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TECHNOLOGICAL COMPETENCIES AND TECHNOSTRESS AS DETERMINANTS OF ELECTRONIC RESOURCES UTILISATION AMONG NIGERIAN ACADEMIC LIBRARIANS

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Abstract

The paradigm shift in library and information service delivery brought about by the advent of use of technology has provided significant improvement to both libraries and librarians alike. Previous studies revealed that most academic libraries were operating conventional library system before the emergence of digital library system which now makes the use of e-resources an imperative for optimal performance in librarianship. The advancement of modern ICT in Nigerian universities is however accompanied by the question of technological competence and technostress experienced by librarians which inhibit effectiveness of library automation. Past studies have focused on types and benefits of e-resources without paying much attention to factors that can affect the utilization; hence the need for this study to bridge the gap. The objectives are to identify various e-resources utilized by librarians, the level of technology competence of academic librarians, e-resources utilization, relationship between technology competence and e-resources as well as examine the level of technostress among academic librarians in selected university libraries. Descriptive research design of correlation type was adopted. The population comprised all librarians in federal universities in south west Nigeria from which 138 were selected from six university libraries. 127 questionnaires were returned and valid for analysis. Statistical analysis was done using descriptive and inferential statistic of Pearson product moment correlation. The result revealed that librarians' use of e-resources, technological competence were moderate while they exhibit low level of technostress. Based on these findings recommendations were made that Academic librarians should intensify more efforts at improving their technological skills through training, conference and workshop participation, reducing technostress by self management and reducing multi-task activities. It is also recommended that librarians should identify their areas of strength in terms in technological competence.

Keywords

E-Resources, Technology Competence, Technostress, Federal University Libraries

Introduction

The explosive nature of information and information services in the digital age have given credence to the popular assertion that information is dynamic, it grows in leaps and bound. The devices for managing it also keep

changing on a daily basis. Professional librarians endeavour over time to keep pace with the trends of event in the area of ICT in order to create better access to knowledge and provide needed information to their users at the appropriate time.

With these developments, most of the functions and activities in academic libraries which were previously carried out manually are now being done with the introduction of diverse technological tools and services. In present digital age, there has been an ample of improvement in the library and information services delivery as a result of the use of technology for library activities such as acquisition, circulation, cataloguing, reference and serial control (Bicheler, 1986, Murthy & Cholin, 2003 in Ahmad, 2009). According to Madu (2002), application of Information and Communication Technology have become very prominent in library housekeeping functions such as Acquisition (with the use of computer based acquisition, selection and acquisition of books can be done with ease); Cataloguing (automating the cataloguing section can facilitate the establishment and maintenance of Online Public Access Catalogue (OPAC) which enable the researchers to get the needed materials without undergoing rigour of Manual Catalogue), Circulation (with the use of computer, major routines jobs in circulation section are performed faster with high level of accuracy) , Serials (with the introduction of computer, relevant and current journal can be searched online for acquisition. Haliso (2011) also opined that all the functions and services that academic libraries used to provide manually can be provided now through the use of ICTS as better and faster option. The relative transition from the conventional methods to digital methods of carrying out library services has without a doubt improved the quality of services offered by the librarian to their respective users and it has invariably brought about a reasonable degree of technostress experiences by

professional librarians while carrying out varied library services (Isiakpona & Adebayo 2011).

Previous studies have revealed that e – resources is one among the new technologies which has gained prominence in the library. Electronic resources consist of materials that are computer – controlled, including material that required the use of a peripheral (e.g a CD- ROM player) attached to a computer ; the item may or not be used in the interactive mode .There are two types of E- resources : data (Information in the forms of numbers, letters, graphics, images and sound or a combination thereof) and, program (instruction or routines for performing certain task including the processing of data and programme (e.g Online services , interactive multimedia) (Haridasan and Khan, 2009). They have exploded in popularity and utilisation as well as enables innovations in teaching and learning. Electronic resources are the electronic representation of information. They are available in various forms like e – book, digital libraries, online journal, magazine, e- learning tutor and online test. Electronic Resources delivers collection of information as full text databases, e- journal, image collections, multimedia in the form of CD, tape, internet, web technology e.t.c. Electronic resources are wide ranges of products going from electronic periodicals to CD-ROM, from mailing list to databases, all of them having a common feature of being used and sometimes modified by a computer (Naidu, GHS, Rajput, Prabhat & Motiyani, Kavita, 2007).

