ORGANISATIONAL JUSTICE AND LIBRARIANS' DIGITAL SECURITY BEHAVIOURS IN UNIVERSITIES IN SOUTH-EAST, NIGERIA

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Abstract
The study focused on Organisational Justice and Librarians' Digital Security Behaviours in Universities in South-East, Nigeria. The study adopted a survey design, with a sample of two hundred and ninety-five respondents, of which two hundred and forty-one were returned and used for this study. A structured questionnaire was the instrument for data collection with a return rate of 82%. Data were analyzed using simple percentages, frequency tables, mean, and standard deviation, and regression analysis. The study used descriptive and inferential statistics. The study found that the security behaviour commonly practised was securing mobile devices ($\overline{x} = 4.15$, SD = 1.019), antivirus protection ($\overline{x} = 3.88$, SD = 1.178), scheduled backups ($\overline{x} = 3.76$, SD = 1.227) and firewall ($\overline{x} = 2.85$, SD = 1.403). The study further revealed that strong passwords ($\overline{x} = 2.5082$; SD = 1.303) and securing laptops ($\overline{x} = 3.34$, SD = 1.420) in universities in South-East, Nigeria. Findings further showed that all three dimensions of organizational justice indicated high; interactional justice with the highest mean of ($\overline{x} = 3.73$, SD = 0.960), distributive justice ($\overline{x} = 3.62$, SD = 0.952) and procedural justice with the lowest mean of ($\overline{x} = 3.49$, SD = 1.043).The study concluded that organizational justice plays an important role in enhancing and ensuring librarians' security behaviours in university libraries in South-East, Nigeria. The study recommended among others that university library management in collaboration with the university authorities should endeavour to sustain and possibly improve the level of organizational justice in their libraries. Furthermore, library authorities should ensure that librarians are sensitized to the importance of using strong passwords on their computers and making sure backups are done regularly.
Keywords: Organizational justice, digital security, information security, cybersecurity, librarians

Introduction

Libraries are under constant attack from internal and external threats that put the integrity, availability and confidentiality of their information at risk. Amidst the digital era, university libraries, and organizations, have encountered a growing risk of security threats, including data breaches, rules and regulations, ransomware attacks, and social engineering exploits, prompting them to adopt heightened vigilance to safeguard their assets (Michael, 2023). Librarians' security behaviour is defined as the behaviour of librarians in using organizational information systems (including hardware, software, and network systems), and such behaviour may have security implications. Examples of employee security behaviour include how members of staff handle their passwords, how they deal with organizational data, and how they use network resources. Reis, Oliha, Osasona and Obi, (2024) also observed another notable escalation in cyber threats, particularly phishing, ransomware, and insider attacks which may pose security threats to the organization. Following the analysis of data published by

the UK Information Commissioner's Office identified that, 64% of reported information security incidents and breaches across all sectors were likely to be the result of human error. Therefore, there is a need to understand the role that improved librarians' digital security behaviours in the defense of organizational information security in university libraries. One such approach is to study the relationship between information sensitivity and security behaviours in the workplace, which is directly the goal of all organizations in order to minimize the threat of data breaches (Blythe, Richard & Lynne, 2022). Some of the librarians' security behaviour indicators that guide the study as reviewed from the literature include strong passwords, firewalls, secure mobile devices, Antivirus protection, secure laptops, and scheduled backups. These measures can be achievable when librarians feel there is fairness in resource allocation, decision-making and interpersonal interaction within the university libraries in the South-East. However, the capacity of a librarian to be security conscious could be influenced by other factors which as the organizational justice exhibited in his/her university library. Organizational justice is defined as a perception of fairness in the workplace where resource allocation, decision-making, and interpersonal interaction in an organization are considered to be either fair or unfair (Caron, Ahmed, & Christian, 2013). It is thus concerned with workplace behaviour, especially from the way and manner supervisors treat their subordinates with regard to pay (salaries, wages, and rewards), organizational procedures (policies, decision-making) and interpersonal relationships. This further shows that justice or fairness is important to employees because more often they try to work in an environment where there is a free flow of information between supervisors and among workers, where employees are treated with respect, and where there is transparency in decision making, adequate rewards, and organizational

procedures. Organizational justice is seen as a fundamental requirement that encourages librarians' security behaviour and organizational success.

