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Original Research Article

# Gender and Techno-Phobia Among Library Staff in Some Selected Polytechnic Libraries in South-South Region of Nigeria

Olusheun Ekuoye\*, Osaheni Oni and Aminu U. Momoh

Auchi Polytechnic, Auchi, Edo State, Nigeria

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This study aims to ascertain gender and techno-phobia among library staff in some selected polytechnic libraries in the south- south region of Nigeria. The study employed a descriptive survey method and questionnaire was the instrument used for data collection. The population of the study consisted of a focus group made up of the total number of one hundred and forty-eight (148) library staff. It was revealed from the study that female library staff are more prone to techno-phobia than their male counterparts, a majority of both sexes agreed that lack of training, lack of computer knowledge, fear and anxiety, network problem and leaning unwanted new skills are the major causes of techno-phobia, poor performance, low productivity, lack of commitment and Job dissatisfaction are the major effect of techno-phobia in the libraries as agreed upon by the both the males and females library staff. The study revealed a significant difference in the level of techno-phobia experienced by male and female library staff. The study concludes that techno-phobia in polytechnic libraries, if not properly manage could bring about poor performance, low productivity, lack of commitment and job dissatisfaction. The study recommends that the polytechnic management and library administrators should deem it necessary to always organize training and retraining programs for all the staff in the library in order to expose them to new and advanced technologies and their usage.

Key words: Computer, Technology, Phobia, South- South Region, Polytechnic library Staff, Gender, Nigeria.

#### INTRODUCTION

The world is fast turning into a global village and this is as a result of the introduction of the use of diverse technological tools in carrying out functions or activities that originally were done manually. The present age is referred to as the information age or the digital age. The information age today is faced with diverse challenges and issues. Most of these issues are related to the use of information technology tools in carrying out various activities. Library and information services delivery have improved and have also experienced set back to a large extent as a result of the use of technology for library activities such as acquisition, circulation, cataloguing, reference, and serials control (Bichteler, 1986). Despite the increasing growth of computers, there is evidence that the use of computers by people appears to be limited due to the prevalence of computer anxiety or fear of computers, and negative attitudes towards technology in general (Howard & Smith, 1986; Igbaria, 1989). Bitchteler (1987) observes that accompanying the successful and exciting high technological revolution in libraries has been the occurrence of a number of physical, psychological and social problems among staff and patrons. Chidi and Oyeronke (2011) opined that the departure from the manual methods of carrying out library services has without a doubt improved the quality of service offered by the library to its clientele and it has also on the other hand brought about a reasonable degree of techno-stress experienced by professional librarians while carrying out library services.

Librarians in the process of carrying out their duties interact with the computer and other information technology tools. It is a condition resulting from having to adapt to the introduction and operation of new technology, particularly when equipment, support, or the technology itself is inadequate (Davis-Millis, 1998). There is no consensus in the literature on the use of the terms such as computer anxiety, computer phobia, and technophobia have been used interchangeably. In the studies performed so far this subject has been handled under some titles, computer phobia, techno-stress, cyber-phobia, computer aversion, techno-phobia, and computer anxiety (Keating, 1996; Yaghi, & Abu-Saba, 1998). Temple & Lips (1989) measured gender differences in computer attitudes among students at the university level. It was found that male students had a greater interest in computers, were more Knowledgeable about computer languages, and more likely to be information technology majors. Furthermore, the study revealed that the female students, in general, thought themselves just as capable as men of learning and using computers, while the male students expressed the opinion that women were less capable of learning and using computers. These authors further stress that there is a considerable amount of

Corresponding Author: chiefonism@yahoo.com

research to show that women are considerably less likely than men to be information technology majors and to graduate from college (Temple & Lips, 1989).