However, academic librarians need to perform contemporarily in the present dispensation and are thereby forced to acquire the technological competence for effective performance (Haider, 1998, Mahmood, 2003,

Ameen, 2008 & Ullah, 2011). Moreover, it has been observed in the recent times that the relative acceptance of new technology in the library depend largely on technological competence among the librarians. On the other hand, competence implies set of knowledge and skills in possession of individual in performing their duties. It has to do with measuring the ability level of an individual in terms of mastering set of skills.

There is no doubt that technological revolution has been the dominant force in improving and enhancing library services in academic libraries i.e it has improved efficiency while at the same time, the rapid technological advancement has caused lot of employees to suffer from technostress/ strain. The rapid introduction of technology in a library environment may cause librarian to suffer from combination of technological fatigue and aversion (Ahmad, Amin and Ismail, 2009). In most cases, a professional librarian who is ICT compliance is expected to have a positive mindset towards using e- resources, so from all indications such a librarian will not experience technostress but a librarian with no knowledge of ICT is expected to have technostress problem. Furthermore, Academic libraries in the recent times have adopted the use of new technology to replace analogical means, to boost their survival, performance and enhance effective and efficient provision of information services to the users. However, librarians are now being faced with the issue of technostress, as a challenge inherent in the use of e- resources in boosting their activities. Technostress in most cases may be experienced by a librarian due to intense use of ICT in the likes of electronic information resources particularly in rendering

services to users.

Prior observation has revealed that there are varied benefits of Electronic resources ranging from speedy access to materials without mediation by the library, ease of use, opportunity to get current information among others .As a result of this, the need to ensure proper utilisation and curb associated stress should be taken into cognizance by librarians and relevant management. Hence, this study is being carried out to examine technological competencies and technostress as determinant of Electronic resources utilisation among Nigerian academic librarians.

Literature Review

The information resources of the library can be classified into print and electronic resources. E-resources on the other hand is one of the new technology which has gain prominence in library and it has remain consequential source of information (Thanuskodi, 2012). E-resources include document in electronic or E-format that can be accessed via the internet. E-resources are easily accessible in remote areas, solve storage problem and control flood of information (Munira, & Bushra, 2010). This has resulted in global dissemination of information. There are several forms and types of E-resources which are available on the internet, some of the popular ones that are gaining ground are the electronic journal, standards, technical specifications, patents, full text articles, trade reports and host of others (Dhanavandan, Mohammed, Esmail, and Nagarajan, 2012). E-resources remain one of the emerging trends in the information world that has made the library so significant to its users. E-resources usually consist of e- book, e- journal, articles, newspapers, thesis,

dissertation and CD-ROM which are likely to be an alternative to print medium. Electronic resources advantages abound and they include speedy access to many different resources, professional development opportunity and time saving (Porumbeanu, 2012). According to Oyedapo and Ojo (2013), e-resources such as e-journal remains extremely relevant to both the libraries and users.

According to Dadzie (2005), e-resources are invaluable research tools that complement print based resources in traditional library settings. However, in order for university libraries to enhance effective performance of their academic staff, Aina (2004) explained that through users studies, libraries are well placed to know those who use their services, what their information are, and what services needs will likely meet the information needs. Allwood and Barmark (1999) also opined that the library is the most widely used source of information available to literate societies. Hence librarians must be aware of the kind of information being sought and how it can be obtained.

Further, Yakubu and Omotoke (2015) affirmed that e-resources usually share some characteristics with print sources which include the fact that they send message, information and facts, possesses bibliographic details of an entity, easy accessibility, assist in research and ultimately they overcome geographical limitations and lastly lots of researchers can utilize e-resources at the same time but in different location and can easily be manipulated.