Ghasi, Ogbuabor and Onodugo, (2020) conceptualized organizational justice in three dimensions: distributive justice, procedural justice and interactional justice. Distributive Justice refers to the perceived fairness of how outcomes and resources are distributed among employees in organizations. Employees compare their outcomes such as pay, promotion and access to resources and inputs with their peers within and outside their organizations. A positive perception of distributive justice improves organizational attachment, identification and involvement. In contrast, distrust, disputes, disrespect and demotivation of employees occur when benefits are assigned unfairly. Procedural justice refers to the perception of fairness in the decision-making process, including motives, methods, mechanisms and processes used in determining outcomes, and comprises: voice and process control perspectives. Voice involves an opportunity to be heard and taken into consideration, while process control entails an opportunity to influence information used in decision-making. Organizations should tolerate the opinions of employees, make decisions based on a consistent approach and correct information, exhibit impartiality, avoid favouritism and remain ethical, provide effective feedback, and explain decisions to employees. When decision-making is perceived as fair, performance improves due to increased job involvement, organizational commitment, trust and cooperation among employees (Chen, Wu W, Chang, Lin, Kung, & Weng, 2015).

Interactional justice refers to employee perceptions of fairness of interpersonal treatment they are subjected to during decision-making procedures and comprises two dimensions: interpersonal and

informational justice. Interpersonal justice entails how supervisors treat coworkers with respect and dignity. Informational justice implies how supervisors share information with their subordinates relating to their tasks. Derogatory judgements, deceptions, abusive actions, public criticism and coercion result in decreased perception of interactional justice (Xerri, 2014).

Organizational justice is therefore an individual's perception of the level of fairness with which he/she is treated by the organization. Librarians care about justice because fair actions and processes make them feel valued and motivated to perform, thus making organizational justice imperative in improving the operational efficiency of university libraries (Ghasi et al., 2020; Gile, Samardzic, and Van De, 2018). Librarians' digital security behaviour in the organization will depend on the fair treatment they receive from their workplace. Librarians aspire to be contented and work in an environment that provides rewards for the discharge of their duty and ensures enacted policies apply to every employee irrespective of his/her level and good relationship with supervisors and workmates. Librarians' perception of organizational justice has an important role in organizations because a negative perception of justice may affect the organization, particularly in the area of influencing and providing instructions to employees (Selvitopu & Sahin, 2013).

Anecdotal and empirical evidence show that librarians' security behaviour is poor and has manifested in such behaviour in the university library such as spam mails, identity thefts, phishing, and data leakage (Thecla & Chinelo, 2020; Campbell, 2016). Such threats also include website defacement, espionage, theft of intellectual property, Denial-of-service (DoS) attacks, and destructive malware (Verge, 2013). Other similar insecure behaviours such as writing down passwords carelessly,

delaying a backup, and sending unencrypted emails were also noted (Yin, Nan & Mikko, 2019) alongside obnoxious patron behaviour (Lincoln, 1984).

While the identified factors that have resulted in the security breaches of librarians in public, private and state universities in Southeast, Nigeria, may be true, other factors such as organizational justice which has been identified as a factor influencing librarians' attitudes and behaviours in the university library, and they are generally influenced by the organizations' fairness or unfairness related behaviours, decisions, and actions. Mayowa- Adebara (2018), noted that perceived unfairness in the library environment leads to carelessness and a lack of dedication from library personnel, as well as plans to leave. Librarians, on the other hand, perform well when the university library management is thought to be fair. This means that librarians' perceptions of library justice may have a direct impact on their overall happiness, commitment, and safety which could also exacerbate librarians' digital security behaviour. This factor is yet to be tested for its empirical influence. This is the gap that this study is attempting to fill. Therefore, this study investigated the influence of organizational justice, on librarians' security behaviour in university libraries in South-East, Nigeria.

Objective of the Study

The general objective of the study is to investigate the influence of organizational justice on librarians' digital security behaviour of librarians in universities in South-East, Nigeria. The specific objectives are to:
1. find out the digital security behaviour exhibited by librarians in universities in South-East, Nigeria;
2. find out the level of organizational justice among librarians in universities in South-East, Nigeria, and

3. find out the challenges of digital security behaviour of librarians in universities in South-East, Nigeria.

Research Questions

1. What is the digital security behaviour exhibited by librarians in universities in South-East, Nigeria?
2. What is the level of organizational justice among librarians in universities in South-East, Nigeria?
3. What are the challenges of the security behaviour of librarians in universities in South-East, Nigeria?

