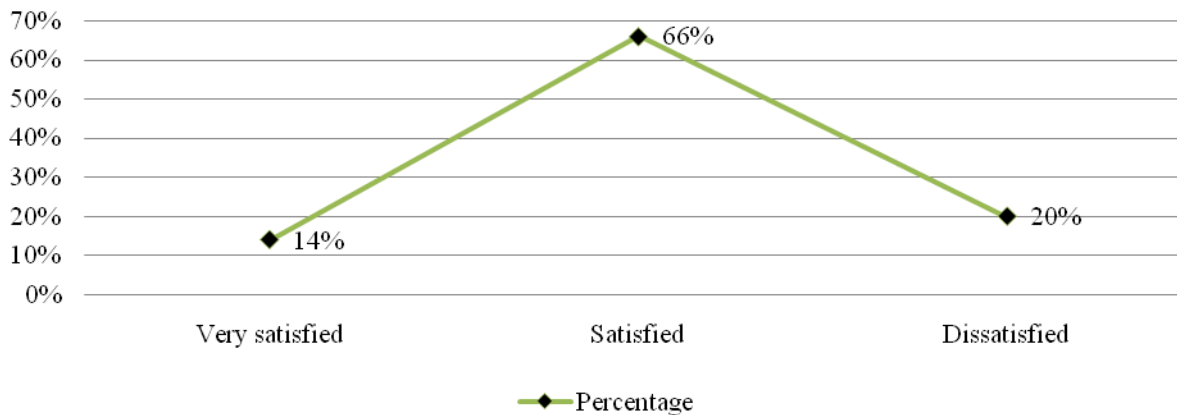


Figure 4. Satisfaction with information resources.

access to extensive electronic information resources.

Again, response from library staff confirms users' dissatisfaction with information resources. Reason given being; most books on the open shelf areas were old. A comment from a library staff member was:

Users are generally satisfied with the reference materials but they express dissatisfaction with the materials on the open shelves though access to reference textbooks is restricted.

With regard to the AUC Library, interview responses from faculty and library staff indicated that the information resources were commendable. Only one faculty member complained that he was not satisfied with some of the magazines because they were not current. However, the rest were very impressed especially with the electronic resources. A faculty member made this comment:

I am satisfied because the electronic resources are relevant.

The library staff confirmed users' satisfaction with a special mention of the textbook policy which enables individual student to have access to textbooks and to keep them till the end of a semester.

Both positive and negative responses revealed the importance of providing adequate and relevant information resources for libraries. This supports the argument that libraries are still relevant in spite of alternative sources of information.

Satisfaction with library environment

The library environment and physical facilities play a major role in providing quality and a satisfactory service to users. The building should be purposely built to facilitate the maximum use of all the resources in the

library. Abbasi et al. (2014) recommended that the library should be situated in an appealing and attractive environment; it should have appropriate lighting systems because it creates a conducive atmosphere for learning. The fittings should be comfortable and attractive in appearance with enough balance between informal and study type seating.

When students were asked to evaluate the physical library building with its facilities, Figure 4 revealed that a total of 79% of respondents indicated that they were satisfied while (21%) thought that the library environment does not meet their expectation as far as a place of learning and conducting research is concerned. At AUC, reasons given for the dissatisfaction were noisy at night, crowding at certain times, and inadequate air condition.

All faculty staff interviewed responded that they were satisfied with the library environment due to its unique architectural design and the interior arrangement. A lecturer commented:

I am satisfied because it is a welcoming place and the building is so distinctive.

Surprisingly in GIJ, even though majority of students were generally satisfied with the library environment, faculty and library staff was however not satisfied with the library environment. Perhaps students were considering the well organised nature of the library, besides, they might not have been exposed to other libraries unlike the lecturers who might have had the opportunity to use bigger and well stocked libraries.

The perception of faculty was that the library environment was of poor quality because the library space is inadequate. Therefore, it is not a surprise that they were dissatisfied. Some comments from faculty:

That is where I have a problem, I think the library in terms of space is very small and it is a challenge for me as a lecturer.

Table 3. Help received from the library.

Response	Frequency	Percentage
Assistance with locating a book	72	24.5
Assistance with project work	41	14
Assistance with retrieving old newspapers	27	9.1
Assistance with orientation	31	10.5
Assistance with searching for scholarly materials online	29	9.9
Never received help from the library	14	4.8
They helped me with the photocopier when it jammed	34	11.6
They helped me with some literature searches	6	2
The library staff helped me print my assignment	6	2
The e-resources helped me do my literature review	7	2.4
I had my assignment bound in the library with the help of the staff	4	1.4
No response	23	7.8
Total responses	294	100

Number of respondents= 155

I haven't seen any significant change but I think it will also be disingenuous on my part to say there hasn't been improvement, especially the arrangement in the library is orderly and bit more user friendly than when I was a student- a lecturer and an old student.

The responses from the library staff support the responses of the faculty staff about their dissatisfaction with the library environment. All library staff interviewed stated that the library space is too small; creating congestion during peak time. This finding therefore demands action to enhance the GIJ Library space.

Usefulness of the library to users

In assessing the contribution of library services to the academics of users, respondents were asked to give the kind of help received from the library and what that help enabled them to achieve. On a whole, 95.2% respondents have received various assistances from the libraries while only 4.8% had never received any help from the library as shown in Table 3. In one of the libraries, students received most help, with locating books or relevant materials (24.5% responses) and assistance in doing assignments and project work (14% responses). Other help received were in the form of orientation, or searching for information using the Internet. The assistance given to users was really considered beneficial and they appreciated it. The following are comments from students:

I was doing a project on the use of library by students of GIJ and the head of the library gave me all the assistance I needed. I was able to get the necessary information and it earned me good grade in that particular course. I needed reference books to write my assignment for end

of semester project and the library staff helped me found one, I had a high mark that I think I couldn't have gotten without the library.

This notwithstanding, the response from 4.8% that they have never received help from the library need to be addressed. This response could either be due to complained such as overcrowding, noise, poor staff attitude, and lack of irrelevant and inadequate resources of the respondents do not know the relevance of library to them. In either case, it is necessary that these complaints be addressed. Besides, library services and resources should be publicised. Also, off campus services should be introduced through online portals, so that all students can benefit from library services.

The respondents as displayed in Table 4 enumerated how the help they received from the library has impacted positively on their academic work. Sixty-four (23.8%) indicated that the use of the library enabled them to submit their assignments on time. Forty-two (15.6%) mentioned that the assistance from the library enabled them to understand their subjects. Another significant benefit that is worth noting is that ten (3.7%) of the respondents achieved a good grade in their exams. This confirms the claim by Soria et al.(2017) and Cox and Jantti (2012) that students who use the library frequently get higher GPA.

The other benefits such as the ability to search for the appropriate information online, ability to do project work, ability to acquire presentation skills and the ability to print and photocopy own work were also mentioned. Some of these skills mentioned have been confirmed by Atta-Obeng (2016) that academic libraries have enabled students to acquire lifelong learning skills like presentation and information literacy skills among others. Below is a comment from a student:

Table 4. Success with library use.

