EFFECT OF TECHNO STRESS AMONG ACADEMIC LIBRARIANS IN NIGERIA UNIVERSITIES

ADENEKAN Fauziyah Nihinlolawa

Federal University of Agriculture, Abeokuta Nigeria.

Abstract

This study examines effect of techno stress among academic librarians in Nigeria Universities. The study is a survey research anchored on positivism paradigm. The questionnaire was used as data collection instrument. Furthermore total enumeration method was used since the population comprised of 50 academic librarians in three selected Universities in South- West Nigeria. The data was analysed using SPSS version 21. The finding revealed that the respondents experienced cognitive, affective and behavioural forms of techno stress, which had negative effect on their personal and professional development. The study recommended constant health care monitoring and the need for adequate relaxation after the use of technological tools. The study joins in discussion for creating awareness on effect of techno stress among professionals in the library.

Keywords: Academic Librarian, Effect, Information Technology Tools, Techno Stress, University.

Introduction

Stress is a psychological perception that has negative effect on individual's health, comfort and career routine (Casey, 2013). Techno stress is psychosomatic illness caused by working with computer technology on a daily basis due to too much interaction with technology. It has negative psychological link between people and the introduction of new technologies (Lalitha, Samil and Pangannaiah, 2006). Wang (2003) postulated that techno stress is equally technophobia, computer phobia, computer anxiety, computer stress and negative computer attitude. Researchers have been contemplative over the organisational culture of modern organisations and were trying to identify different factors and phenomenon attached with certain level of stress which decreases productivity and intrapersonal development. Techno stress affects individual with over discovery of computer technology and who rely on it and those who under discover it and are struggling to know more of it. This implies that individual might feel knowing more of computer technology is better than not knowing anything about discovery of Computer technology which in turn can lead to stress. Monideepa, Cary & Jean-François (2019) posited techno stress as the stress that individuals experience due to their use of Information System, the phenomenon is an emerging occurrence of scholarly study.

Problem Statement

The use of computer in library operation cannot be over emphasised. Despite its importance, it could cause lots of damages to individual's health which include emotional, psychological and physical health issues. Although, technology has brought a lot of changes to the library in this technology age, its usage is convenient for some librarians while it poses a threat for others, thereby making them to pass through a lot of stress in order to balance with the new trends in librarianship. Based on this, the study singled out the need to carry out a research

on the effect of techno stress among academic librarians in Nigeria, which is the gap the study intends to fill.

Research questions

- 1. What are the causes of techno stress among Academic Librarians in South-West Nigerian Universities?
- 1. What are the effects of techno stress on Academic Librarians in South-West Nigerian Universities?
- 2. What are the effective coping strategies with techno stress among Academic Librarians in South-West Nigerian Universities?

Literature Reviewed

Suh & Lee's (2017) findings clearly stated that technology and job characteristics jointly induce teleworkers' techno stress, which in turn reduces their job satisfaction. The main connection in (Meckel, Fieseler, Grubermann, and Mueller, 2014) study revealed that techno stress creators lead to a techno specific form of stress, which in turn lead to the general strain level that is related to work exhaustion which have negative effect on work satisfaction.

Rajiv (2017) posited that library workers deal with constantly changing technology, excessive workload, and exhaustion, which quicken internal stress. Librarians are also susceptible to stress from outside sources as a result of ethics of the librarianship as a profession to always attend to the library users in a hospitable environment. The use of technology tools improve workplace effectiveness, productivity, and flexibility as such techno stress is caused by use of technological tools which have negative effects on individuals' reasoning, emotional, and physical health.

Atanasoff and Venable (2017) posited that techno stress lowers employee satisfaction and decreased employee commitment with the use of Information and Communications Technologies (ICTs) which adds to existing work stress. Small bone (2000) maintained that managers should organize technology based trainings for employees to make them comfortable with technologies and also be aware of the harmful effects. It is important for employees to consistently update their technological skill which will provide a level of comfort to them.

As digital library create a change in the library by making information available to library users promptly to meet the modern trends in librarianship, librarians seek ICT skills to be up to date in this global village that is revolutionized with the ICT transformed economy and widely adopted in Nigeria. This study is carried out in selected Universities in Nigeria.