Research Hypothesis

Considering the specific objectives of the study and the research interest, the following hypothesis has been postulated for the study and was tested at a 0.05 significance level.

Ho_1: Organizational justice has no significant influence on librarians 'digital security behaviour in university libraries in South-East, Nigeria.

LITERATURE REVIEW

This section reviews relevant literature on the Influence of Organisational justice, on librarians' security digital behaviours in university libraries in South-East, Nigeria. The section evaluates the existing stock of knowledge with the intent of identifying and filling the existing literature gaps. This section also covers the conceptual review, empirical review, and theoretical review of the study.

Librarians' digital Security Behaviour

The concept of librarians' digital security behaviour was viewed in various ways by researchers such as employees' security behaviour, information security, cybersecurity, computer fraud and security, information security behaviour, and cybercrime. Guo (2013) defined employee security behaviour as the behaviour of employees in using organizational Information System (IS) (including hardware, software, and network systems etc.), and such behaviour may have security implications, examples of employee security behaviour include how members of staff handle their passwords, how they deal with organizational data and how they use network resources, and this behaviour may either pose organizational IS security threats. The two types of employee security behaviour that were examined were compliant behaviour (i.e. adhering to the policies, procedures, and norms of an organization regarding information security) and non-compliant behaviour (i.e. intentional but no malicious behaviours of employees that may put organizational information security at risk and entail non-compliance to the policies, procedures and norms of an organization in relation to information security (Carmi (2020).

Librarians' digital security behaviour represents the protection of information/data systems and information from potential unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording or destruction. Thus, the information security becomes part of our lives. Librarians 'digital security is influenced by the people who use them and the same technologies that enable these processes by which they take place. The increasing influence of thinking about information security policies indicates the width and complexity of the content that is being covered. Aleksandar (2019) postulate that information security: a threat from employees, is the "people problem" and how employees expose the threat of potential information risks by sharing their passwords, making backups, and protection from so-called "viruses" to unauthorized access to information/data. Information security involves people and technology. Up to 90% of companies and organisations encounter at least one information security incident during the business year.

Kaspersky (2022) in a lab study said, in over 5,000 businesses around the globe, that employees are the biggest weakness to Information Technology security 52 percent of them. With cyber security becoming a major concern these days, various organisations, companies, and small and even medium-sized businesses are adopting every possible measure to tackle outside threats. While outside security threats seem quite menacing, insider security risks can be equally dangerous for your network's safety. Insider threats can come from anywhere, be it inconsistent password policies or unmanaged data in the personal devices of your employees. Such threats are often difficult to spot and stop. Quite possibly, the person sitting in the cubicle next to yours might be using weak passwords for email access, and putting sensitive information at risk. Insider threats often lead to electronic theft, stolen credentials, misaddressed emails and unintentional data leaks from which academic libraries are not exempted.

University libraries are vulnerable to security risks from the private and public population, and members of the university community, both students, faculty and staff, can pose security problems. Security issues in university libraries are numerous. These include; data breaches, rules and regulations, ransomware attacks, and social engineering exploits, prompting them to adopt heightened vigilance to safeguard their assets (Michael, 2023). The common way to prevent external attacks is the implementation of technical security controls, including firewalls, anti-malware software, and authentication controls. These measures are widely employed by organizations and are largely effective. On the other hand, an insider threat refers to an intentional or unintentional misuse of an organization's information system by employees that may negatively affect the confidentiality, integrity, or availability of that organization's vital information. Maintaining employees' compliance with information security rules is a more problematic matter as technical controls are unable to prevent all human blunders. For instance, employees tend to write passwords down, share them with colleagues or send confidential information in an unencrypted form. It is estimated that at least half of information security breaches are made by (1) internal personnel, and (2) deviant behaviour is best managed with a combination of technical and social measures. Overcoming the issue of "human error" has received considerable attention in Behavioural Information Security research. Various approaches designed to improve employee security behaviour have been suggested by Information Security scholars. These range from security awareness programmes (3) and security education and training (4) to approaches that take into account deterrents (5) as well as cognitive factors (Posey, Roberts, & Lowry, 2016). Some of the Librarians' security behaviour indicators that will guide the study as reviewed from the literature include strong passwords, firewalls, antivirus protection, secure mobile devices, secure laptops, and scheduled backups.