Farina, Arce, Sobral and Carames (1991) conducted a study of a population of 162 university students of equal gender to examine the relationships between anxiety towards computers and the variables of trait anxiety, and anxiety towards mathematics. The results of the study supported other studies that females were more computer anxious than males and that all the trait variables influences computer anxiety. Pope-Davis and Twing (1991) measured the effects of age, gender and computer experience on attitudes towards computers using a sample of 275 college students. The Computer Attitude Scale (CAS) was used to assess the students' attitudes towards computers and computer use. The study found that females were equally as interested in computers as males and that the respondents were generally positive in their attitudes towards computers. Some other studies showed that females have higher computer anxiety than males (Achuonye & Olele, 2009). Anthony, Clarke, and Anderson (2000) showed that there is no significant difference between gender and computer anxiety. In the light of these mixed results within the studies of relationship between gender and computer anxiety. Sacks, Bellisimo and Mergendoller (1993) opined that attitudes toward computers differ between the genders and revealed that Males tend to display more positive attitudes toward computers, regardless of the level of familiarity, while female attitudes become more positive as the level of familiarity increases. Female staff is more nervous and less confident about their computer skills (Namlu & Ceyhan, 2002).

Todman and Day (2006) considered the role of psychological gender and effects of computer anxiety. Their studies indicated that psychological gender rather than biological gender had more impact on computer anxiety or computer phobia. In developing countries like Nigeria, psychological, gender has much impact on females while biological gender has less effect. Techno phobia among female students as indicated in this study, if allowed to remain, will become a clog in the wheel of progress of empowering women and promoting gender equity in Nigeria (Achuonye & Olele, 2009). The World Wide Web offers immediate global access for the dissemination and retrieval of research information in education all over the world including Nigeria. A majority of the positions relating to computers are occupied by male workers (Reinen & Plomp, 1996). Okeke (2002) reveals that more women than men are scientifically illiterates. Okeke stressed further that the science classes / laboratories tend to be cold for the girls, coupled with social pressures and hidden curriculum that are of disadvantage to girls. Hence, opportunities for psychological satisfaction and fulfillment of the potentials are generally limited, repressive and rigid, especially to the poor masses and female folk in Nigeria (Nwosu & Kalu, 1980).

In a more recent on internet using patterns of Nigerians students, Achounye and Olele (2009) found that more female students (39%) are personally connected than their male counterparts (16%); but that more male folks (83%) surf the internet themselves than the females (53%) is an indicator of male dominance in skills which is more important than mere possessing connection. Achounye and Olele expressed worry over the persistence of gender barriers, which have since been identified to hinder females in science and technology. Computer experiences defined such as computer usage level, usage frequency, computer ownership are generally used as indicators of computer Experience (Gurcan-Namlu & Ceyhen, 2003; Bozionelos, 2004). Ennis (2005) revealed that some reasons were attached to computer phobia especially experienced by librarians and they include: Pace of technological change, Lack of proper training: in some rare occasions, techno-phobia could be as a result of improper training of both the librarians and the library clientele. When the needed professional training is lacking, technophobia is unavoidable. Chidi and Oyeronke (2011) posited that the network system sometimes, may pose a challenge to the library staff, especially in the case of libraries that make use of web based library software, when there is a continuous fluctuation in the network system, the librarian may have hitches or difficulties while using the web based library software. Brosnan (1998) reveals that computer anxiety has been found to adversely affect performance. Chidi and Oyeronke (2011) reveal from their study the extent to which techno-stress affects job productivity of library staff. Out of the 34 respondents, 5 (14.7%) are of the opinion that techno-stress could affect their job productivity to a great extent, 15 (44.1%) expressed that techno-stress experienced affects their job productivity to some extent, while 8 (23.5%) noted that techno-stress has very little effect on their job productivity and 6 (17.7%) noted that techno-stress does not in any way affect the level of their job productivity. From the study, it is evident that techno-phobia affects the level of job productivity irrespective of sex.

# Statement of the problem

Computer technology has become the engine house of modern civilization and the moving force of the information age (Ituen, 2009). In today's global and competitive environment, Information communication technology (ICT) is becoming a widely accepted tool for multifacet development in view of the speed, flexible and quality services it offers and the potential to revolutionize the traditional library system (Ahmad, Amin & Ismail, 2009). The new information revolution in librarianship has provided a unique platform for speedy provision and dissemination of information. This highly celebrated technology in librarianship has also created some distresses. This technological change could be resisted due to fear. This fear, which is known as techno-phobia or computer phobia could have an adverse effect on the productivity of both male and female library staff. Several works on techno-phobia by scholars have not really dwelled on gender and techno-phobia of library staff in south – south, Nigeria. It is against this background that this study attempt to investigate gender and techno-phobia among library staff in some selected polytechnic libraries in the south-south region of Nigeria.

