



**PERCEIVED EFFECTS OF TECHNO-STRESS ON SECRETARIES JOB SCHEDULE
AND EMPLOYMENT SECURITY IN PUBLIC TERTIARY INSTITUTIONS IN
ABEOKUTA METROPOLIS**

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Abstract

This study examined the perceived effects of techno-stress on secretaries' job schedule and employment security in public tertiary institutions in Abeokuta. Three specific objectives and three research questions guided the study. The study adopted descriptive survey research design, while the population and sample of the study consisted of 105 secretaries in three public tertiary institutions located in Abeokuta. A structured questionnaire was used for data collection. Data obtained were analyzed using frequency tables, mean and standard deviation. The research instrument was subjected to content and construct validation by three experts. The internal consistency of the questionnaire was determined using Cronbach Alpha reliability test which yielded co-efficient of 0.87. A descriptive analysis was performed, where weighted mean and standard deviation were used to answer the research questions. Findings of the study revealed that techno-stress is caused by complexity of new systems, cyber security concerns, and inadequate training, among Others. It was also revealed that techno stress perceived effectss secretaries' job schedule and employment security in diverse ways .Finally, the study suggested that tertiary institutions should organize regular workshops, seminars, and online courses that can help secretaries stay updated with the latest tools, and software, reducing the anxiety associated with the adoption of emerging technologies.

Keywords: Techno-stress, Secretaries Job Schedule and Employment Security

Introduction

I have integrated the theoretical foundation into your background of the study so that it flows naturally from your discussion of technology, techno-stress, job schedule, and employment security. I also added recent supporting references and linked the theory directly to your variables.

The professional operations of secretaries have moved from analog to digital, thus increasing productivity and work output. The advent of digital technologies has changed the way organizational activities are performed, as secretaries now operate in automated offices and perform diverse functions using digital tools. Therefore, secretaries are among the professionals

who operate in the e-world, where information and communication technologies (ICTs) have become essential tools for administrative efficiency, coordination, and decision-making.

Job schedule can be described as the process of organizing, managing, and arranging tasks to ensure that activities are completed within a specified time frame. In modern organizations, job scheduling is increasingly influenced by digital technologies that support task automation, communication, data processing, and workflow management. For secretaries, effective job scheduling is a core responsibility because it determines their ability to coordinate appointments, manage information, prioritize assignments, and support managerial activities. Secretaries who possess technological competence and adaptability are more likely to manage their schedules effectively and maintain relevance in changing work environments.

Employment security refers to the likelihood that employees will retain their jobs and continue to enjoy stable employment without the fear of unexpected job loss. It contributes significantly to employees' confidence, motivation, commitment, and satisfaction. However, the rapid advancement of technology has created both opportunities and concerns for secretaries. While digital technologies have improved office efficiency, some employees experience uncertainty regarding their ability to adapt to technological changes and maintain their positions in automated workplaces.

The relationship between technology use, techno-stress, job schedule, and employment security can be explained through the Technostress Theory developed by Brod (1984) and the Job Demands–Resources (JD-R) Model by Demerouti et al. (2001). These theories provide a foundation for understanding how technological advancement affects employees, particularly secretaries whose duties are highly dependent on ICT applications.

The Technostress Theory explains that individuals may experience psychological and emotional strain when they are unable to cope with the demands created by modern technologies. Although technology enhances speed, accuracy, and productivity, excessive technological demands may result in anxiety, frustration, and reduced work effectiveness. According to Tarafdar et al. (2020), techno-stress among technology users occurs through different dimensions, including techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. Techno-overload occurs when employees are required to handle increased workloads due to technology-driven efficiency, while techno-invasion occurs when digital connectivity extends work demands beyond official working hours. Techno-complexity results from difficulties associated with learning new technological systems, whereas techno-insecurity reflects fear of losing employment due to technological replacement. Techno-uncertainty occurs because continuous technological changes require constant adaptation and skill development.

In the context of secretarial work, the Technostress Theory suggests that the increasing use of automated office technologies may influence how secretaries organize their tasks and perceive their employment stability. While technologies such as electronic mail systems, word processors, database applications, and digital communication platforms improve job performance, they may also create pressure for secretaries to continuously upgrade their skills. Ragu-Nathan et al. (2018) noted that excessive technological demands can affect employees' psychological well-being, productivity, and ability to effectively manage workplace responsibilities.