Response	Frequency	Percentage
It enabled me do my assignment on time	64	23.8
It enabled me have a better understanding of the subject	42	15.6
It enabled me search for materials in the library	27	10
It enabled me do my project work	20	7.4
It enabled me search effectively the internet	10	3.7
It enabled me improve my oral presentation skills and self esteem	4	1.5
It enabled me get a good grade	10	3.7
It enabled me have the needed information for my project work	23	8.5
It enabled me seek alternative means of information	2	0.8
It assisted me print/photocopy my work	25	9.3
It helped me finish my work with ease	9	3.3
It helped me keep a better track of the books I borrow	1	0.4
The help made me enjoy my leisure reading in the library	2	0.8
No response	30	11.20
Total responses	269	100

Number of respondents = 255.

One of the staff helped me search for information for my assignment and actually taught me how to cite all the references. In fact I couldn't have done it without him.

The faculty staff also confirmed that the library had been helpful to them in their last research or project. Every faculty member interviewed had received help from the library especially in the area of facilitating access to relevant documents for various purposes. Here is a statement made by a faculty staff member:

I had a document from the library on election campaign and that is exactly what I am doing so my contact with the library goes a long way to enrich my thesis.

Yes, they gave me a book and it was on Aristotle's view on colours that informed the writing of an article on branding that I needed to do and how colour can be used as part of branding, it was insightful, and it gave me another perspective of colour and branding.

In addition, there were seven responses that indicated other support the library had offered to faculty staff. Such support had been in the form of accessing relevant materials that enabled them to prepare and teach new courses and being informed in their research interest area. A comment from a faculty staff:

The head librarian helped me to identify appropriate resources and it enabled me to have the idea of what other people are doing in my research interest area.

The library staff were asked whether the use of the library by the third year students had any positive influence on them for example, acquiring skills in searching for

information and what evidence they had for that. The library staff said yes it had indeed been helpful to students. However, the head librarian was of the opinion that the impact is personal as it varies from a user to user depending how frequently individuals had used the library since their first years.

I think it is personal, but those that have been coming to the library since first year now don't depend on us so much to search for information, some can now search and use information properly, but for those who do not patronise the library services, I don't think they have had much impact.

Library staffs were also asked if they thought that the use of the library by the third year students had any positive influence on the students. They all responded in the affirmative, that the use of the library enabled the students to acquire lifelong skills like searching for information through the one-on-one assistance they offer to users. They mentioned that through observation they realised that the dependence of the third year students on staff for assistance has actually reduced over time. A comment from a library staff member was:

Yes, students are positively influenced unlike most of the first and second year students, third year students don't depend much on staff of the library when searching for information or conducting research.

I think it is personal, but those that have been coming to the library since first year now don't depend on us so much to search for information, some can now search and use information properly, but for those who do not

patronise the library services, I don't think they have had much impact.

The above comments from faculty and the services providers are indications that the library has helped students and faculty, especially in accessing information, and the help has influenced them positively.

CONCLUSION AND RECOMMENDATIONS

The survey has ascertained that academic libraries are of high value to both students and faculty. Library services, resources, physical environment and staff conduct all recorded high satisfaction. Among the services, book lending and photocopy services recorded highest levels of satisfaction. The study also revealed that through the library students have been able to obtain some lifelong learning skills such as presentation skills, ability to use internet, and the ability to find information materials in a library. Again, it was recorded that through the library some students got good grades. Moreover, 80% majority of respondents were satisfied with library information resources. This supports the argument that libraries are still relevant in spite of alternative sources of information. This confirms the impact of libraries as mentioned by Cobblah and Van Der Walt (2016). Furthermore, 79% majority of respondents showed satisfaction for the library environment. However, a total of 34% of respondents showed dissatisfaction with library services, 20% showed dissatisfaction with information resources and 21% showed dissatisfaction with library environment. Even though these are minority, their responses raise concerns for necessary measures to be taken. It is therefore recommended that the libraries should be equipped with relevant and adequate information resources. In respect to this, online resources are critical. In addition, the number of computers as well as the size of broadband should be increased to address challenges with online service delivery. Moreover, the number of library staff should be increased and continuous professional development provided to build their capacity to serve. This can improve staff conduct and facilitate collaboration between the library and stakeholders especially faculty. Furthermore, it is recommended that the library space be expanded and adequate air conditions provided to make the place comfortable and less noisy. Finally, marketing of library services and resources is highly recommended to create awareness, educate users and demonstrate value.

In conclusion, it should be reiterated that for the academic library to be perceived as valuable by its community, it should reflect the academic society that it serves and should be made approachable to all users in the community who need the library to satisfy their information needs. The library should make sure it is deeply embedded in the university community by contributing to the teaching, learning, research and other

activities through provision of relevant and accessible information services. By so doing, libraries will be able to meet the expectations of their stakeholders, demonstrate value to justify funding as well as establish their relevance over alternative sources of information.

Further research

The following are areas of further research necessary to compliment this study:

1. Users' satisfaction with online services, staff ICT competence, advocacy and policy formulation functions of the library.
2. Library value from the perspective of university management.

Research limitations

The assessment of value was limited to users' opinion. The perception of the universities' management was not considered.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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Full Length Research Paper

Assessment of information literacy competency among students of College of Nursing and Midwifery, Kafanchan, Kaduna State, Nigeria

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This study investigates the level of information literacy competency among students of College of Nursing and Midwifery School Kafanchan, Kaduna State, Nigeria. The study focuses on three basic skills namely: Identification, accession and evaluating skills. A survey research method was employed for this study. The study was based on the data collected through questionnaire tagged information literacy questionnaire (ILSQ). The reliability of the instrument was determined through Cronbach's Alpha coefficient statistic and the obtained value was established at $r=0.73$. Frequency count and percentage were used to analyze the data. The result obtained revealed that most students lacked ability in the identification, accession and evaluation of information resources. The study recommends that information literacy programme be incorporated and should be a two credit units course into the school curriculum of the school.

Key words: Information, information literacy, competency, evaluation skill, accession skill identification skill.

INTRODUCTION

In recent times, information is recognized as a crucial factor in all aspects of human endeavor; it is a major commodity (Hadimani, and Rajgoli, 2010). In our day to day activities, information is being used for decision making, planning and for tasks accomplishment. However, not all information is relevant, accurate, and reliable for information needs of information users, especially students. Besides, because of the information explosion, students are faced with a lot of information that it becomes difficult to filter and access the needed information from the avalanche. Because of the difficulties associated to accessing the needed information, Hazrati et al. (2014) contended that students

and researchers must be equipped with basic information skills such as: ability to determine nature and extent of information, ability to evaluate information needs, ability to access needed information and its source, ability to use information effectively and ability to understand the legality linked to the information. It is in this light that this study is aimed at investigating the information literacy competence of the students of College of Nursing and Midwifery, Kafanchan, Kaduna State.

The concept of information literacy has been variously defined by different experts in the field. It could be seen as a set of abilities that an individual should possess so that he or she can recognize when information is needed

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and also have the potentials and skills of locating, evaluating and the effective and efficient use of the required information not only ethically, but legally. Information literacy (IL) is a set of abilities required by students to identify, retrieve, evaluate and use information to solve problems. It expands students' knowledge and shapes their thought, provides opportunity for self-direction, for learning, and forms a foundation for students to achieve academic success (Mealey, 2014), it is an essential factor for achieving a lifelong learning (Soleymani, 2014). Information skills and abilities enable medical students to retrieve the right information without wasting much time, (Lata and Sharma, 2013). Arguably, for students to cope with independent learning in an information overload environment it requires students in higher education system to be information literate so that they can be able to extract the appropriate information from the sea of information in the shortest possible time (Santharooban, 2016).

