

## **Strategies of Minimising Technostress among Library Professionals in Ahmadu Bello University Library Zaria.**

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### **Abstract**

*This study sought to determine the strategies for minimizing technostress among library professionals. To achieve these two objectives were raised. Data were collected by means of questionnaire. One hundred and eighty-one (181) copies of questionnaire were administered, out of which one hundred and twenty nine (129) were duly completed and returned. The data collected were analysed using descriptive statistics. The study discovered that the major cause of technostress in libraries include; inexperience with computers, performance anxiety, information overload, fast pace of change, policies, increasing demand, and overwork/insufficient training. To minimize the causes of technostress in libraries, the study recommended training, workshops, continuing education, and knowledge sharing with colleagues.*

**Keywords** - library, professionals and technostress

### **Introduction**

The nature of library work environment has changed dramatically over the years, largely because of technology. The technological revolution has undoubtedly brought along many changes in the workplace today. It has allowed work to be carried out faster and more efficient, technological innovation is dynamic and as just as professional librarians are getting used to one way of doing things, the technological advancement force the library professionals to make changes and adjustment as well to the new technology; as a result, they experience stress known as technostress. According to Dunmade, Adegoke, and Agboola (2014) the concept of 'technostress' has been used in many different ways. Technostress refers to the

state of mental and physiological arousal, and consequent pressure, observed in employees who are dependent on technology in their work (Weil & Rosen, 1997). Some consider technostress to be a modern disease caused by the inability to cope with new technologies in a healthy manner (Brod, 1984). In this study, technostress refers to strain caused by individuals' interaction with Information and Communication Technology (ICT).

Ahmad, Amin and Ismail (2014) view technostress as 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. Technostress can

therefore be referred to as negative psychological and physical link between people and the introduction of new technologies. Such negative links is usually caused by all or some of these factors: the quick pace of technological change, lack of proper staff training, an increased workload, lack of standardization of technologies and unreliability of hardware and software. Technostress, according to Brod (1984) manifests itself in two distinct and related ways: in the struggle to accept computer technology and in the more specialized form of over identification with computer technology.

According to Agbonlahor (2006) universities the world over are among the major organizations where ICT facilities are being used on a large scale with the intent of increased productivity. Library and information science profession in particular has greatly benefited from the adoption and utilization of ICTs and the ICTs has tremendously enhanced such information work activities as information collection, processing, organization, storage, packaging and dissemination. It was this that made Popoola and Olalude (2013) to conclude that librarians are bound to apply ICTs in their operations and services in the 21st century.

However, while the benefits of ICTs adoption and utilization are not in doubt, it

is also true that the adoption and rapid diffusion of ICTs in librarianship and other related information science professions have brought about a number of demands and challenges such as technostress. Therefore, it is the intention of this study to find out what causes technostress in libraries.

### **Problem Statement**

Technology over the decade has changes the way people work and learn and was introduced as time saver, but the convenience of technology has also raised expectations about what librarians can accomplish in the workplaces. Overall, librarians are projected to constantly restore their technical skills while keeping up with a relentlessly changing environment, even as maintaining a higher intensity of productivity.

The researchers observed that the changing nature of the library switching from one technology to another new technology has made library professionals to adapt to the new changes in the library. This is in consonance with Champion (1988) who stated that the information age was all about change, or to be more specific, response to “technochange”, is not about technical components such as machines, programs, network, or fibre optics but about individual acceptance and adopting it. The question here is what strategies are adopted to

minimize technostress among library professionals in Ahmadu Bello University Library?

### **Objectives of the Study**

The objectives of this study are to:

1. Identify the cause of technostress among library professionals in Ahmadu Bello University Library
2. Identify the strategies adopted in minimizing technostress among library professionals in Ahmadu Bello University Library Zaria.

### **Literature Review**

Most libraries today are fully automated and carry out their services through the use of library software. Technostress experienced by the librarian could be as a result of the introduction of new library software. There are technicalities involved in the use of software and if proper training is not done, the introduction of this software may lead to technostress on the part of the librarian. According to Quinn (2007) the source of technostress is the pace at which information technology changes.