Methodology

The study is a survey research anchored on positivism paradigm. Questionnaire was used data instrument for collection instrument. Furthermore total enumeration method was used since the population comprised of 50 academic librarians in the three purposively selected Universities in South- West Nigeria. Nema (2012) argued that total enumeration can be used for population

less than 200 respondents. The selected university libraries were federal and state-owned university libraries in Southwest Nigeria. The data was analyzed using SPSS version 21. Informed consent was solicited from the respondents before administering the questionnaire.

Result and Discussion

The data collected are presented, analysed and discussed using frequency count and simple percentage.

Only 50 copies out of 60 questionnaire administered was returned and found usable, giving a response rate of 83.3%. This is supported by Kerlinger and Howard (2000) that asserted that where the population of the study is small, the larger percentage of that population should be sampled with a view to generalize the findings.

Table 1: Distribution of Questionnaire to Librarians in the Selected University in South-West, Nigeria

S/N	Academic Librarians in Tertiary institution	Copies of Questionnaire Distributed	Copies of Questionnaire Returned	Percentage Response (%)
1.	Federal university of Agriculture	25	24	40
2.	OlabisiOnabanjo University	13	9	15
3.	University of Ibadan	22	17	28.33
	Total	60	50	83.33

Source: Field Survey, 2019

Table 1 revealed that FUNAAB total Academic librarians were 25, total academic librarians in OOU were13 and there were 22 academic librarians at UI as at the time the survey was carried out. Only 50 copies out of 60 questionnaire administered was returned and found usable, giving a response rate of 83.3%

Research question 1: What are the causes of techno stress among Academic Librarians in South-West Nigerian Universities?

The respondents were asked to indicate their agreement with causes of techno stress and their responses are presented in Table 2:

Table 2: Causes of techno stress among Academic Librarians in South-West Nigerian Universities

S/N	Statement	SA (%)	A (%)	D (%)	SD (%)
1.	The quick pace of technological	15(30)	27(54)	5(10)	3(6)
	change.				
2.	Habitual multi-tasking	12(24)	27(54)	7(14)	4(8)
3.	An increased workload.	14(28)	26(52)	6(12)	4(8)
4.	Lack of standardization within	12(24)	23(46)	12(24)	3(6)
	technologies.				
5.	Technological competency	9(18)	32(64)	6(12)	3(6)
6	Updating technological knowledge	13(26)	31(62)	3(6)	3(6)

7.	Overspending time on computers	17(34)	24(48)	6(12)	3(6)
8.	Routine work / under work	14(28)	23(46)	9(18)	4(18)
9.	Information overload	19(38)	21(42)	7(14)	3(6)

Source: Field Survey, 2019

Note: Strongly Agree = (SA), Agree = (A), Disagree = (D), Strongly Disagree = (SD)

Table 2 clearly shows that majority of the respondents agreed that the following are causes techno stress: 44(88%) indicated :Updating technological knowledge", 42(84%) indicated "the quick pace of technological change", 41(82%) indicated ;Technological competency" and Overspending time on computers respectively, 40(80%) indicated "An increased workload" and on "Information overload" respectively, 39(78%) indicated "Habitual multi-tasking", 37(84%) indicated "Routine work/under work", 35(70%) indicated "Lack of standardization within technologies".

Research question 2: What are the effects of techno stress on Academic Librarians in South-West Nigerian Universities

The respondents were asked to indicate their agreement with causes of techno stress and their responses are presented in Table 3

Table 3: Effect of techno stress on respondents (Cognitive, Affective and Behavioural forms of Techno stress) among Academic Librarians in South-West Nigerian Universities