The general aim of medical education in Nigeria is to produce competent physician capable for improving and saving life (Alakpodia, 2014). It is based on this comprehension that College of Nursing and Midwifery, Kafanchan was built in 1977 with the first enrollment of 47 students. The total intake is noted to be on the increase since the inception of the College alongside with estimated 5% yearly increment of library resources. As at 2018 the total population of students raised to 421.

Once students are admitted, they are exposed to a basic information literacy programme usually carried out by the librarian of the school during a two weeks orientation exercise. Also, a one credit unit course on library science is being offered in the first semester of the first year of the school programme. This is an attempt to equipping students with information skills to enable them easily access, retrieve and use information resources to enhance their research work. Regrettably, despite these efforts, it is observed that students find it difficult in accessing their information needs from the available information resources.

Problem statement

It is not in doubt that information literacy competence plays important role in providing students with necessary skills and ability to access, evaluate and use information to perform given tasks. Hence, students are expected to be information literate in order to be relevant in the present era of information age. Unfortunately it is noted that students of Nursing and Midwifery, Kafanchan spend so much time in an effort to access their needed resources, they resort in consulting library staff for most of their searches for information resources. Most students are observed to have deficiency in the clear understanding of the reliable and appropriate information

resource to be used for their research activities.

The problem that prompted this study was lack of adequate information skills required to access information resources by students of the area under study and the frustrating condition of the students while trying to access information resources to improve and facilitate their learning. Preliminary study has shown that students of the College of Nursing and Midwifery are facing a strong challenge and difficulties in accessing their information needs within a short time. This is in line with the observation of Lata and Sharma (2013) that medical students find it difficult to find relevant resources within a short span of time.

Regrettably, based on the literature available, nobody has ever investigated the information literacy of students in the present area under study. The situation is worrisome and requires to be addressed; It is in the light of this the study sets to investigate in-depth the level of information literacy competence among the students of College of Nursing and Midwifery Kafanchan, Kaduna State, Nigeria.

Study objectives

The broad objective is to determine the level of information literacy competency among students schooling in the Kaduna State College of Nursing and Midwifery, Kafanchan. The specific objectives are to:

- (1) Ascertain ability to locate information resources among students of College of Nursing and Midwifery Kafanchan, Kaduna State.
- (2) Determine the students' ability to identify appropriate and relevant information resources.
- (3) Determine students' ability to evaluate information resources they need.

LITERATURE REVIEW

Many investigations have been carried out on IL Skills leading to several findings. Lata and Sharma (2013) studied information literacy among students of postgraduate institute of medical education and research, Sharma University of Health Sciences. The data used were collected through questionnaire. They discovered that majority of respondents had high skills in accessing electronic resources. In the same study, majority of students were said to have good skills of evaluation. In a similar investigation conducted by Omeluzor et al. (2013), they discovered that most of the respondents have the ability to identify their information needs. Issa et al. (2015) studied IL competency of undergraduate students of the University of Ilorin, Kwara State, Nigeria. The result revealed that most students had difficulties in the identification of appropriate information resources.

Likewise, Ilogho and Nikiko (2014) observed that majority of students had deficiency in the aspect of identification of information resources needed. In another related research carried out by Dorvlo and Dadzie (2015) on the IL level among students of Ghana University. They noted that students had no adequate evaluation skill, unskillful in search strategies and search tools.

Hazrati et al. (2014), in their comparative investigation, revealed that academia had higher level of retrieving information and evaluating skills than skills of using information ethically. Their findings are in agreement with that of Leichiner et al. (2013) who observed that IL level in evaluation of information resources among psychology students was good. However, the findings of Malliari et al. (2014) showed that students lacked ability to evaluate information resources of their choice. Igun and Odafe (2014) discovered that students were able to recognize, access and use information resources effectively. Notwithstanding, in the same study they discovered that students had no good knowledge of evaluation. Santharooban (2016) analyzed IL of the medical Students University of Sri Lanka. He discovered 47% respondents had ability to locate information needs. He therefore concluded that the locating skill level possessed by the students of the Medical school was satisfactory.

Theoretical framework

Several studies have been undertaken on IL competence and different theories were applied as the basis for such studies. The present investigation is guided by the five standards of information literacy of higher education prepared by the America Library Association presidential committee and was approved by the America College of Research Libraries (ACRL) in 2000.

According to the five information literacy Standards; Standard one contended that for a student to be considered as information literate he should be able to determine the nature and extent of information needed. Standard two explained that information literate students should access needed information effectively and efficiently. Standard three states that information literate student evaluates information and its sources critically. Standard four states that information literate student, individual or as a member of a group uses information to accomplish a given task. Standard five states that a student or an individual with information literacy uses information ethically. This study was built on these standards because they explained what should be the performance of information literate students and which is the focused of the present study.

METHODOLOGY

Descriptive survey method was employed for the study; this is because of its convenience for data collection through the use of

questionnaire (Osuala, 2005). The choice of the method for this study was based on the fact that it allowed collection of the data from relatively large number of respondents (Ikeh, 2003). Also, the method was employed for the study because it is observed to be one of the best available methods to the researcher who is interested in collecting original data for the purpose of describing a population (Ejifugha, 1998).

The population for this study was the entire Students of College of Nursing and Midwifery, Kafanchan totaling 421. A sample size of one hundred and sixty four respondents were proportionately sampled through randomization from second and third year students of Nursing and Midwifery schools of the College. Note that these groups of students were considered appropriate for the study because they were already being exposed to information literacy. The decision of sampling a sample size of 164 for the study was in line with Krejcie and Morgan (1970) who recommended for the minimum of 20% of the population to be a sample size for behavioral research such as this particular study.

Structured questionnaire tagged information literacy questionnaire (ILSQ) was used for the collection of the data. The questionnaire contained twelve items. Four statements were framed with multiple options for each research question. In the questionnaire, items 1, 2, 3 and 4 attempted to find out students' ability to locate resources from the abundance. While items 5, 6, 7 and 8 attempted to find out the level of students' ability in identifying appropriate or relevant resources that facilitate access to information needs. Lastly, items 9, 10, 11 and 12 determine students' ability to evaluate the information resources in terms of accuracy, authenticity and relevancy. The questionnaire was first pretested on few students who could not take part in the actual study. This was so in order to ensure face and content validity of the instrument.

Cronbach's Alpha coefficient statistics was used to find the reliability of the questionnaire, thus the value was established at $r = 0.73$. Copies of the questionnaire were self-administered to the sampled respondents. A total of one hundred and sixty four copies of questionnaire were self-administered to the sampled respondents, which helped in guiding the respondents on how to properly complete the question presented and for clarification were needed. The distribution of the questionnaire to the respondents was done in their classes and in the library. However, the researchers were able to collect back 160 copies and were used for this study. Descriptive statistics of simple percentage was used to analyze all the stated research questions.

RESULTS AND DISCUSSION

The findings of the study were presented in a form of table for easy interpretation. One of the skills this study focused on was "locating Skill". To achieve this, four statements were raised with multiple options from which respondents were asked to choose the appropriate answer (Table 1). The appropriate answer is (a. abstract) and was chosen by only few respondents 34 (21.3%). Majority of the respondents 48(30%), 65 (40.6%) and 13(8.1%) respectively selected wrong answers. From Table 2, the correct answer is (C. Call number). This answer was affirmed by only few respondents 32 (20%). While, the majority 43(26.8%), 56(35%) and 29(18.2%) respectively picked the wrong answers. From Table 3, majority of the respondents 72 (45%) chose the correct option (b. index page). Meanwhile, 34(21.2%) respondents expressed that they do not know the

Table 1. Testing students' ability to locate resources.