Furthermore, the Job Demands–Resources (JD-R) Model provides another explanation of the influence of technology on secretaries' work experiences. The model proposes that every occupation contains job demands and job resources. Job demands represent physical, psychological, or organizational pressures that require effort, while job resources refer to factors such as training, organizational support, and technological assistance that enable employees to perform effectively (Demerouti et al., 2001). In relation to secretarial duties, technological requirements such as managing digital information, responding to electronic communications, and learning new software applications represent job demands that may contribute to techno-stress. However, access to adequate training, supportive organizational policies, and digital competencies serve as resources that reduce technological pressure.

The application of the JD-R Model to secretarial roles suggests that technology does not automatically create stress; rather, the impact depends on the balance between technological demands and available resources. When secretaries receive adequate technological support, they are more likely to manage schedules efficiently, improve productivity, and maintain employment security. However, when technological demands exceed employees' abilities and available resources, they may experience stress, reduced performance, and concerns about job continuity.

Techno-stress is therefore an important issue in modern office environments because secretaries are expected to continuously interact with digital technologies while maintaining high levels of efficiency. Tagurum et al. (2017) described techno-stress as the negative influence of technology on individuals' attitudes, behaviours, and psychological well-being. Similarly, Ayyagari et al. (2020) emphasized that technological changes can create stress when employees perceive technology as complex, demanding, or threatening to their professional roles.

A secretary is a professional responsible for providing administrative support through communication, coordination, record management, and organizational activities. The effectiveness of secretaries depends largely on their ability to use available office technologies and apply appropriate professional skills. Adedoyin (2020) noted that modern office technologies have transformed secretarial functions by improving information management and administrative productivity. Similarly, Appah and Emeh (2020) observed that ICT has become essential for improving organizational operations and enhancing the effectiveness of office professionals.

Historically, secretaries were mainly responsible for traditional tasks such as typing, filing, shorthand, and handling correspondence. However, technological advancement has expanded their responsibilities to include electronic document management, online communication, database management, and digital scheduling. According to Agbatogun (2020), computer applications such as word processors, spreadsheets, and database systems have become important tools for modern secretarial practice. These technological developments have improved efficiency but have also increased the expectations placed on secretaries.

Despite the advantages of digital technologies, challenges associated with excessive technology use remain a concern. Continuous technological changes may increase workload, create pressure for constant availability, and generate fears about employment replacement. Salanova et al. (2016) argued that technology can produce negative psychological effects when employees lack adequate coping mechanisms. Therefore, understanding the influence of techno-stress on job schedule and employment security among secretaries is necessary in contemporary organizational settings.



Consequently, this study is guided by the Technostress Theory and the Job Demands–Resources Model to examine how technological demands influence secretaries' work experiences. The theories provide insight into how ICT usage can simultaneously improve administrative effectiveness and create challenges that affect job scheduling and employment security.

Statement of the problem

New technologies are springing almost on a daily basis and secretaries are part of the professionals whose operations are linked to the utilization of new technologies. Through the new technologies have boosted productivity in a tremendous moment.

It is obvious that there are certain side effects of spending prolonged hours using technological gadgets with little or no break at all. Techno-stress manifests through various stressors, such as information overload, constant connectivity, and the need for continuous learning, and the pressure to meet the increasing demands of a technology-driven work environment. For secretaries, who are integral to the smooth functioning of administrative operations, these stressors can disrupt their job schedules, leading to longer work hours, difficulties in managing tasks, and increased job demands.

Moreover, the rise of technology in administrative roles has raised concerns about job security among secretaries. As institutions increasingly rely on automated systems and advanced software to perform tasks traditionally managed by secretaries, there is a growing fear of redundancy and job displacement. This anxiety is compounded by the pressure to continually update their skills to keep pace with technological changes, leading to further stress and potential declines in job performance.

Significance of the Study

The findings of the study will be beneficial to Academicians and the secretaries of public institutions to acquire research skills to conduct business research. Like developing questionnaires, interacting with new people, getting the necessary information, analyzing and presenting data.

This study will benefit many government officials, institutions, industries and co-operate organizations in techno-stress on secretaries' job schedules and employment security, as few work have been done on the subject. Also it will serve as a starting point for other researchers who will be interested in the subject of this research.

Aim and objectives of the study

The aim and objective of the study was to examine the impact of techno-stress on secretaries' job schedules and employment security in public tertiary institutions in Ogun State.