S/N	Statement	SA (%)	A(%)	D (%)	SD (%)
1.	I feel restlessness after a long work on computer system	11(22)	26(52)	10(20)	3(6)
2.	I have keyboard related injuries after a long work on computer system	7(14)	23(46)	16(20)	4(8)
3.	I have headache, backaches, stiff shoulders after a long work on computer system	12(24)	29(58)	8(16)	1(2)
4.	I have Muscle tension ,neck pain, joint pain, Chest pain after a long work on computer system	13(26)	25(50)	9(18)	3(6)
5.	I have Increased blood pressure and difficulty in breathing &rapid heart rate after a long work on computer system	5(10)	16(32)	18(36)	11(22)
6.	I have Stomach discomfort, irritable bowel syndrome& Loss of appetite after a long work on computer system	4(8)	16(32)	20(40)	10(20)
7.	I sometimes have negative attitude toward computer usage	5(10)	14(28)	22(44)	9(18)
8.	I sometimes have negative attitude toward computer usage	9(18)	13(26)	21(42)	7(14)
9.	I experience Low morale/confidence, Poor judgment after a long work on computer system	4(8)	13(26)	25(50)	8(16)
10.	I experience increased work errors and mental	8(16)	13(26)	21(42)	8(16)

	fatigue with computer usage				
11.	I sometimes have anxiety while using computer	7(14)	13(26)	22(44)	8(16)
12.	I sometimes feel isolated and frustrated while	8(16)	10(20)	22(44)	10(20)
	using computer				
13.	I sometimes feel angry and loss of temper after	7(14)	14(28)	19(38)	10(20)
	a long work on computer system				
14.	I sometimes feel Withdrawn after a long work	7(14)	16(32)	20(40)	7(14)
	on computer system				

Source: Field Survey, 2019

Results as presented in Table 3, shows that 41(82%) respondents have headache, backaches, stiff shoulders after a long work on computer system; 38(76%) respondents have Muscle tension, neck pain, joint pain, Chest pain after a long work on computer system; 37(74%) respondents agreed that they feel restlessness after a long work on computer system; 30(60%) respondents have keyboard related injuries after a long work on computer system; 23 (46%) respondents sometimes feel withdrawn after a long work on computer system; 22(44%) respondents sometimes have negative attitude toward computer usage; 21(42%) respondents have increased blood pressure and difficulty in breathing & rapid heart rate after a long work on computer syste; 21(42%) respondents experience increased work errors and mental fatigue with computer and sometimes angry and loss of temper after a long work on computer system respectively; 20(40%) respondents have Stomach discomfort, irritable bowel syndrome and loss of appetite after a long work on computer system; 20(4%) respondents sometimes have anxiety while using compute; 19(38%) respondents sometimes have negative attitude toward computer usage; 18(3%) respondents sometimes feel isolated and frustrated while using computer; 17(34%) respondents experience low morale/confidence, poor judgment after a long work on computer system.

Research question 3: What are the effective coping strategies with techno stress among Academic Librarians in South-West Nigerian Universities?

The respondents were asked to indicate their agreement with causes of techno stress and their responses are presented in Table 4

Table 4: Effective coping strategies with techno stress among Academic Librarians in South-West Nigerian Universities

S/N	Statement	SA(%)	A(%)	D (%)	SD (%)
1.	Doing exercise	21(42)	24(48)	3(6)	2(4)
2.	Having meditation	18(36)	22(44)	9(18)	1(2)
3.	Relaxing and having adequate sleep	22(44)	25(50)	3(6)	0(0)
4.	Positive personality talk	23(46)	22(44)	4(8)	1(2)
5	Staying in good physical shape and	24(48)	22(44)	4(8)	0(0)
	eating healthy diet				
6.	Safe physical environment	22(44)	24(48)	1(2)	3(6)
7.	Taking regular break	23(46)	24(48)	2(4)	1(2)

Source: Field Survey, 2019

The result revealed in Table 4 showed that most respondents' effective coping strategy with techno stress are "Relaxing and having adequate sleep" and "Taking regular break" with 47(94%) respondents respectively followed by "Staying in good physical shape and eating

healthy diet" and "Safe physical environment" with 46 (94%) respondents respectively. The respondents that affirmed positive personality talk are 45(90%) and respondents that affirmed "doing exercise" and "Having meditation are effective coping strategy with techno stress" are 40(80%) respectively.

Discussion of Findings

Findings of Research question 1: What are the causes of techno stress among Academic Librarians in South-West Nigerian Universities?