## **Research Questions**

- What are the levels of techno- phobia among male and female polytechnic library staff?
- What are the factors influencing techno- phobia among male and female polytechnic library staff?
- What are the effects of techno-phobia experience by male and female polytechnic library staff?

## **Research Hypotheses**

- I. There is no significant difference between male and female polytechnic library staff on the level of techno-phobia
- II. There is no significant difference between male and female polytechnic library staff with respect to the effects of techno-phobia.

# Methodology

The study employed a descriptive survey method to investigate Gender and Technophobia among Library Staff of some selected Polytechnic Libraries in the south-south region of Nigeria. The population of this study consists of one hundred and forty- eight (148) library staff. The population of this study is not too large to cover, the researchers decided to study the entire population (Egbule & Okobia, 2001). A questionnaire entitle "Gender and Technophobia among Library Staff Questionnaire (GTPLSQ) was used". The questionnaire has two parts. The first part is designed to measure the biographical data of the respondents such as sex. The second part consists of three sections which contained structured statements aimed at eliciting data on Gender and Technophobia of Library Staff of the polytechnic libraries. Z-test of significance was used to answer the formulated hypotheses.

# **Discussion of Findings**

Table 1: Gender Distribution of Respondents

Sex	No of Respondents	%
Male	65	44
Female	83	56
Total	148	100

Source: field survey, 2015

Table 1 reveals the gender distribution of the respondents. A total of 65 (44%) male and 83 (56%) females participated in the study. The number of female staff who participated in the study was more than the male staff. This is a reflection of gender difference in the polytechnic librarians in the South-South, Nigeria.

#### **Research Questions Anaysis**

#### **Research Question One**

What are the levels of techno-phobia among male and female library staff?

Table 2: Levels of techno-phobia among male and female library staff

Levels of Techo-	Sex	Agree		Disagree		Undecided		Total	
phobia		NO	%	NO	%	NO	%	NO	%
High Level	Male	22	34	29	45	14	22	65	100
	Female	49	59	24	29	10	12	83	100
Moderate Level	Male	39	60	26	40			65	100
	Female	55	66	12	15	16	19	83	100
Low Level	Male	51	78	12	19	2	3	65	100
	Female	35	42	42	51	6	7	83	100

**Source:** field survey, 2015

Table 2 shows the levels of techno-phobia among male and female library staff. It is very clear from the table that that female library staff exhibits a high level of techno-phobia than their male counterparts with 49(59%) female and 22(34%) agreed to high level of techno-phobia. Female staff exhibits a moderate level of techno-phobia than the male staff with 55 (66%) females and 39 (40%) males. Also, male agree to low level of techno-phobia than their female counterparts with 51(78%) males and 35 (42%) females. This reveals that

females are more prone to techno-phobia than their male counterparts. This study is in congruence with the work of Achuonye and Olele (2009) that revealed that females have higher computer anxiety than males. They posited that techno-phobia among females, if allowed to remain, will become a clog in the wheel of progress of empowering women and promoting gender equity in Nigeria. This finding was also supported by Temple and Lips (1989) who measured gender differences in computer attitudes among students at the

university level. It was found that male students had a greater interest in computers, were more Knowledgeable about computer languages, and more likely to be information technology majors. This finding also agrees with the work of Farina, Arce, Sobral and Carames (1991) that conducted a study using a population of 162 university students of equal gender to examine the relationships between anxiety towards computers and the variables of trait anxiety, and anxiety

towards mathematics. The study revealed that females displayed more computer anxiety than males.

#### **Research Question Two**

What are the factors influencing techno phobia among male and female library staff?