The network system sometimes, may pose a challenge to the librarian, especially in the case of libraries that make use of web based library software, when there is continuous fluctuation in the network

system, the librarian may have hitches or difficulties while using the web based library software. Our country, Nigeria, is still at the development level in terms of ICT infrastructure especially when compared with other developed countries of the world such as America, France, England etc. The usual power failure and fluctuation could lead to temporary “stand still” of library services especially when there is no alternative means of electricity supply.

Okebaram (2013) identified causes of technostress, to include, inexperience with computers, performance anxiety, lack of training/insufficient training, organizational factors overwork/insufficient staffing, information overload, fast pace of change, language/jargon intimidation, multiple interfaces among others. Okebaram goes further to explain that the organizational factors, reflects poor management and management staff communication. When grouped with “lack of insufficient training” the employer cannot do much to reduce the impact of technostress on staff.

There is an increment of speed with each new hardware upgrade computer users seem to want computers to run faster and faster. Meanwhile institutions are slow to discard old computers (Hudiburge, 1996). The Internet is probably becoming the major

causes of technostress due to the fact that many of new information sites are with no standard to how they are designed, maintained and updated.

Relevant research findings on technostress revealed by Ennis (2005) that there are six specific causes of technostress: (1) the rate of change of technology; (2) lack of standardization; (3) lack of training individuals on the equipment; (4) reliability of the technology; (5) increased workload placed on each individual; and (6) the changing roles of librarians. Moreover, the research found out that librarians rated the first two as the strongest causes of technostress. Just as the librarians were getting used to one way of doing things, the technology advancement forced them to make a change as well.

Librarians and media specialists, especially managers, face not only the responsibility for staying abreast of new technological developments, but also the task of trying to eliminate some of the stresses experienced by staff. Librarians must develop strategies for arming themselves to cope with these personal and professional stress ingredients. At the same time, in the face of personal dilemmas, they also must effectively motivate and attempt to find solution to stress among their employees. In order to help others, librarians

first must help themselves by acquiring the necessary education and training to identify solution to technostress. The fatigue and frustrations brought on by technological stress often make it difficult to recognize and respond effectively to the symptoms of stress.

It is not surprising, given the result of Clute (1998) who stated that, majority of advice on minimizing and coping with technostress is directed at management in organizations. We need to learn new ways to cope with the constant demand to learn new skills, meet speedier turnaround times, and be accessible 24 hours a day.

The pace of technological innovation and intrusion into our lives is unprecedented, and there is need to improve on how we relate to technology. If managed appropriately, technology can enhance both the quality and efficiency of everyday life. The first step in managing technostress is to meet the challenge of technology head-on, and not deny that computers are a part of the library profession (Champion, 1988). Effective management skills reduce technostress, and one of the most important things managers can do in reducing technostress is to present a positive strategies, for example, coping with stress is a highly individual matter; different people react to stress in different ways, and

therefore the techniques to reduce stress will be individualized. Champion (1988) found out that there are three fundamental stages to successful technostress management which must be considered in adapting to change: “1) how one perceives techno change and how one interprets it, 2) how one feels about techno change, and 3) how one copes with techno change”. Failure to recognize that every change imposed by technology generates varying degrees of technostress automatically results in the failure to effectively manage change.

Sharma and Sareen (2015) also mentioned some ways of minimizing technostress as follows:

- Get adequate, user friendly software
- Create better communication within the environment
- Create a level of reassurance, patience, and stability within the environment
- Maintain an ever-present system of training and education to new and old technologies
- Avoid using technology
- Foster sharing of computer related knowledge within the organization.
- A responsive and easily reached help-desk can allay managers anxiety and concerns, guide them in using and familiarizing with new computer

applications and assure them in case of problems

- Keep employees “involved” in the general scheme of things in the context of new computer systems. The more involved and familiar they are, the less technostress they would be.
- encourage people to “experiment” and innovate in the context of computer use
- encourage employees to communicate, discuss, and share their knowledge about computers

The actions of management typically have a great effect on how technostress impacts an organization. Good practices include setting clear and reasonable priorities, fostering a culture that values cooperation and is positive about technology. Key issues include planning, staffing and training. When the introduction of new technology is in the planning stage, it is very important to involve all staff members who will be affected by the changes. By involving staff in the planning stage, they can develop a more positive attitude toward change without feeling threatened (Brillhart, 2004). A great deal of technostress can be eliminated by informing staff of planned changes, as employees deal more effectively with known or expected change.