Despite lots of opportunities offered by e-resources in meeting the information needs of students and academic librarians within the library environment, it has been discovered that

utilization of e-resources in most developing countries is still very low when compared to extent of utilization in developed countries due to some impending factors such as technological competence and technostress. According to Suharti and Susanto (2014), Technological competence implies combination of skills, knowledge and expertise acquired over time in the field of automation, computer technology and information technology in running necessary automatic devices and equipment in the library. The higher the level of an individual competence in managing the varied automation devices /equipment at its disposal, the easier the computer/technological disturbances during the device/equipment running process and vice versa. Alternatively, this will reduce the negative stress caused by changes in the working system due to changes in available technology (Weil and Rosen, 2010). Technological competences can be regarded as combination of skills, knowledge and behaviour related to library technologies that are important for personal performance, carrier building and organizational success (APLEN, 2008) cited in (Batool & Ameen, 2010).

Diamond (2011) asserted that with an improvement in technology, the need arises for libraries or librarians to be aware of how to authenticate online resources and the limit of electronic resources as a whole. This is because using e-resources requires additional expertise and some level of technological competence. This is especially important when instructing library users on how to use electronic resources and the internet to research on their own. This implies that, librarians should take up the responsibility of sharing with the users their own knowledge of limit and problems with

electronic research which in turn will enhance their competence (Diamond, 2011).

However technological revolution in the country has caused a lot of librarians to suffer from technostress. The concept "Technostress" has been described from different perspectives by different authors. Ahmad et al (2009), conceptualized technostress as "a new type of stress which results from the impact of technology (p.103). Ennis (2005) also defined technostress as a circumstance in which person cannot accept the technological changes that occur in their workplace and it eventually result in workstress for them. Tarafdar M.T.O., Ragu-Nathan, T.S. & Raga- Nathan, B. S., 2007 also noted that technostress is a problem of adaptation as a result of a person's inability to cope with or manage requirement related to information and communication technology (ICT). Strain due to technostress can be psychological or behavioural. Psychological strain symptoms are emotional reaction to stress or condition and they include: dissatisfaction with the job, depression and negative self-evaluation. Behavioural strain symptoms include reduced productivity, increased turnover and absenteeism and poor task performance (Tarafdar, M.T.O., & Ragu-Nathan, T.S. 2010).

Tarafdar et al (2007) also developed five components of technostress which are described as technostress creator i.e stressor associated with technostress are called technostress creators. There are five dimensions or creators of technostress. They are:

1. Techno- overload - This is a circumstance where ICT users are compelled to work faster and longer.
2. Techno- invasion- This is a

circumstance where the ICT users feel that they can be reached anytime or continuously "connected" which caused an unclear boundary between work – related and personal contextus.

3. Techno- complexity – This is circumstance where the ICT users feel that their skills are insufficient due to difficulty related to ICT. As a result, they are strained to use up more time and effort to study and understand diverse features of ICT.

4. Techno- insecurity- A circumstance where ICT users feel threatened that they will lose their job, either being reinstated by the new ICT or by other people who are better in ICT compare to them.

5. Techno- uncertainty- A circumstance where ICT users feel disturbed since ICT is continuously changing and need upgrading.

Technostress is also known as technophobia, computer phobia, computer anxiety and computer stress (Chua, Chen and Wong, 1999; Durndell and Haag, 2002; Mustafa, Yusof and Saad, 2007). Clute (1998) identified some of the relative causes of technostress to include performance anxiety, inexperience with computer, lack/insufficient training, organizational factors, information overload; fast pace of change among others. There are two forms of technostress affecting academic staff: The Physical form and the Psychological form. Physical form of technostress include backache, back strain, muscular dysfunction and eye strain while Psychological ones include feeling drained, information overload, over-identification with technology, underworked and doing routine jobs (Harper, 2000).