The objectives are to:

1. Find out the causes of techno-stress among secretaries in public tertiary institutions in Abeokuta metropolis.
2. Determine the perceived effects of techno-stress on secretary job schedule in Abeokuta metropolis.
3. Investigate the perceived effects of techno-stress on secretary employment security in public tertiary institutions in Abeokuta metropolis.

Research Questions

The following research questions guided the study.

- i. What are the causes of techno-stress in public tertiary institutions in Abeokuta?
- ii. In what ways does techno-stress perceived effects secretaries' job schedule in tertiary institution?
- iii. How does techno-stress perceived effects secretaries' employment in tertiary institutions?

Methodology

Descriptive survey design was adopted for the study because the study examined the perceived effects of techno-stress on secretaries' job schedules and employment security in public tertiary institutions in Abeokuta metropolis. The population consisted of 105 secretaries in three public tertiary institutions located in Abeokuta. The institutions are Federal University of Agriculture, Federal College of Education, and Moshood Abiola Polytechnic. Census sampling technique was adopted, since the population was manageable. A structured questionnaire containing 20 items in two clusters was used to collect data for the study. The questionnaire was structured on a 4-point rating scale with response options of Strongly Agree– SA (4), Agree – A (3), Disagree – D (2), Strongly Disagree – SD (1). The instrument was faced validated by three experts. The data collected were analyzed using weighted mean and standard deviation for the research questions. Mean score that was within the real limit of 4.00- 2.50 was ruled agree (A) and 2.49 – 1.00 was ruled disagree (D)

RESULTS

Research Question 1: What are the causes of technostress among secretaries in public tertiary institutions in Abeokuta?

Table 1: Mean ratings of the causes of technostress in public tertiary institutions in Abeokuta.
N= 105, Decision Rule =2.50

S/N	Item Statements	Mean — (X)	SD	Remark
1	Inadequate Training and Support	3.16	0.73	Agree
2	Frequent Technological Changes	3.12	0.70	Agree
3	Poor Infrastructure and Internet Connectivity	3.11	0.71	Agree
4	Increased Workload Due to Technology	3.30	0.83	Agree
5	Digital Divide and Inequality	3.97	0.93	Agree
6	Complexity of New Systems	3.02	0.46	Agree
7	Fear of Job Loss or Obsolescence	3.08	0.54	Agree
8	24/7 Connectivity and Blurring of Boundaries	3.04	0.51	Agree
9	Cybersecurity Concerns	3.12	0.59	Agree
10	Resistance to Change	3.08	0.63	Agree
	Cluster Mean	3.20	0.66	Agree

Source: Field Survey (2025)

Data presented in table 1 revealed a mean cluster ($X = 3.20$) which was within the real limit of 2.50 and above with 0.66 standard deviation, indicating that the secretaries in public tertiary institutions in Abeokuta agree with all the item statements. Specifically, secretaries agree with all the item statements. This is an indication that technostress in public tertiary institutions in Abeokuta arises from various factors from the responses of the respondents.

Research Question 2: In what ways does technostress perceived effects secretaries' job schedule in tertiary institutions in Abeokuta?

Table 2: Mean ratings of the perceived effects of technostress on secretaries' job schedule in tertiary institutions in Abeokuta

S/N	Item Statements	Mean		Remark
		— (X)	SD	
1	Enhanced Efficiency and Productivity	3.15	0.89	Agree
2	Increased Time for Routine Tasks	2.23	0.69	Disagree
3	Reduction of Errors and Mistakes	2.92	0.46	Agree
4	Work Overload and Burnout	3.82	0.91	Agree
5	Disrupted Communication	2.01	0.38	Disagree
6	Difficulty in Managing Multiple Digital Platforms	3.00	0.46	Agree
7	Improvement in Technology Adoption	2.83	0.70	Agree
8	Increased Reliance on External Support	2.87	0.47	Agree
9	Boost in Professional Growth	3.03	0.55	Agree
10	Professional Collaboration	3.47	0.44	Agree
Cluster Mean		2.93	0.60	Agree

N= 105, Decision Rule =2.50

Source: Field Survey (2025)

Data presented in table 2 revealed a mean cluster ($X = 2.93$) which was within the real limit of 2.50 and above with 0.53 standard deviation, indicating that the secretaries in public tertiary institutions in Abeokuta agree with the associated perceived effects of technostress stated in the table. Specifically, secretaries agree with item statements (1, 3, 4, 6, 7, 8, 9, and 10) while they disagree with item statements (2 and 5). This is an indication that technostress has a profound effects on the job schedules of secretaries in public tertiary institutions in Abeokuta.