The most appropriate source to be used to locate an article from a journal is:	No. of respondent	Percentage
Abstract	34	21.3
Index	48	30
Catalogues	65	40.6
All of the above	13	8.1
Total	160	100

Table 2. Testing students' ability to locate resources.

From the catalogue, you discovered the following content: call number, author, title of the book, subject, and place of publication. The most suitable content of the catalogue to consult that quickly directs you to the position of the require book (s) on the shelf is:	No. of respondent	Percentage
Author's name	43	26.8
Title of the book	56	35
Call number	32	20
Place of publication	29	18.2
Total	160	100

Table 3. Testing students' ability to locate resources.

For you to speedily identify a note-worthy term or concept contained in a book, you should browse through:	No. of respondent	Percentage
Table of content	23	14.4
Index page	72	45
Cover page	31	19.4
I don't know	34	21.2
Total	160	100

Table 4. Testing students' ability to locate resources.

In an event you are searching for information resources on a given concept but you got too few search result. For you to access plenty search result one of the Boolean operators bellow is the most appropriate to be used	No. of respondent	Percentage
"OR"	32	20
"AND"	54	33.8
"NOT"	11	6.9
I don't know.	63	39.3
Total	160	100

answer. Other few respondents 23(14.4%) and 31(19.4%) selected wrong answers.

In Table 4, the appropriate answer is ("OR") and was chosen by only 32 (20%) respondents. Most respondents 63(39.3%) indicate that they are not conversant with Boolean operators. Some respondents 54 (33.8%), and

11(6.9%) selected answers considered to be wrong "AND" and "NOT".

The total average score of the respondents to the four statements meant to test their location skill is 26.8%. Based on this result it is an indication that most students could not differentiate functions of the retrieval tools of

Table 5. Testing students' ability to identify appropriate or relevant resources.

The most suitable resources from the following that you should use for definition of a medical concept or term is:	No. of respondent	Percentage
Medical encyclopedia	26	16.3
Medical dictionary	84	52.3
General dictionary	33	20.6
All of the above	27	16.8
Total	160	100

Table 6. Testing students' ability to identify appropriate or relevant resources.

The most appropriate tool you should use to locate a book (s) from a library, if the author, title or the subject is known is:	No. of respondent	Percentage
Library catalogue	27	17
Book index	58	36.3
Abstract	63	39.4
All of the above	12	8.6
Total	160	100

Table 7. Testing students' ability to identify appropriate or relevant resources.

You were given a research topic titled "Traditional Method of Treating Malaria Fever" it happens that you have only few resources available. Which of the following tools you should use to find other resources or documents on the given topic?	No. of Respondent	percentage
Bibliography	23	14.4
Index	58	36.2
Glossary	67	41.9
All of the above	12	7.5
Total	160	100

the library; most students are unaware that Call numbers are used to classify materials and tell them locations of materials on the shelves. It also shows that most students lacked knowledge of the function of Boolean operators as it is a tool being used to narrow or broaden search result of any needed information. Majority of the students find difficulties in the selection of appropriate retrieval tools. This finding implies that most students find difficulties in accessing the needed information resources.

The present finding is not in agreement with the second information literacy standard of ACRL (2000) which argued that "The information literate student accesses needed information effectively and efficiently. The performance indices according to ACRL (2000) argued that the student is expected to have the ability to select appropriate investigative methods or information retrieval systems and search strategies. The present finding also does not corroborate with Santharoban (2016)'s finding that indicated the ability skill of Medical students of Sri

Lanka University is satisfactory. The implication of this finding is most students depend on library staff to access their information resources.

In an information overloaded environment it is important for students to have the ability to identify the appropriate information sources for their information needs. To test the students' level of "identification Skill", four statements were framed alongside with options from which respondents were asked to select the appropriate answer. The appropriate answer from Table 5 is (b. medical dictionary) for the statement and was affirmed by majority 84 (52.3%) of the students. While, the remaining respondents 26(16.3%), 33(20.6%) and 27(16.8%) selected incorrect answers.

Table 6 shows only respondents 27(17%) have chosen the correct option (a. library catalogue). Whereas, most respondents 63(39.4%), 12 (8.6%) and 58(36.3%) respectively have chosen wrong answers. From Table 7, only 23(14.4%) respondents chose the appropriate answer (a. bibliography). But 12(7.5% respondents

Table 8. Testing students' ability to identify appropriate or relevant resources.

The following Databases are available to you. As a medical student, choose the one that is more appropriate for you	No. of respondent	Percentage
Springer	17	10.6
PubMed	25	15.6
Agora	71	44.4
Ebscohost	47	29.4
Total	160	100

Table 9. Testing of students' level of evaluating skill.

9.While evaluating your information resources you are expecting to consider the following:	No. of respondent	Percentage
The author should be known in the field only	38	23.8
The publisher only	29	18.1
Up-datedness of the date of publication only	54	33.7
All of the above	39	24.4
Total	160	100

Table 10. Testing of students' level of evaluating skill.

As a medical student, the following are sources of information. Choose one from the options that provides most current information	No. of respondents	Percentage
Journal	29	18.1
Book	41	25.6
Internet	38	23.8
Dictionary	52	32.5
Total	160	100

selected "all of the above". While other respondents 58(36.2%) and 67(41.9%) preferred "index" and "Glossary" which are all wrong answers. From Table 8, most respondents 71(44.4%) indicated that the answer is agora. Meanwhile only few students 25(15.6%) selected the appropriate answer (b. PubMed). The overall average score from the four statements that were framed in respect to determine the level of identification skill was 31.36% out of hundred percent. From the result, it indicates that most students cannot differentiate functions of individual reference resources; it also shows that they are not familiar with Medical database. Thus, the study concluded that most students of the college have hitches in identifying suitable sources of information. Therefore the finding is not in consonant with the ARCL (2000) standard one. The performance of this standard clearly states that "the information literate student identifies a variety of types and formats of potential sources for information. This implies that an information literate student should be able to know the information resources that are capable of meeting his information needs.

The present finding is in conformity with findings of Issa et al. (2015) which indicated that undergraduate students of the University of Ilorin lacked identification Skills. To test the students' level of evaluating skill, four statements were raised in that regard for students to respond to. From Table 9, the appropriate answer is (d. all of the above.) and was selected by only 39(24.4%) respondents. However, most respondents 54 (33.7%), 38(23.8%) and 29(18.1%) have chosen inappropriate answers,

In Table 10, the most appropriate answer is (d. internet) and was chosen by only few respondents 38(23.8%). Whereas most respondents 52(32.5%), 41(25.6%) and 29(18.1%) picked answers that were not correct. Table 11 shows that only 26(16.3%) respondents chose the most appropriate answer (d. all of the above), whereas the rest of the respondents selected options "a", "b" and "c" which are all wrong answers.

Most of the respondents 62(38.8%) have selected "relevance". However, only 41(25.6%) respondents chose the appropriate answer (a. Currency). Some of the

Table 11. Testing of students' level of evaluating skill.