Applegate (1997) defined user's utilisation as "a personal, emotional reaction to a library service or product". Bitner and Hubert

(1994), suggest that user utilisation consist of service encounter utilisation, “the consumer's disutilisation with a discrete service encounter”, and overall service utilisation the organization based on all encounters and experience with that particular organization”. In addition, a characteristic of service delivery is the simultaneous nature of production and consumption (Zeithaml & Bitner, 1996). University libraries today are faced with challenges on several element such as mega book stores, online information providers, e-learning and multimedia products, document delivery services and other competitive sources of information that seem to be threatening the role of university libraries (Hernon & Altman, 1996). As a result, university libraries may have not adopted a more strategic direction in which the creation and delivery services utilisation for their users play an important role.

Also, Norliya and Khasiah (2006) reiterated that in meeting or satisfying user information needs, academic libraries must provide the latest collections of e-resources, opening hour should stay longer, staff should be more friendly and knowledgeable, and the library should organize more workshops on how to improve technical skills of its staff and that the library should develop its own internet information. Norliya and Haslinda (2008) also stated that information provision on customer utilisation reveal many things that the libraries can do in term of activities that would benefit librarians. The result of their study found that the largest proportion of the respondents think that the library should publish a guide on information researching skills.

Statement of the Problem

Previous literature in the field of

Information Technology revealed that most academic libraries have been operating conventionally before emergence of digital library system, hence the utilisation of e-resources surfaced which enhances optimal performance in librarianship. This advancement of modern ICT in the Nigerian University libraries is however accompanied by the problem of technological competence and technostress. Lack of Technological competence in terms of skill acquisition in managing varied technological tools on the part of library personnels brings about phobia, stress experience by librarian and thus negating the primary objective of library automation which has improved library service delivery to users. Preliminary findings from literature indicate that a situation where by a librarian remains adamant in accepting technological changes may result in stress and incompetencies on the part of the librarian. Moreover it has been discovered from literature that technostress problem is inevitable and constant because library is continuously acquiring new technology to enhance timely and quick service delivery to users.

Existing studies have focused mainly on the types and surrounding benefits of e-resources without paying attention to factors that can affect the utilization, hence this study is being carried out to fill the gap. This is despite the huge financial resources committed to their annual subscription. Identifying the factors that affect the use of e – resources will provide library management with information on how to promote and sustain their use in the universities libraries, hence this study is being carried out to fill the gap.

Objective of the study

The main objective of the study is to examine the influence of the technological competence and technostress on electronic resources utilisation among librarians.

The specific objectives are to:

1. identify various e-resources utilized by librarians in selected university library.
2. identify the level of technology competence of academic librarians in selected university libraries in south-west Nigeria?
3. ascertain the level of e-resources utilization among academic librarians in selected university libraries in south west Nigeria?
4. investigate if there is any relationship between technology competence and e-resources utilization among librarians in selected academic libraries?
5. examine the level of technostress among academic librarian in selected university libraries?

Research Questions

1. what are the various e-resources used by librarians in selected universities library?
2. what is the level of technology competence of academic librarians in selected university libraries in south-west Nigeria?
3. what is the level of e-resources utilization among academic librarians in selected university libraries in south west Nigeria?
4. is there any relationship between technology competence and e-resources utilization among librarians in selected academic libraries?
5. what is the level of technostress among academic librarian in selected university libraries?

Methodology

The study was carried out in Federal Universities in the South West Nigeria. The universities are University of Ibadan, University of Lagos state, Obafemi Awolowo University, Ile Ife, Federal University of Abeokuta, Federal University of Oye Ekiti and Federal University of Technology, Akure. The descriptive design of

correlational type was adopted for the study because it provides suitable and efficient way of studying large population. This research design enhanced the result of the study with the hope of providing better understanding of the relationship among technology competences, technostress to E-resources utilisation among librarians in academic libraries. The respondents were professional librarians in selected Federal University libraries in South West Nigeria. Simple random sampling technique was adopted for the study in order to achieve an even sample size of the population. (Professional librarians were randomly selected because since they all use e- resources. Questionnaire was the instrument for data collection in this study. The questionnaire was divided into four sections. The questionnaire was a self – developed questionnaire while that of technostress level among librarians was an adopted scale by (Popoola & Olalude, 2013).
Section A: Demographic Variables
Section B: Technological Competencies
Section C: Technostress
Section D: E-Resources Utilization

This study employed frequency count, inferential statistics of Pearson Product moment Correlation to establish relationship among the variables being studied.