Table 3: Factors Influencing Techno- Phobia among Male and Female library Staff

Causes	Sex	A	gree	Dis	agree	Unde	ecided	Total	
		NO	%	NO	%	NO	%	NO	%
Lack of training	Male	56	86	9	14			65	100
	Female	77	93	6	7			83	100
Fear/anxiety	Male	37	57	16	25	12	18	65	100
	Female	64	77	19	23			83	100
Inadequate staff	Male	26	40	34	52	5	8	65	100
	Female	34	41	40	48	9	11	83	100
Inadequate equipment	Male	30	46	30	46	5	8	65	100
54-4	Female	39	47	32	39	12	14	83	100
Information overload	Male	38	59	27	41			65	100
	Female	31	37	38	46	14	17	83	100
Network problem	Male	45	69	20	31			65	100
	Female	50	60	30	36	3	4	83	100
Security issues	Male	15	23	35	54	15	23	65	100
	Female	32	38	43	52	8	10	83	100
Lack of computer	Male	41	63	16	25	8	12	65	100
knowledge	Female	66	80	17	20			83	100
Job displacement	Male	22	34	43	66			65	100
	Female	31	37	27	33	25	30	83	100
Leaning unwanted	Male	44	68	21	32			65	100
new skills	Female	52	63	31	37			83	100

Source: field survey, 2015

Table 3 shows the causes or factors influencing techno-phobia among library staff. Both sexes agreed that lack of training is one of the major causes of techno-phobia with 77(93%) females and 56(93%) males. Lack of computer knowledge is another major cause of techno-phobia among library staff with

66(80%) females and 41(63%) males. However, the female library staff has the highest percentages. This finding is also supported by Ennis (2005) who revealed that some reasons were attached to computer phobia, especially experienced by librarians and they include; Pace of technological change, Lack

of proper training: in some rare occasions, techno-phobia could be as a result of improper training of both the librarians and the library clientele. When the needed professional training is lacking, technophobia is unavoidable. Fear and anxiety also ranked among both sexes of library staff with 64 (77%) females and 39(60%) males. The female library staff has the highest percentage. This study conforms to the study of Achuonye and Olele, (2009) that revealed that females have higher computer anxiety than males. Network problem also ranked high from both sexes with 45(69%) males and 50(60%) female. This finding is in congruence with the work of Chidi and Oyeronke (2011) who posited that the network system sometimes, may pose a challenge to the library staff, especially in the case of

libraries that make use of web based library software, when there is a continuous fluctuation in the network system, the librarian may have hitches or difficulties while using the web based library software. Leaning unwanted new skills was also seen as a major cause of techno-phobia with 44 (68%) and 52(63%). The male percentage is slightly higher than that of their male counterparts.

#### **Research Question Three**

What are the effects of techno phobia on male and female library staff?

Table 4: Effects of Techno - Phobia on Male and Female Library Staff

Causes	Sex	A	gree	Disa	agree	Unde	Undecided		Total	
		NO	%	NO	%	NO	%	NO	%	
Lack of commitment	Male	56	86	9	14			65	100	
	Female	77	93	6	7			83	100	
Poor turnout	Male	43	66	22	34			65	100	
	Female	59	71	21	25	3	4	83	100	
Poor performance	Male	59	91	6	9			65	100	
periormance	Female	80	96			3	4	83	100	
Job dissatisfaction	Male	49	75	6	9	7	11	65	100	
dissatisfaction	Female	58	70	10	12	15	18	83	100	
Illness	Male	27	42	31	48	7	11	65	100	
	Female	39	47	43	52	1	1	83	100	
Insecurity	Male	32	49	33	51			65	100	
	Female	40	48	19	23	24	29	83	100	
Low	Male	58	89	7	11			65	100	
productivity	Female	78	94	5	6			83	100	

Source: field survey, 2015

Table 4 shows the effect of techno- phobia among male and female library staff. Both sexes agreed that poor performance ranked first with 80(96%) females and 59(91%) males. Low productivity came second with 78(94%) females and 58(89%) males. Lack of commitment closely followed with 77(93%) females and 56(86%) males. Job dissatisfaction ranked next with 49(75%) males and 58(70%) females. These findings corroborate Brosnan, (1998) who reveals that Computer anxiety has been found to adversely affect performance. These findings are also supported by Chidi and Oyeronke (2011) who **Hypotheses Testing** 

reveals from their study the extent to which techno-stress affects job productivity of library staff. Out of the 34 respondents, 5 (14.7%) are of the opinion that techno-stress could affect their job productivity to a great extent, 15 (44.1%) expressed that techno-stress experienced affects their job productivity to some extent, while 8 (23.5%) noted that techno-stress has very little effect on their job productivity and 6 (17.7%) noted that techno-stress does not in any way affect the level of their job productivity. From the study, it is evident that techno-phobia affects level of job productivity.