You would need to use one of the following options as an indices to evaluate your information resources:	No. of respondent	Percentage
Authority of the resources only	44	27.5
Content of the resources only	37	23.2
Arrangement of the resources only	53	33
All of the above	26	16.3
Total	160	100

Table 12. Testing of students' level of evaluating skill.

As a student of History. You are asked to write a research paper 'the Civil War in Nigeria'. Which of the following criteria is not important to be considered when evaluating your resources?	No. of respondent	Percentage
Currency	41	25.6
Relevance	62	38.8
Authority	24	15
Scope	33	20.6
Total	160	100

respondents 24(15%) selected "authority" and the rest 33(20.6%) chose "scope" (Table 12). Evaluation of information resources is a critical factor that helps in ensuring the appropriateness of information resources. However, not all criteria are applicable in all circumstances. The overall average score from the four statements that were framed in order to determine evaluating skill is 22.5% out of hundred percent. Most students do not have good idea as to when to apply appropriate criteria for evaluating their information resources. They also cannot identify materials that provide current and authentic information resources.

The present finding does not agree with the standard three which argued that an information literate individual evaluates the information resources and its source. The study however affirmed the findings of Malliari et al. (2014) and Igun and Odafe (2014) in their investigation. They discovered that students lacked the ability to effectively evaluate their information resources. Students should be able to evaluate information resource for its authenticity, accuracy, currency and ease of use.

Conclusion

From the result of the findings, it was revealed that most students lacked basic skills of information literacy. Based on the result of the study, most students faced difficulties in accessing and evaluating their information resources. Therefore it is concluded that the information resources of the library are not fully utilized by the students.

Recommendation

Based on the results of the investigation, the researchers recommended that Information literacy programs should be incorporated should be a two credits unit course in the curriculum of the school and be for first and second semester of their first year school programme.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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Full Length Research Paper

University Libraries as facilitators of academic development: A case study of Noakhali Science and Technology University Library, Bangladesh

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This study focused on the role of Noakhali Science and Technology University Library in the academic development of the university. A mixed method research design was used whereby copies of questionnaires and structured interview guide were utilized to collect data. The study was conducted among 100 library users (students, faculty and university staff), librarian and another member of academic council as two key informants. The study found that the Noakhali Science and Technology University Library is playing an important role in the academic development in terms of education and research. The library offers information literacy training, free Internet access and digital library services for e-resources for all users. The study also found that Noakhali Science and Technology University Library plays a significant role in contributing to teaching and learning by providing reference services and circulation of books, journals, magazines and newspapers. The study however identified the challenges that bedeviled the university library to include: lack of relevant resources, inadequate ICT facilities and absence of enough reading space for users.

Key words: University libraries, academic development, Noakhali Science and Technology University Library, Bangladesh.

INTRODUCTION

Academic means anything that occurs in the academy. Academic development mainly refers to the development of teaching-learning environment of a university. According to Clement and Ylanne (2005), academic development is all the initiatives taken – both at the central as at the local level- in order to support faculty members to fulfill their different roles (teaching, research...) throughout their academic career. Mukerji and Tripathi (2017) define academic development as educational or professional development; it involves

academic and professional staff in planned activities to enhance all dimensions of teaching, learning and scholarship in universities. So, academic development is the advancement of academic environment which is badly needed for academic achievement.

Library is regarded as an integral part of a university. University libraries help in many important ways to achieve the missions of the universities of which they are a part. They are active partners in teaching and research process and support students and faculty through the

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provision of information resources and technology, spaces for individual and group work and study, programs and events, and assistance with finding, using, and evaluating information. Their contribution is reflected in academic development within the universities. According to Khan et al. (2014), in academic institutes both academics as well as researchers mostly depend on the library resources and facilities. No doubt a quick and easy access to such resources accelerates both academic and research activities more effectively.

University plays a major role in developing a country. It is an institution of higher education and research which grants academic degrees in a variety of subjects. The academic culture of modern universities is changing with the changing of teaching- learning concepts. In addition, the abundance of ICT has brought about a revolutionary change in the global knowledge. As a result, the information needs of students, teachers and researchers are growing very high in this age of information explosion. It affects the library to strengthen its role by adopting suitable resources and services. The works done by the library demonstrate the goal and success of the university. The library contribution is very important for building the institution reputation. As an indispensable tool of university, the library which does not show the ability to play effective role will lose its position in the academy. Consequently, university will fail to secure position in the society or in the ranking. It will also infect the development process of the country.

In recent years, many changes have been brought by technology to the rapidly expanding information universe. Changes in technology have created an increasingly complex environment. As a result of changes in scholarly communication and technology, university libraries are experiencing many challenges to fulfill the constantly growing demand of users. Noakhali Science and Technology University Library is also facing some problems of technology, resource, space and personnel that the author has already witnessed through working in the library. The changes in technology also provide both challenges and opportunities as academic libraries work to successfully contribute to their organization's mission (FACRL, 2015). Therefore, this study was designed to examine the current role of library in facilitating the development of academic standard in Noakhali Science and Technology University. It is important to note that the Noakhali Science and Technology University has no a good position neither in the national nor in the world ranking of universities (Center for World University Rankings, 2019).

According to Hussain and Abalkhail (2013), with a view to providing quality information services the library should have a systematic assessment policy to maintain and to improve the quality of services to meet the information needs of users at the highest level. Evaluation of the quality of library services can be done by getting feedback from users as they are the best judges to

quality. It also assists to indicate the performance of the services provided for the library users. The role of a university library is obviously to meet the research and information needs of its community. If we look at the functioning of a university in the developed world, they manage to provide their clients with local and remote access to collections in all kinds of formats. This is not the case in the less developed countries like Bangladesh. The university library collections here have been based mainly on books and then serial publications like newspapers, magazines and journals etc. Bangladesh has 10 'Science and Technology' university that are fully government funded and under the University Grant Commission of Bangladesh in the Ministry of Education (University Grants Commission of Bangladesh 2019). Noakhali Science and Technology University is one of them. All of these universities have almost the same academic culture and pattern. Their libraries are also same category. The Noakhali Science and Technology University Library has been taken as a sample for this study which will pave the way for further research. In the year 2006, the Noakhali Science and Technology University Library was established (Noakhali Science and Technology University Website 2019), and the library started its activities with the aim of bringing library and information services closer to the students, teachers and members of the university family. The building where the library is currently housed is a four-stored building but many of its space are now used as academic class room and so it cannot cater for the number of users.

Objectives of the study

The objectives of the study are to:

1. identify services offered by the library to the users,
2. determine the adequacy and satisfaction of library resources and services,
3. determine the role of the library in academic development as perceived by users,
4. identify the problems faced by the library.

LITERATURE REVIEW

The library of a university is regarded as its central organ around which all the academic activities pulsate. According to Chaudhari (2018), academic library is the vital component which develops the teaching-learning and research activity. It serves as a key factor to accomplish the aims and objectives of the higher education. A quality education and research is not possible without a modernized library. According to Dold (2013), good library skills are integral to academic success. In collaboration with research and teaching faculty, librarians create a foundation for knowledge

acquisition in the developing university education. She explained the academic role of librarian as faculty. Librarians work as gatekeeper of information resources, teacher in information literacy, scholar in doing research and collaborator in curriculum design and planning. Above all, librarians address all levels of information needs for the university.