Results

This section deals with data analysis and interpretation of result of the findings. Specifically the study provided answers to five research questions. Results are presented in tables followed by interpretation of each research question. The findings of the study were also discussed.

Response rate

Table 1: Response Rate of Respondents

Response rate

Table 1: Response Rate of Respondents

UNIVERSITY	No of Questionnaire distributed	No returned
University of Ibadan	34	32
University of Lagos	19	17
Obafemi Awolowo University	24	23
Federal University of Oye, Ekiti	17	15
Federal University Technology, Akure	20	19
Federal University of Agriculture, Abeokuta	23	21
Total	138	127
Percentage response rate	100%	92.0%

Table 1 shows that a total of 138 questionnaires were distributed among six selected academic libraries in south-west Nigeria out of which 127 were retrieved and valid for analysis. This constituted about 92% response rate.

Demographic Information of Respondents

Table 4.2 presents demographic information of respondents.

Table 2: Demographic Information of Respondents

SN	Item	N	Percent
A. AGE			
1	20-30 YEARS	5	3.9
2	31-40 YEARS	33	25.9
3	41-50 YEARS	67	52.8
4	51- 60 Years	19	15.0
5	61 and above	3	2.4
	Total	127	100.0
B. Marital status			
1	Single	21	16.5
2	Married	75	59.1
3	Divorced	18	14.2
4	Widow/Widower	13	10.2
	Total	127	100.0
C. Sex			
1	Male	86	67.7
2	Female	41	32.3
	Total	127	100.0
D. Highest Academic Qualification			
1	Masters	119	93.7
2	PhD	8	6.3
	Total	127	100.0

It could be observed from the table that majority of the respondents were between the ages of 41 and 50 years old which constituted 52.8%. This is closely followed by respondents between ages 31-40 years which constituted about 25.9%. The least in this category were those between 61 years and above which is about

2.4%. This means that most of the librarians were between the ages of 40 and 50 years.

Also, the demographic information revealed that there were more male (67.7%) librarians than female (32.3%). Also, in terms of marital status, majority of the respondents were married (i.e. 59.1%). The distribution also showed that 119(93.7%) of the respondents have masters degree while only 8(6.3%) possess PhD degrees as their highest academic qualifications. The implication of this is that all the librarians have requisite academic qualifications.

Research question 1

What are the various e-resources used by librarians in selected universities library?

Respondents were asked to indicate various e-resources used in selected university libraries and the responses were summarized in table 3.

Table 3: Availability of e-resources in selected university libraries in South-west Nigeria

Information Resources	VA		A		RA		NA		Mean	Std. Dev.
	N	%	N	%	N	%	N	%		
Internet	102	80.3	19	15.0	5	3.9	1	0.8	3.71	.534
e-book	23	18.1	57	44.9	35	27.6	12	9.4	3.23	.500
e-journals	19	15.0	35	27.6	41	32.3	22	17.3	3.38	.497
Database	45	35.4	39	30.7	22	17.3	21	16.5	3.60	.513
Open Access	10	7.9	37	29.1	61	48.0	19	15.0	2.24	.701
OPAC	14	11.0	57	44.9	37	29.1	19	15.0	2.47	.618
CD-ROM	42	33.1	47	37.0	23	18.1	14	11.0	3.43	.508
Journal websites	35	27.6	62	48.8	17	13.4	13	10.2	2.40	.575
Newspapers	70	55.1	35	27.6	12	9.4	10	7.9	3.62	.485
Encyclopedia	17	13.4	31	24.4	50	39.4	29	22.8	2.71	.728
Dictionaries	71	55.9	25	19.7	14	11.0	17	13.4	3.60	.458
Electronic mails	69	54.3	27	21.3	10	7.9	21	16.5	3.67	.482
Online Discussion forum	13	10.2	21	16.5	63	49.6	38	29.9	1.83	.973
Professional association forum	5	3.9	7	5.5	78	61.4	37	29.1	1.76	.941
Weighted mean	41.65		Std. Dev.		8.513					