Findings as revealed in Table 2 clearly described the majority of respondents 44(88%) agreed that "updating technological knowledge"; 42(84%) "The quick pace of technological change"; 41(82%) "Technological competency" and "Overspending time on computers" are causes of techno stress respectively. This finding is supported by (Suh and Lee's (2017) findings that showed that technology and job characteristics jointly induce teleworkers' techno stress, which in turn reduces their job satisfaction. Chandra, Shirish, & Srivastava (2019) also clearly stated that "technostress creators" through the five dimensions techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty

Findings of Research question 2: What are the effects of techno stress on Academic Librarians in South-West Nigerian Universities?

Result as presented in Table 3, showed that 41(82%) have headache, backaches, stiff shoulders after a long work on computer system, 38(76%) have Muscle tension, neck pain, joint pain and chest pain after a long work on computer system 37(74%) respondents agreed that they feel restlessness after a long work on computer system. This is supported by Ajala (2011) that observed that Emotional, Psychological, Behavioral and physical stress are faced by librarian as a result of too much engrossment with technological tools. Librarians' can improve their healthcare quality by retrieving, sharing, and use of health information for their personal needs. Isiakpona and Adebayo (2011) found that techno stress affects librarians to an extent while carrying out their duties on a daily basis with their sitting positions and slow internet network among others.

Findings of Research question 3: What are the effective coping strategies with techno stress among Academic Librarians in South-West Nigerian Universities?

The findings as revealed in Table 4 revealed that most respondents' effective coping

strategy with techno stress are "Relaxing and having adequate sleep" and "Taking regular break" with 47 (94%) respondents followed by "Staying in good physical shape" and "eating healthy diet" and "Safe physical environment" with 46 (94%) respondents respectively. This is supported by Riedl, et al (2012) who opined that conducting stress supervision actions such as exercise, meditation, relaxation, affirmative personality talk, staying in good physical shape with healthy diet and taking regular break are some of the ways to eliminate techno stress. As against the findings of Ofua and Tiemo (2011) that found that techno stress could be avoided by librarians, by taking the following measures: purchasing user friendly interface software, regular staff training on ICTs, and developing positive attitude toward technology

Conclusion

The concentration of this study provided insights into techno stress as well as the coping strategy among academic librarians in universities in Nigeria. Based on the findings there is much consistency in the way librarians are affected by the issues of techno stress. It can however be concluded that technology stress is prevalent among academic librarians in developing countries like Nigeria. The academic librarians are faced by techno stress as a result of technological tools that penetrated the modern librarianship. Provision of appropriate and safe physical environment is necessary in coping with techno stress which affects individual's continued existence, occupation, and social lives.

As technology is here to stay, it is crucial that librarians appreciate the different responses to it. Finding solutions to recent trend of stress encounter on the job will enhance the academic librarian's performance thereby reducing the technology stress. Some stress in the work place is normal and stress is one of the factors that provide the energy and motivation needed to stay creative and productive. Never the less, much stress can have extremely negative impact in individual's life.

The library facilities augment the job performance of academic librarians with ease with advent of technology. Librarians need to be a techno stress manager by slowing down any time stress presents itself which most of the time is not noticed until it weighs down the zeal or energy to do work and as a result brings out the body pain. Librarians should listen to their body needs as they are too busy providing relevant information to library clientele. Librarians should take action and be self-assured to redeem their confidence in the profession. Librarians need to put in mind that simply being there for library clients always as they feel the pain of workplace stress cannot help in dealing with technology stress but they should try to maintain healthy balance. Librarians should find ways ahead of time to prepare to deal with pain as it begin to occur within the body.

Recommendations

The specific recommendations are:

- 1. The study recommends constant health care monitoring and the need for adequate relaxation after the use of technological tools.
- 2. The academic librarians should continually seek for a conducive working environment to reduce techno stress and improve their job performance.
- 3 They should independently acquire in-depth knowledge of techno stress in order to be more proactive in dealing with stress that comes with the use of technological tools to improve their work efficiency.
- 4. Academic librarians should not hesitate to speak out to their colleagues, if experiencing techno stress, so that it would not lead to depression.
- 5. The academic Librarians should also endeavour to have attitudinal change and frequent personal development to alleviate techno stress.

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