According to Abduldayan et al. (2016), research in every institution sets a hallmark for development and increasing the visibility of such institution and its global ranking. Academic libraries are wholly designed for the purpose of rendering information services that promote research, learning and innovations. However, Gabbay and Shoham (2017) found, most faculty members believe that the library fulfills their teaching needs. Regarding research, faculty members believe most libraries support the technical aspects, but they do not support others aspects, such as locating the information or providing more comprehensive information relevant for the faculty members' research. Indeed, providing ICT – based information aids and services academic library can play very significant role in the entire research process for better output. Information and digital literacy skills are needed for that.

Adeola (2014) made a case study indicating the role of library on the accreditation process of Fountain University at Osogbo in Nigeria and found that the library played a stirring role in the accreditation process of an institution. The way the university library manages and supports library resources reflects the priority of the institute, the educational goals and methods of faculty, and the performance of the students and graduates. One of the most important aims of the accreditation is to promote and foster good quality university education and training for the production of high quality skilled manpower. Library helps in accreditation process and contributes to the future development of the university. Wijitunge (2012) elucidates the role of the university librarians as teachers. Giving examples as well as providing theoretical knowledge, she emphasized on the teaching role of the university librarian to develop knowledge economy in the current global context of new teaching –learning approach. She also expects to see the librarians as policy makers who have a great leadership role and responsibility to develop a healthy academic environment in the university. American Library Association (ALA) also asserts that. The character and quality of an institution of higher learning are shaped in large measure by the nature and accessibility of its library resources as well as the expertise and availability of its librarians. Librarians perform a multifaceted role within the academy. It includes not only teaching credit courses but also provides access to information, whether by individual and group instruction, selecting and purchasing resources, digitizing collections, or organizing information. In all of these areas, librarians impart knowledge and skills to students and faculty members both formally and

informally and advise and assist faculty members in their scholarly pursuits. They are involved in the research function and conduct research in their own professional interests and in the discharge of their duties. Their scholarly research contributes to the advancement of knowledge valuable to their discipline and institution (ALA, 2007).

Many authors have pointed out that, with the influence of ICT, the role of library and librarians in higher education has been widely expanded. Virkus and Metsar (2004) identified the following roles for academic librarians in the University education:

- a) Partnering with discipline faculty and other specialists for delivering of information and instructions.
- b) Designing instructional programs for information access.
- c) Teaching students and faculty how to access information whatever its format and location, and how to evaluate what they find.
- d) Serving as consultants on information resources, issues and problems.
- e) Developing and implementing information policy.
- f) Creating information access tools.
- g) Selecting, organizing, and preserving information in all formats.
- h) Serving as leaders and facilitators in introducing information technologies and ensuring their effective use.

Information literacy education has been more focused on it. Digital literacy is also associated with it. They further added it is believed that the library staffs changing role will benefits students, faculty, university administrators and librarians. Students will acquire better information skills, stronger critical thinking skills, greater confidence and the ability to transfer what they have learned to their post- graduate lives. Faculty will get opportunities to learn new information access, management and evaluation skills which support better their research and teaching. Administrators will begin to view the benefits of new collaboration initiatives and new organizational relationships. Librarian will be called upon to think differently about their assignments in both the library and the broader academic community, they will develop closer relationship with discipline faculty and with technical staff assigned to other campus units, familiarizing themselves with each groups, culture, and curriculum (Virkus and Metsar, 2004). All these benefits are closely related to the academic development.

METHODOLOGY

The research design used for the study was survey. Mixed method- a combination of questionnaire and interview guide was used to collect data from the respondents. Copies of questionnaire were physically handed over to 100 respondents. Structured interviews were conducted with the two key informants (one librarian and one member of academic council).

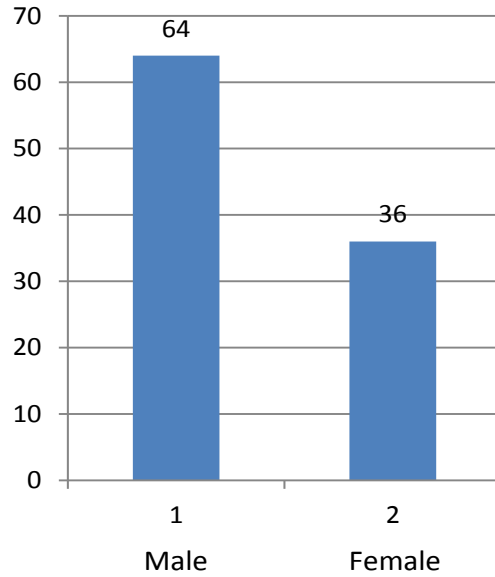


Figure 1. Sex category.

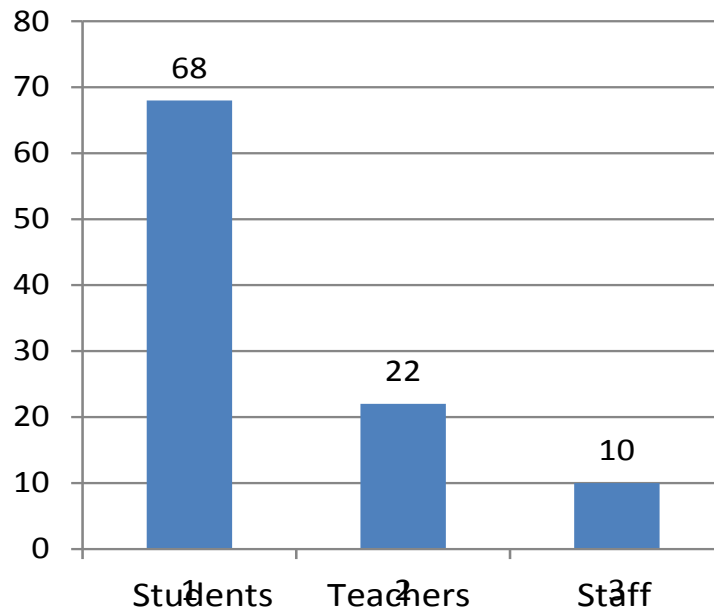


Figure 2. Status category.

FINDINGS AND DISCUSSION

Findings from library users

User category

A total of 100 users were consulted. Data on the sex of respondents are indicated in Figure 1 which shows that most of the respondents were males; only 36% females took part in this survey. The status category (identity of

the users in the university like students, teachers or university staff) of the users as indicated in Figure 2 also shows that 68% respondents are students, while 22% are teachers. Only 10% fall in the category of university staff.

Library as information center

The respondents were asked to state where they turn to in order to satisfy their information needs. Forty eight

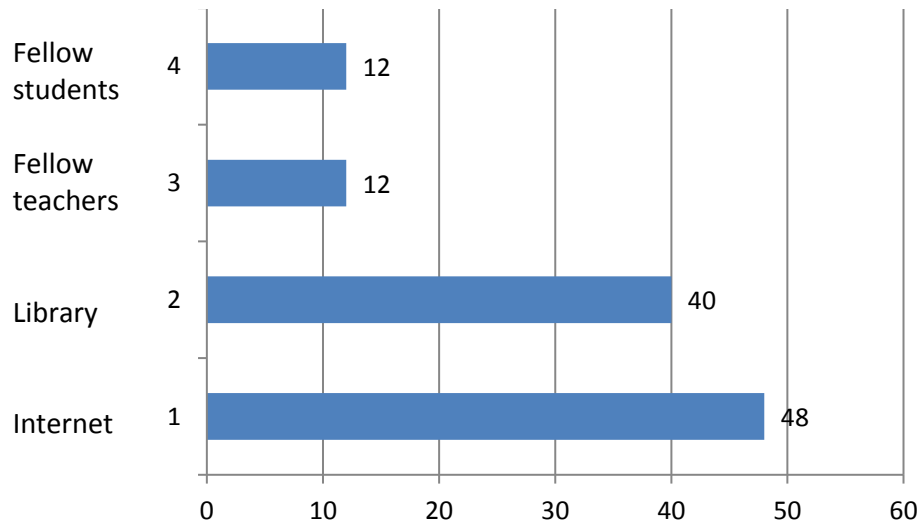


Figure 3. Library as first point of information center.