Table 3 revealed that the most prominent e-access and e-journals.

resource use in selected university libraries is the internet with 102(80.3%) of the respondents indicating that it is very available while only 1(0.8%) indicated that internet is not available. Other information sources given prominent as being available in the selected university libraries in South-west Nigeria are respectively dictionaries, newspapers, emails and OPAC. The overall mean score is 41.65 with standard deviation of 8.513. This means that information resources and sources are moderately available in selected university libraries in South-west Nigeria. However, there are certain information sources as observed from the response that were noted to be relatively unavailable as could be seen from the table. This includes professional association forum, discussion forum, open

Research Question 2

What is the level of technology competence of academic librarians in selected university libraries in south-west Nigeria?

The respondents were asked to indicate the level of technological competence and the result is presented in table 4.

Table 4: Technology competence of librarians in selected university libraries in south west Nigeria

Information Resources	VC		C		FC		NC		Mean	Std. Dev.
	N	%	N	%	N	%	N	%		
Internet surfing	102	80.3	19	15.0	5	3.9	1	0.8	3.71	.534
Computer publishing	18.1	57	44.9	35	27.6	12	9.4	3.23	.500	
Document scanning	19	15.0	35	27.6	41	32.3	22	17.3	3.38	.497
Document printing	45	35.4	39	30.7	22	17.3	21	16.5	3.60	.513
Electronic PowerPoint preparation and presentation	10	7.9	37	29.1	61	48.0	19	15.0	2.24	.701
e-mail	14	11.0	57	44.9	37	29.1	19	15.0	2.47	.618
Teleconferencing	42	33.1	47	37.0	23	18.1	14	11.0	3.43	.508
e-discussion	35	27.6	62	48.8	17	13.4	13	10.2	2.40	.575
Photocopying (use of the machine)	70	55.1	35	27.6	12	9.4	10	7.9	3.62	.485
CD burning	17	13.4	31	24.4	50	39.4	29	22.8	2.71	.728
Weighted mean	30.79		Std. Dev.		5.66					

The overall score is obtainable 40.00.

The mean score of 31.00 - 40 denotes high technological competence, while mean score of 21.00-30.99 denote moderate technology competence. Mean score of 20.99 and below denotes low technology competence. From the table, the weighted mean is 30.79 which falls within the range of moderate technology competence. It could therefore be concluded that librarians' technology competence in selected libraries is moderate.

Research question 3: what is the level of e-resources utilization among academic librarians in selected university libraries in south west Nigeria?

Table 5: Level of electronic information utilization by librarians

Electronic Information Resources	VWU		WU		RU		NU		Mean	Std. Dev.
	N	%	N	%	N	%	N	%		
Internet	102	80.3	19	15.0	5	3.9	1	0.8	3.71	.534
e-book	23	18.1	57	44.9	35	27.6	12	9.4	3.23	.500
e-journals	19	15.0	35	27.6	41	32.3	22	17.3	3.38	.497
Database	45	35.4	39	30.7	22	17.3	21	16.5	3.60	.513
Open Access	10	7.9	37	29.1	61	48.0	19	15.0	2.24	.701
OPAC	14	11.0	57	44.9	37	29.1	19	15.0	2.47	.618
CD-ROM	42	33.1	47	37.0	23	18.1	14	11.0	3.43	.508
Journal websites	35	27.6	62	48.8	17	13.4	13	10.2	2.40	.575
Newspapers	70	55.1	35	27.6	12	9.4	10	7.9	3.62	.485
Encyclopedia	17	13.4	31	24.4	50	39.4	29	22.8	2.71	.728
Dictionaries	71	55.9	25	19.7	14	11.0	17	13.4	3.60	.458
Electronic mails	69	54.3	27	21.3	10	7.9	21	16.5	3.67	.482
Discussion forum	13	10.2	21	16.5	63	49.6	38	29.9	1.83	.973
Professional associa forum	15	3.9	7	5.5	78	61.4	37	29.1	1.76	.941
On-line discussion forum	15	3.9	7	5.5	78	61.4	37	29.1	3.03	.681
Seminar/workshops	35	27.6	62	48.8	17	13.4	13	10.2	3.01	.721
Weighted mean	68.74				Std. Dev.		13.347			