Organizational Justice in Libraries

Organizational justice is vital for both organizations and societies at large. Adewoyin (2020) cited Yang and Cho (2017) defined organisational justice as the sense of fairness and equality in features of organizational policies and regulations relating to individual interests perceived by members of the organizations. Similarly, organisational justice is defined as the individual's perception of fairness in organizations, his behavioural reaction to such perceptions and how these perceptions affect organizational outcomes such as organizational values and work environment. Organizational justice is the term used to describe the role of fairness as

related to the workplace (Aboagye, 2015). Adzie (2016) avers that organizational justice is a vital element and a predictor of organizational success. According to him, workers who perceive that their organizations are fair and just in their rules, policies, interactions and distribution systems give better responses to the organizations by way of their positive behaviours and productivity. Social concepts such as equity, fairness and organizational justice play an important role in employees 'evaluation of their own workplace environment (Turgut, Tokmak, & Gucel).

Baba and Ghazali (2017) state that organizational justice comprises the workers' extent of acceptance of managerial treatment in a business enterprise. According to them, justice from an organisational perspective demands that the head of department (University librarian and managers) must see through the eyes of their subordinates such as heads of units in various sections of the library, and workers in different companies and organizations as the case may be. Organizational justice refers to the extent to which librarians perceive outcomes, procedures and interactions to be fair. To keep librarians satisfied, committed, and loyal to the organization, the organizations need to be fair in their systems of distributive, procedural, and interactional justice (Usman & Jamal, 2013). Organizational justice is an essential factor that determines organization success. Adzie (2016) is of the view that employees give better responses to their organization when they consider that the organization is fair and just in its rules, policies, interactions and distribution systems. According to him, enhancing organizational justice results in improved outcomes for employees.

Adewoyin (2020) investigated the influence of organizational justice and job satisfaction on the organizational commitment of library personnel in public universities in south-west Nigeria. A survey research design was adopted for the study. The population of the study was 346 library personnel in public universities in south-west Nigeria. Findings showed that organizational justice had a significant influence on the security behaviours of librarians. Findings also revealed that distributive justice and interactional justice significantly influenced librarians' consciousness on safeguarding laptops and information/data therein, while procedural justice was not significant. It was also recommended in the study that, library management should create an enabling environment and ensure regular promotion of the librarians. Library management should involve the librarians in decision-making processes and allocation of rewards to enhance the perception of organizational justice (Adewoyin, 2020).

Babalola and Soyemi, (2014); Straub, (2004), state that employees, who have an axe to grind with their organisations either often take their anger out on the system. Stanton, Mastrangelo, Stam & Jolton, (2004), found that job satisfaction and organizational commitment are among the factors that determine the information security behaviour of employees. Lack of job satisfaction naturally reduces organizational commitment which might lead to a careless or carefree attitude towards information security issues. Besides, adhering to information system policies requires some effort on the part of users and could be sometimes inconvenient. Hartwig and Wilkinson (2014) also find out that Employees who are dissatisfied with their jobs may not be willing to exert such efforts in obeying information security rules. Incidentally, insiders account for up to 30% of information security breaches in organizations.

Ajala (2016) investigated the perceived correlation between organization justice and employees' organizational citizenship behaviours in the civil service of Ondo and

Oyo State, Nigeria. The descriptive survey research was used for the study. The

The study population consists of employees of the civil service in Ondo and Oyo States, Nigeria. The findings of the study showed that there was a significant relationship between distributive justice and librarian's security behaviour, there was a significant relationship between procedural justice and librarian's behaviour and there was a significant relationship between interactional justice and librarians' behaviour. This collaborates with the findings of the current which states that the three dimensions of organisational justice significantly influenced librarians' digital security behaviour in universities in Southeast, Nigeria.

Theoretical Framework

The Deterrence theory of punishment can be traced to the early works of classical philosopher Cesare Beccaria (1738–1794). This theory justifies that procedural security countermeasures which are factors that tend to increase employee information security awareness in the organizations information security, are the requirements of security threats and consequences of illicit actions inclined to lead to compliant behaviour. That is, procedural security countermeasures influence employee security behaviour indirectly through employee security awareness. The GDT employed both negative and positive behaviours of employees in the organization. The theory of deterrence relies on three individual components: severity, certainty and celerity of sanctions. Based on the rational choice view of human behaviour, GDT is based upon the central proposition that illicit behaviour can be

controlled by the threat of sanctions. Therefore, GDT focuses on disincentives against committing a criminal act and the effect of these disincentives on deterring others from committing deviant acts. The relevance of the theory to the study is that if a punishment is severe, certain and swift, librarians as rationally calculating human beings will measure the gains and losses before engaging in crime and will desist from a criminal act if the loss is greater than the gain.