## Methodology

The study adopted survey research design, and the population of the study are library professionals in Ahmadu Bello University library. The study made use of questionnaire. Simple random sampling was used to select one hundred and eighty-one (181) librarians out of which one hundred

and twenty nine (129) responded. A descriptive statistic was used to analyze the data and was presented using frequency count and percentage. Chi-square was used to determine the mean scores for decisions on each of the items at 0.05 level of significance.

## Findings and Discussion

**Table 1: Causes of Technostress among Library Professionals in Ahmadu Bello University Library**

S/NO	Causes of Technostress Experiences	High		Low		Not at all		Mean
		Freq.	%	Freq.	%	Freq.	%	
1	Inexperience with computers	72	55.8	9	7.0	48	37.2	2.2
2	Lack of training/insufficient training	65	50.4	13	10.1	51	39.5	2.1
3	Organizational factors	62	48.1	12	9.3	55	42.6	2.1
4	Poor sitting position	47	36.4	19	14.7	63	48.8	1.9
5	Use of outdated technology	67	51.9	10	7.8	52	40.3	2.1
6	Inbuilt fear of technology	60	46.5	13	10.1	56	43.4	2.0
7	Sitting in front of computer systems for long period	78	60.5	12	9.3	39	30.2	2.3
8	Electric power fluctuation	94	72.9	10	7.8	25	19.4	2.5
9	Poorly designed workstations	63	48.8	11	8.5	55	42.6	2.1
10	Fast pace of change	52	40.3	12	9.3	65	50.4	1.9
11	Information overload	69	53.5	9	7.0	51	39.5	2.1
12	Policies	63	48.8	12	9.3	54	41.9	2.1

Table 1, presents the causes of technostress among the library professionals in Ahmadu

Bello University, Zaria. The respondents were of the opinion that inexperience with

computers coupled with lack of adequate training on the utilization of the various techno devices were the major causes of technostress to the library professionals. This is indicated in items 1 and 2 in the Table 1 where 72 (55.8%) and 65 (50.4%) of the respondents were of the view that the role of these two factors was high in the causes of technostress. The mean scores for the two items are 2.2 and 2.1 respectively. But, 48 (37.2%) and 51 (39.5%) of the respondents indicated that the two factors were not causes of technostress in the libraries. This was coupled with individual fear of techno devices innovations in item 6 of the Table with a mean score of 2.0. Table 1 also shows organizational factors, use of outdated technology, inbuilt fear of technology, sitting in front of computer system for a long period, poorly designed workstations, the organizational policies and information overload are all considered as causes of technostress experiences in the libraries. Coupled with these are fast pace of change in the environment associated with information technology. In essence, the listed items were considered as responsible for the technostress experienced by the library professionals in the University Library Complex.

From the analysis of the research objective, it was observed that causes of technostress

among professional librarians tend to be associated with individual, organizational and environmental factors. These included personal factors like inexperience with computers and inadequate training on techno devices while organizational factors included among others use of outdated techno-devices, poor provision for sitting with techno devices, poorly designed workstations, poor power supply, the organizational policies and information overload. This finding agrees with the report of Harper (2000) who emphasized that there were two forms of technostress affecting librarians namely the physical and the psychological forms and Quinn (2007) who stated that the source of technostress is the pace at which information technology changes. The finding here agrees with Isiakpona and Adebayo (2011) who stated that the technostress could also arise when the ICT proficiency level of the librarian is relatively low. The finding is consistent with Okebaram (2013) who identified causes of technostress, to include, inexperience with computers, performance anxiety, lack of training/insufficient training, organizational factors, overwork, insufficient staffing, information overload, fast pace of change, language/ jargon intimidation, multiple interfaces among others.