Key: VWU- very well utilized, WU- well utilized; RU- rarely utilized; NU – Not utilised

From table 5, it could be deduced that the mean score is 68.74 which falls within moderate level of minimum score for utilisation level is 23 (i.e. 1 * 23=23) and the maximum score for utilisation level is 92 (i.e. 23 * 4 = 92). A score of 1-23 indicates a low level of utilisation, a score of 24 - 70 indicates a moderate level of utilisation while a score of 71 – 92 indicates a high level of utilisation. From the table the mean score is

Table 6: Relationship between technology competence and electronic information resources utilization by librarians in selected libraries

Variable	Mean	Std. Dev.	N	R	P	Remark
Technology competence	24.5373	5.66	127	.358*	.000	Sig.
EIR Utilisation	67.9851	6.63				

** Sig. at .01 level, * Sig. at .05 level

It is shown in the above table that there was significant relationship between Technological competence and electronic information resources utilization among librarians in selected university libraries in south-west, Nigeria (r = .358*, N= 67, P< .05). This means that there is a significant relationship between Technological competence and electronic

information resources utilisation in south-west, Nigeria. There is a positive linear relationship indicating that the more technological competent a librarian is the more likely he or she will utilize electronic information.

Research question 5: what is the level of technostress among academic librarian in selected university libraries?

Table 5: Technostress level among librarians in selected libraries in South-west Nigeria

Information Resources	Not at all		Sometimes		Often		Very often		Mean	Std. Dev.
	N	%	N	%	N	%	N	%		
Do you reject the use of computer out rightly?	102	80.3	19	15.0	5	3.9	1	0.8	3.71	.534
Are you unable to concentrate on a single computer task when you work with computer?	23	18.1	57	44.9	35	27.6	12	9.4	3.23	.500
Do you experience fear when you work with the computer?	19	15.0	35	27.6	41	32.3	22	17.3	3.38	.497
Do you feel frustrated when you work with the computer?	45	35.4	39	30.7	22	17.3	21	16.5	3.60	.513
Do you feel irritated you work with the computer?	10	7.9	37	29.1	61	48.0	19	15.0	2.24	.701
Do you feel pressurized by your employer, supervisor or co- worker to work with the computer?	14	11.0	57	44.9	37	29.1	19	15.0	2.47	.618
Do you feel isolated when you work with the computer?	42	33.1	47	37.0	23	18.1	14	11.0	3.43	.508
Do you experience a feeling of loss of control when you work with the computer?	35	27.6	62	48.8	17	13.4	13	10.2	2.40	.575
Do you experience increase in heart beats when you work with the computer?	70	55.1	35	27.6	12	9.4	10	7.9	3.62	.485
Do you express self depreciating thought about your ability to cope with computer related library tasks?	17	13.4	31	24.4	50	39.4	29	22.8	2.71	.728
Do you feel bored you work with the computer?	71	55.9	25	19.7	14	11.0	17	13.4	3.60	.458
Do experience tension when you work the computer?	69	54.3	27	21.3	10	7.9	21	16.5	3.67	.482
Do you feel helpless when you work with the computer?	13	10.2	21	16.5	63	49.6	38	29.9	1.83	.973
How often do you reject learning new things on how to use computer to perform library service related tasks?	5	3.9	7	5.5	78	61.4	37	29.1	1.76	.941
How often do you experience dry mouth when you work with the computer?	59	46.5	32	25.2	17	13.4	23	18.1	3.91	.572

From the table the maximum point is 80 showing very low level of technostress. The means score of 61-80 shows low level of technostress, 41-60 moderate level of technostress, while 21-40 indicates high level of technostress and score from 20 and below shows a very high level of technostress. It could be observed from the table that the weighted mean score is 62.54 which falls within low level of technostress. It is therefore submitted that academic librarians in selected libraries in south west Nigeria exhibit low level of technostress.