## **Hypothesis One**

There is no significant difference between male and female library staff on their levels of computer phobia

Table 5: Z- test Analysis showing the difference between male and female library staff on their levels of computer phobia

Gender	N	X	SD	Df	zCal.	zCrit.	Level of significance	Decision	Remark
Male	65	7.6	1.78	146	2.33	1.96	0.05	Rejected	Signficant
Female	83	8.3	1.87						

Source: field survey, 2015

From the result presented above, the null hypothesis of no significant difference tested is rejected. This is because the calculated (z) value of 2.33 is greater than the (z) critical value of 1.96. This implies that there is a significant difference in the level of techno-phobia experienced by male and female polytechnic library staff. The finding corroborates the work of Sacks, Bellisimo and Mergendoller (1993) who opined that attitudes toward computers differ between the genders and revealed that Males tend to display more positive attitudes

toward computers, regardless of the level of familiarity, while female attitudes become more positive as the level of familiarity increases. Female staff is more nervous and less confident about their computer skills (Namlu & Ceyhan, 2002).

## **Hypothesis Two**

There is no significant difference between male and female library staff with respect to the effects of technophobia.

Table 6: z- test Analysis showing the difference between male and female library staff with respect to the effects of computer phobia

Gender	N	Х	SD	Df	zCal.	zCrit.	Level of significance	Decision	Remark
Male	65	18.4	3.71	146	0.83	1.96	0.05	Accepted	Not Significant
Female	83	18.9	3.55						

Source: field survey, 2015

From the result presented in the table 7, the null hypothesis of no significant difference tested is accepted. This is because the calculated (z) value of 0.83 is less than the (z) critical value of 1.96. This implies that there is no significant difference between male and female library staff with respect to the effects of techno-phobia. Poor performance, Low productivity, Lack of commitment and Job dissatisfaction are the major effect of techno-phobia to both male and female library staff of some selected polytechnic libraries in south-south of Nigeria.

## **Findings**

- The study reveals that female polytechnics library staff is more prone to techno-phobia than their male counterparts.
- b. It was discovered from the study that a majority of both sexes agreed that lack of training, Lack of computer knowledge, Fear and anxiety, Network problem and Leaning unwanted new skills are the major causes of techno-phobia.
- c. The survey reported that poor performance, Low productivity, Lack of commitment and Job dissatisfaction are the major effect of techno-phobia by both male and female polytechnic library staff.
- d. It was discovered from the study that there is a significant difference in the level of techno-phobia experienced by male and female polytechnic library staff
- e. The study reported that there is no significant difference between males and females polytechnics

library staff with respect to the effects of technophobia.

## Conclusion

It is obvious from the study that the female polytechnics library staff exhibit more fear or anxiety with regards to technology than their male counterparts. There is a significant difference between male and female library staff with respect to their level of techno- phobia. Techno-phobia in libraries occurs as a result of fear/dislike for advanced technology or complex devices especially computers by library staff. Techno-phobia among polytechnic library staff irrespective of sex occurs due to lack of training, lack of appropriate computer knowledge, fear and anxiety, network problems and learning unwanted new skills. Techno-phobia in polytechnic libraries, if not properly manage could bring about poor performance, Low productivity, Lack of commitment and Job dissatisfaction. The study revealed that there is no significant difference between male and female library staff on the effect of techno-phobia.

#### Recommendations

 The polytechnic management and library administrators should deem it necessary to always organize training and retraining programs for all the staff in the library in order to expose them to new and advanced technologies and their usage.

- The polytechnic administrators should always sponsor library staff at regular interval to seminars, conferences and workshops to acquaint them with latest and recent development in librarianship to enable them acquire new skills especially in the area of technology.
- Library staff should try as much as possible to embark on self-training or development, especially in the area of technology (computers) to overcome the negative effect of technology.
- The polytechnic management and the library leadership should ensure that any technological process initiated should run smoothly by way of providing all the needed equipments and facilities for the smooth operations of the process such as hardware, software, network, bandwidth, constant power supply etc, to avoid unnecessary stress that may result from malfunctioning or unwarranted breakdown of the process could cause.
- Library staff should work on their level of confidence and should desist from the habit of resisting change or new development especially in the area of technology.

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