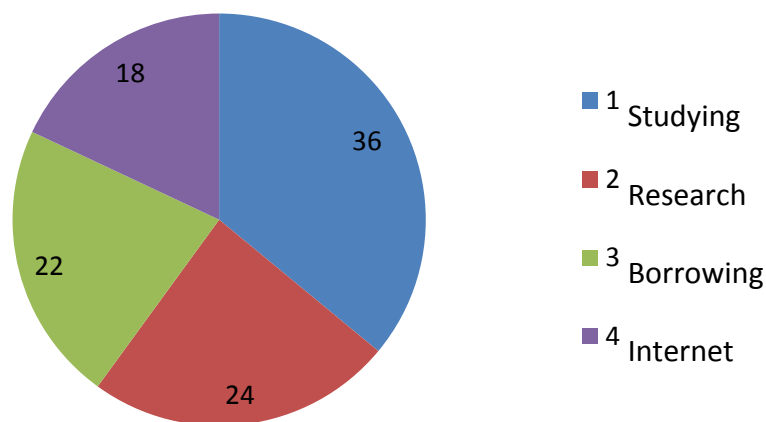


Figure 4. Reasons for visiting the library

participants indicated that they rely on the internet in order to satisfy their information needs. While 40% of the participants indicated that the library is their first point of information. Fellow students and teachers were regarded as first point of information by 12% (Figure 3).

Reasons for visiting the library

Respondents were requested to indicate why they go to the library, in order to determine what services they use at the library. Figure 4 indicates that 36% of respondents visit the library for studying purposes, 24% to do research, while 22% go to the library to borrow books and only 18% of the respondents go to the library for using internet. This is an indication that the library is mostly used for

studying purposes which also corresponds with the findings on the status of participants, of which students were majority.

Adequacy of information resources

One of the aims of the study was to assess the extent to which the different sources of information found in the library are adequate to cater for the information needs of the users of the university family. Table 1 shows that 65% of the respondents indicated that the library materials for studying are fairly adequate and only 20% indicated that the materials are adequate to cater for their information needs. 50% of the respondents also indicated that the resources are fairly adequate for research information

Table 1. Adequacy of information resources.

Resources for	Adequate	Fairly adequate	Not adequate
Studying	20	65	15
Research	10	50	40
Reference	50	20	30

Table 2. Adequacy of information resources.

Resources in	Adequate	Fairly adequate	Not adequate
Print	20	70	10
Electronic	50	15	35
Audio-visual	40	10	50

Table 3. Level of satisfaction.

Particulars	Very satisfied	Satisfied	Not satisfied
Library collections and resources	30	34	36
State of shelves and arrangement of books	20	25	55
Staff assistance	50	35	15
Library services	20	50	30
Computer and internet	15	20	65
Rules and systems of the library	18	27	55
Library opening hours	50	40	10
Reading facilities and environment	20	55	25

needs and 40% reflected that the materials are not adequate for research. 50% indicated that materials for reference are adequate, while 30% indicated the reference materials are not adequate. Only 20% of respondents feel that reference materials are fairly adequate. The Noakhali Science and Technology University library resources were overall rated as fairly adequate for studying and research purposes.

Users were also asked to indicate the availability of information resources in different formats. Table 2 shows that 70% of the respondents indicated that the print materials are fairly adequate, while 20% indicated that the materials are adequate. Only 10% respondents indicated that the print materials are not adequate. 50% of respondents indicated that the electronic materials are adequate and 35% respondents said electronic materials are not adequate, while only 15% indicated that the electronic materials are fairly adequate. 40% respondents indicated that the audio-visual materials are adequate, while only 10% indicated that materials in audio-visual forms are fairly adequate. 50% indicated that the audio-visual materials are not adequate. Therefore, the print materials were overall rated as fairly adequate. The materials in electronic and audio-visual forms are not fairly adequate but have shortage.

Level of satisfaction

Respondents were further asked to indicate whether they were satisfied with the different services, systems and facilities found in the library. According to Table 3, it was indicated that less people were very satisfied with different services, systems and facilities found in the library except for opening hours and staff assistance in which both gained 50% respondents. 36% respondents were not happy with the library collections and 55% respondents were also not satisfied with the state of shelves and arrangements of books as well as library rules and systems. 65% of the respondents were similarly not satisfied with computer and internet facilities. However, 50% of respondents were satisfied with library services while 55% are satisfied with reading facilities and environment.

The respondents were asked to give reasons for their choice in Tables 1, 2 and 3 above; some feel that reference materials are not sufficient in the library. There are not enough e-resources. There is also a lack of audio-visual materials, ICTs.

As indicated in Figure 5, 35% respondents feel that the reading rooms are very small and sometimes are not available for users. The issue of space was also

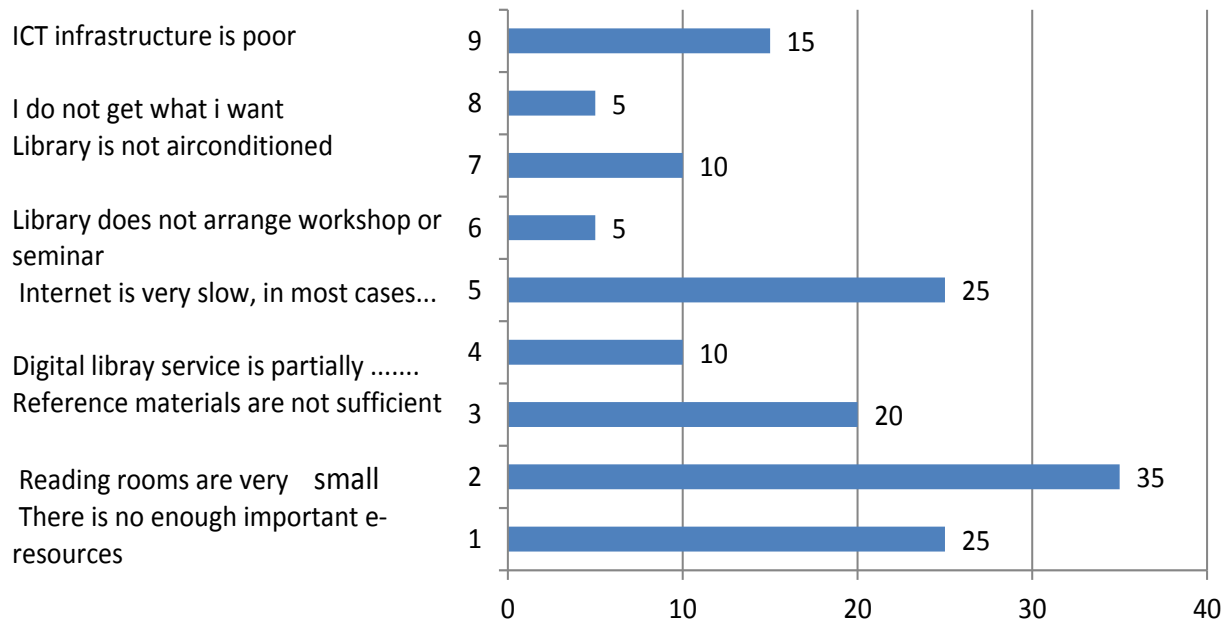


Figure 5. Level of satisfaction obtained from the library.