Discussion of Findings

The finding associated with research question one revealed that basic library resources needed by librarians users were available but moderately utilized by academic librarians. The findings of this study revealed that most of the respondents who are in their active years of information use mostly internet surfing and internet resources. E-books ranked highest as the information types mostly sought after by users in the selected research libraries while non-book materials such as data bases, internet services, manuscripts, audio visual materials and a host of other non-book materials closely follow the least e-resources used by librarians in selected libraries. This finding corroborates that of Allwood and Barmark (1999) who opined that the library is the most widely used source of information available to literate societies. Hence librarians must be aware of the kind of information being sought and how it can be obtained. So in order for university libraries to enhance effective performance of their academic staff, Aina (2004) explained that through users studies, libraries are well placed to know those who use their services, what their information are, and

what services needs will likely meet the information needs.

In the same vein the findings of this study revealed that technological competence of librarians is moderate. This supports the view of Diamond (2011) that with an increase in technology comes to the need of libraries or librarians to be aware of how to authenticate online resources and the limit of electronic resources as a whole. This is due to the fact that using e- resources requires additional expertise and some level of competence. This is especially important when instructing library users on how to use electronic resources and the internet to research on their own. This implies that, librarians should make it responsibility to share with the users their own knowledge of limit and problems with electronic resources which in turn will enhance their competence. T h e librarians should also make sure that the services being offered to researchers are current and of high quality.

The findings further revealed that user's utilisation is generally low as the utilisation indices in the study revealed a negative trend in the responses. This finding is in line with what Norliya and Khasiah (2006) observation which made them stated that in meeting or satisfying user information needs, academic libraries must provide the latest collections of e-resources, opening hour should stay longer, staff should be more friendly and knowledgeable, and the library should organize more workshops on how to improve technical skills of its staff and that the library should develop its own internet information. Norliya and Haslinda (2008), reported that a study on information provision on customer utilisation reveal many things that the libraries can do in term of activities that

would benefit librarians. The result of their study found that the largest proportion of the respondents think that the library should publish a guide on information researching skills.

The findings revealed a significant relationship between Technological competence and electronic information resources utilization among librarians in selected university libraries in south-west, Nigeria indicating that the more technological competent a librarian is the more likely he or she will utilize electronic information. This finding is in consonance with the findings of Suharti and Susanto (2014), ascertained that Technological competence implies combination of skills, knowledge and expertise acquired over time in the field of automation, computer technology and information technology in running necessary automatic devices and equipment in the library. Diamond (2011) asserted that with an increase in technology comes to the need of libraries or librarians to be aware of how to authenticate online resources and the limit of electronic resources as a whole.

Finally, on the question of technostress level, the finding revealed that there is low level of technostress among librarians in selected university libraries. This finding lends credence to that of Tarafdar et al, (2007) who found that technostress is a problem of adaptation as a result of a person's inability to cope with or manage requirement related to information and communication technology (ICT). Strain due to technostress can be psychological or behavioural. Psychological strain symptoms are emotional reaction to stress or condition and they include: dissatisfaction with the job, depression and negative self-evaluation. Behavioural strain symptoms include reduced

productivity, increased turnover and absenteeism and poor task performance (Tarafdar et al, 2010)

Conclusion

The essence of any profession is to be abreast of development trends and dynamics as demanded by such profession. It therefore behoves academic librarians and libraries to wake from their slumber and keep abreast of the trend in the development in the twenty first century librarianship in order to meet the needs of their users and improve their technological competences. It has been established from this study the role played by technology competence and technostress and e-resources utilization by librarians.

Recommendation

Based on the findings of this study the following recommendations are desirable:

- Academic librarians should intensify more efforts at improving their technological skills through training, conference and workshop participation. This could also be facilitated periodically by university libraries under which the librarians serve. This will add value to the librarians in particular and the university will benefit immensely through resultant effective and improved service delivery.
- Technostress can actually be overcome by improved technological competence, self management well as by reducing multi-task activities. It is therefore recommended that librarians should identify their areas of strength in terms in technological competence.

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