Research Question 3: What is the perceived effects of technostress on secretary job security in public tertiary institutions in Abeokuta?

S/N	Items	X	SD	Remark
1	Decreased Job Performance due to outdated skills	3.11	0.92	Agree
2	Inability to Adapt to New Technologies	3.17	0.98	Agree
3	Reduced Professional Growth Opportunities	3.08	0.84	Agree
4	Increased Risk of Job Replacement	3.25	0.83	Agree

5	Higher Likelihood of Job Dissatisfaction and Resignation	3.14	0.98	Agree
6	Increased Pressure and Fear of Job Loss	3.33	0.76	Agree
7	Difficulty Competing with Younger, Tech-Savvy Colleagues	2.81	1.08	Agree
8	Dependence on External IT Support	3.05	0.98	Agree
9	Organizational Downsizing or Restructuring	3.28	0.94	Agree
10	Health related issues of technology usage	3.38	0.69	Agree
11	Complicated work environment	3.25	0.82	Agree
12	Software application problems	2.97	0.97	Agree
Cluster Mean		3.78	0.89	

N= 105, Decision Rule =2.50

Source: Field Survey (2025)

The analysis in Table 3 shows that all the twelve item statements achieved mean scores ranging from 2.81 to 3.38 all of which are above the cut-off point of 2.50. Therefore, the respondents agree all twelve item statements that have perceived effects of technostress on secretary job security in public tertiary institutions in Abeokuta.

Discussion of the Findings

The findings from the data presented in Tables 1, 2, and 3 provide significant insights into the perceived effects of technostress on secretaries in public tertiary institutions in Abeokuta. The analysis of Table 1, with a mean cluster of 3.20 and a standard deviation of 0.66, shows that secretaries in public tertiary institutions in Abeokuta largely agree with the factors that contribute to technostress. The fact that the mean cluster is above the real limit of 2.50 indicates that the secretaries perceive the listed factors as causes of technostress.

The respondents' agreement with all the item statements confirms that technostress is a widespread issue in these institutions, affecting secretaries at various levels. This aligns with the position of Ayyagari et al (2020), indicating that technological changes without adequate support often lead to workplace stress, especially among administrative staff.

In Table 2, a mean cluster of 2.65 and a standard deviation of 0.53 indicate that secretaries agree with most of the item statements regarding the impact of technostress on their job schedules. Specifically, the secretaries agree with item statements 1, 3, 4, 6, 7, 8, 9, and 10 while they disagree with statements 2, and 5. This finding shows that technostress significantly affects secretaries' ability to manage their job schedules. The finding supports the assertion of Ojo and Omolayo (2018) that technostress has an perceived effects on job schedule of administrative staff.



The analysis of Table 3, with mean scores ranging from 2.8 to 3.3, demonstrates that the secretaries in public tertiary institutions in Abeokuta agree with all twelve item statements related to the perceived effects of technostress on employment security. This indicates a strong perception among secretaries that technostress poses a threat to their employment security.

This finding buttress the opinion of Tarafidar et al (2020), that technostress poses significant dangers to the employment security of office workers.

Conclusion

Based on the findings of this study, it was concluded that technostress has significant perceived effects on job schedule and employment security of secretaries in public tertiary institutions in Abeokuta metropolis, the implication of this is that professional secretaries should be adequately enlightened on the risks of technostress and the coping strategies , so that secretaries can operate efficient and effective job schedule, as well boost their level of employment security.

Recommendations

1. Public tertiary institutions should invest in ongoing training programs that equip secretaries with the necessary technological skills. Regular workshops, seminars, and online courses can help secretaries stay updated with the latest tools and software, reducing the anxiety associated with learning new technologies.
2. To mitigate the impact of technostress on job schedules, institutions should consider implementing more flexible work arrangements. Allowing secretaries to work remotely or adjust their work hours can help them manage their workloads more effectively, especially when dealing with new technology implementations.
3. Management should clearly communicate the importance of secretaries in the institution and reassure them about their job security. By recognizing and valuing their contributions, especially in navigating technological changes, institutions can reduce the fear of job loss among secretaries. Institutions should promote a balanced approach to technology adoption, ensuring that new systems genuinely enhance productivity without overwhelming staff.



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