confirmed by the librarian who indicated that the library space is very limited. Though it has a separate four-stored building, many of its space are now used as academic class room and so it cannot cater for the number of users. The librarian also indicated that, although there is a teacher's reading room in Noakhali Science and Technology University Library, it is mostly used for other purposes due to the limited space. The issue of space is also making it difficult for the library staff to expand their collections and facilities. 25% of users indicated that there are not enough important e-resources. 20% of users also indicated that reference materials are not sufficient, while 25% respondents also argued that the internet is very slow and in most cases off. This was also confirmed by the librarian, that they have a small bandwidth, which is why the internet is very slow in most instances. 15% of respondents indicated that the library has poor ICT infrastructure, while 10% of respondents indicated that the library has no air-condition and digital library service is partially provided.

The librarian also confirmed that the library is not fully automated and it provides partially digital library services. It has also no air-condition. The librarian also asserts that air-condition for full library and RFID-based digital library system are under project, which was expected to be completed within very short time but there were some delays. After finishing the project the library will be full bloomed with sufficient services. The library needs to manage more to cater for all its users demand. For the library to function well and to unleash its potential in the university, it needs to have up-to-date and relevant materials for all its users.

Role of the library contribution to the academic development

Respondents were further asked to indicate what role the library is playing in the university and how it is contributing to the academic development.

The identity issues around the use of library reflect the role of the library for individuals in which respondents identified the support in education and research as the main role the library is playing in the university. Students and faculty of the university need teaching –learning aids in their study and research. The Noakhali Science and Technology University Library provide necessary support and information for them. In addition they are also getting instructions to be information literate through information literacy training provided by the library (Figure 6).

Findings from key informants

Interviews were conducted with the key informants (one librarian and one member of academic council) of the Noakhali Science and Technology University Library to identify the library services and project offered in the library.

In identification of library services, both librarian and member of academic council identified the following services as the major services provided by Noakhali Science and Technology University Library:

- 1) Circulation service.
- 2) Reference service.

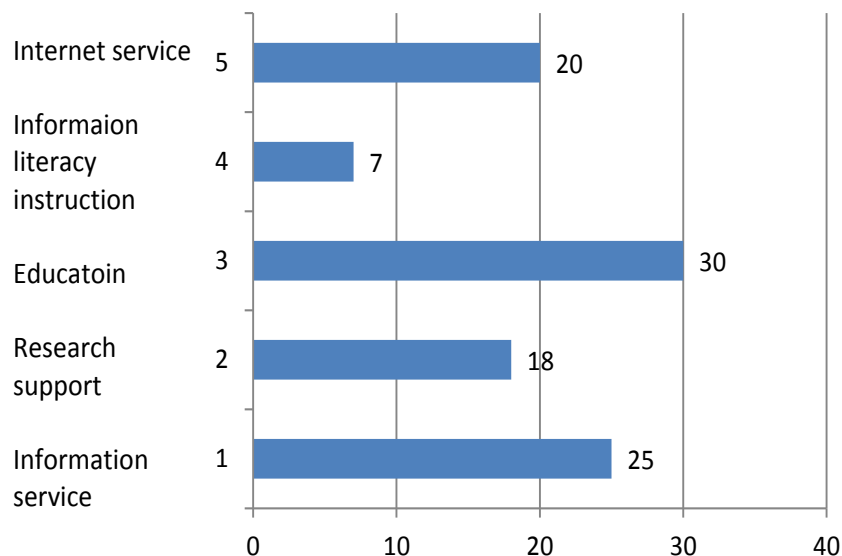


Figure 6. Role of the library contribution to the academic development.

- 3) Internet service.
- 4) Reprography service.
- 5) Print collections (Newspaper, Journal, Magazine, Serial, Report, Government information).

They were also asked about the relationship between the library and the user's community in ensuring that resources provided meet the information needs of the users. Despite the lack of relevant resources for researchers as indicated by users, the librarian reflected that he ask his users to indicate the kind of materials they want the library to provide. He however raised a concern that due to a lack of space he cannot add more resources.

Asked about whether the library has an outreach program, all respondents indicated that there is nothing and this is due to shortage of staff members to carry out this task.

Key informants were also asked about the role of the library and how the library contributes to the academic development of the university. The librarian indicated that the library tries to provide necessary support for quality education and research that the users need in order to cope with the fast changing world. The library contributes to academic development by providing reading materials and information in education and research. Internet facilities of the library also help the students and faculty to navigate the ocean of information.

When asked about whether the library is currently involved in some projects, all respondents indicated that, being a member of UGC Digital Library (UDL) which is hosted by University Grant Commission of Bangladesh, the Noakhali Science and Technology University Library opens a new window of opportunity for users to access to electronic information resources of Taylor and Francis

Group, Emerald, SAGE, Willey and so on. It brings qualitative change in teaching, learning and research in the university.

Benefits or significance of the study

The findings from the case study provide information on how a university library by developing itself can contribute in the academic development. It is expected that the findings obtained from this investigation will help to take necessary measures to improve the Noakhali Science and Technology University Library as well as the academic standard of the university, and stimulate further research in this area. Identification of the role of a particular library may be useful for other libraries planning the strategy of development. The study will also help people to know the problems or obstacles of the third world university libraries. Although there are a number of studies regarding this, this is the first one of its kind in Bangladesh.

Conclusion

The aim of this study is to determine the role of Noakhali Science and Technology University Library in the academic development of this university. The findings indicated that the library mainly has educational and research role through the provision of circulating information and reading materials to the university family. The library also has a role to play in enhancing the library usages and information access through internet facilities and information literacy training provided by the library.

However, there are challenges of too few e-resources and ICTs that users feel need to be addressed. There is also a challenge of lack of skilled manpower and limited reading space for the users that the library management needs to look into. Although the library is seen as essential to students and teachers, it needs to engage with the users to raise the awareness of the library facilities and services. Besides, the provision of information, librarian needs to make partnership with discipline faculties to form integrated information literacy program as well as digital literacy. This study provides information to start a discussion with stockholders about the role of the library in the academy and its potential for ensuring academic development and sustainability of university library services.

Based on the findings the author made the following recommendations:

1. The library needs to employ more qualified staff members to be able to carry out the activities of the library, including outreach programs.
2. Provide more ICTs, as the current devices are not enough to cater for everyone, because the library is used by everyone of the university.
3. More space needs to be created as the current space is not enough to accommodate all activities taking place.
4. To carryout outreach program by taking their services to users, marketing the library services as well as raising more awareness about the importance of the library.
5. More up to date and relevant sources of information to create for all users, especially for students and teachers of the university.

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CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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