**Table 2: Strategies for Minimizing Technostress among Library Professionals in Ahmadu Bello University Library**

S/N	Strategies Adopted by the Library Professionals in Minimizing the Effect of Technostress	Agree		Disagree		Undecided		Mean
		Freq.	%	Freq.	%	Freq.	%	
1	Realize that the only thing constant is change, and go with the flow. Every technological change or problem we have to deal with is an opportunity to learn something	102	79.1	1	0.8	26	20.2	2.6
2	Balance positive and negative thoughts	96	74.4	1	0.8	32	24.8	2.5
3	Positive talk and recognize that technostress is natural	95	73.6	5	3.9	29	22.5	2.5
4	Keep learning, attend workshops and continuing education, share knowledge with colleagues	109	84.5	1	0.8	19	14.7	2.7
5	Increase technology based-training	91	70.5	11	8.5	27	20.9	2.5
6	Accept that occasionally a source will be missed in responding to a research request	90	69.8	3	2.3	36	27.9	2.4
7	Awareness of technostress and its level	94	72.9	2	1.6	33	25.6	2.5

Among the strategies suggested for minimizing technostress among librarians in Ahmadu Bello University, Zaria are; realizations that the only thing constant in life is change, and it goes with the fact that every technological change or problem should be considered as an opportunity to learn something new. This was suggested in item 1 of the table and 102 (79.1%) of the respondents agreed with this suggested strategy and the mean score was 2.6.

Another suggested strategy was the balancing of positive and negative thoughts and the need to have the positive thinking that technostress is natural process of job performance induced by technological innovations and that the only way of improvement is keep learning by attending workshops and sharing knowledge with colleagues. These are indicated with high percentage scores for agreement and high mean scores for items 2 to 4 in the Table.



On the part of the libraries, the respondents were of the view that increased technology based-training helps in minimizing the technostress effects. The respondents also, agreed that creating awareness on technostress at different level is inevitable and this should be seen as a measure of minimizing technostress among library professionals.

Some of the strategies rated high include realizing that the only thing constant is change, and go with the flow. Every technological change or problem we have to deal with is an opportunity to learn something. Also to attend workshops and continuing education, share knowledge with colleagues. The finding here agrees with Ragu-Nathan, Tarafdar, Ragu-Nathan, and Tu, (2008) who reported that some factors that may help lower technostress levels are known as technostress inhibitors. The report claimed that the negative outcomes resulting from the application of information technology can be reduced if the organization provides technical support and training along with guidance.

### **Findings**

The major findings from the analysis of the data are summarized below:

1. The causes of most technostress among the library professionals were significant at 0.05 level and basically

revolve around outdated techno-devices, poor provision for sitting position with techno devices, poorly designed workstations, poor power supply, the organizational policies and information overload, coupled with the inherent effects of techno devices usage in the performance of their services delivery in the library complex.

2. Among the strategies suggested for minimizing the causes of the technostress on the library professionals' commitment to their work were effective uses of time management, physical exercise for improving physiological status, the realization that innovation really requires dynamism and that the only thing constant in life is change. The librarians, however, differed significantly on the mode of adoption of the strategies.

### **Conclusion**

This study provides some insight into the causes of technostress in Ahmadu Bello University Library Complex, Zaria. As university libraries are becoming more technology oriented, it is important that the library professionals should recognize the causes of technostress, so that the benefits of technology application would not be overwhelmed by its drawbacks. It is

important to manage technostress among library professionals in order to achieve greater commitment among the library staff. Therefore, the university libraries should enhance situational mechanisms that would ease the usage of technology.

### Recommendations

Based on the findings from the analyzed data, the researcher would want to recommend as follows:

1. In order to remedy the cause of technostress among library professionals their ICT proficiency level, performance anxiety, lack of training/insufficient training, organizational factors, overwork, insufficient staffing, information overload, fast pace of change, language/ jargon intimidation, multiple interfaces among others should be addressed by the University management.
2. Every technological change or problem we have to deal with is an opportunity to learn something. Therefore, it is recommended that training, attending workshops, continuing education, and share knowledge with colleagues should be encouraged among staff to minimize technostress.

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