METHODOLOGY

The study adopted the survey research design. The population for this study comprised two hundred and ninety-five (295) professional librarians who have a first degree, a master's degree, and a PhD in library and information science and other related fields of information studies from the twenty-five (25) universities; Federal (6), State (5), and Private (14) owned university libraries in the South-East geopolitical zone in Nigeria. The total enumeration method was used due to the manageable size of the population of librarians under investigation to give comprehensive coverage of all librarians in all the universities in South-East Nigeria, therefore there will be no sample for this study. A well-structured questionnaire was used to obtain data for this study, out of 295 questionnaires distributed, 241 were returned and used for analysis. Data collected were analyzed using simple percentage and frequency tables, and finally, regression with the aid of Statistical Product and Service Solutions (SPSS) was used to test the stated hypotheses. The methods used for testing hypotheses were simple and multiple regression analysis was done at 0.05 significant levels. The data collected were analysed using descriptive and inferential statistics.

Results

4. **Research Question One**: What digital security behaviour is exhibited by librarians in Universities in South-East, Nigeria?

Table 1 Librarians' Digital Security Behaviour

Security Behaviour	Always	Sometimes	Hardly	Never	Undecided	Mean	Std.
Secured Mobile Devices						4.15	1.019
I lock my computer when I leave my office	95 (39.4%)	132 (54.8%)	8 (3.3%)	0	6 (2.5%)	4.29	0.756
I prevent others from having access to my phone	110 (45.6%)	94 (39.0%)	21 (8.7%)	3 (1.2%)	13 (5.4%)	4.18	1.025
I use trusted to websites work	102 (42.3%)	94 (39.0%)	14 (5.8%)	1 (0.4%)	30 (12.4%)	3.98	1.275
Antivirus protection						3.88	1.178
I usually logout of my online accounts when I use other people's devices...	117 (48.5%)	97 (40.2%)	11 (4.6%)	8 (3.3%)	8 (3.3%)	4.27	0.944
I always use antimalware (antivirus) applications on my digital devices.	81 (33.6%)	106 (44.0%)	22 (9.1%)	4 (1.7%)	28 11.6%)	3.86	1.236
I regularly update the antivirus on digital devices...	76 (31.5%)	103 (42.7%)	28 (11.6%)	7 (2.9%)	27 (11.2%)	3.80	1.235
I stay informed about security risks online in the workplace…	74 (30.7%)	110 (45.6%)	13 (5.4%)	15 (6.2%)	29 (12.0%)	3.77	1.283
I frequently scan my digital devices for malware...	58 (24.1%)	118 (49.0%)	26 (10.8%)	15 (6.2%)	24 (10.0%)	3.71	1.190
Schedule Backups						3.76	1.227
I always back up my personal data and documents as soon as I am done with my work	65 (27.0%)	142 (58.9%)	13 (5.4%)	10 (5.4%)	11 (4.6%)	4.00	0.951
I use trusted devices in my place of work	69 (28.6%)	123 (51.0%)	11 (4.6%)	8 (3.3%)	30 (12.4%)	3.80	1.246
Backups of information are conducted and maintained periodically	73 (30.3%)	100 (41.5%)	24 (10.0%)	12 (5.0%)	32 (13.3%)	3.71	1.310
I have response plans as well as continuity plans in	59	113	7	20	42	3.5	1.4

place in case of a security breach	(24.5%)	(46.9%)	(2.9%)	(8.3%)	(17.4%)	3	00
Use of Firewall						3.51	1.435
I use security applications like antimalware (antivirus) and firewalls on my digital devices	71 (29.5%)	101 (41.9%)	15 (6.2%)	9 (3.7%)	45 (18.7%)	3.60	1.426
My organization use firewalls to restrict traffic into and out of the network at strategic points	55 (22.8%)	105 (43.6%)	19 (7.9%)	10 (4.1%)	52 (21.6%)	3.42	1.444
Strong password						2.85	1.403
I do not usually share my passwords and login credentials	89 (36.9%)	47 (19.5%)	32 (13.3%)	25 (10.4%)	48 (19.9%)	3.43	1.548
I use strong passwords (made up of at least 8 characters, including one capital letter, one small letter, one special character, and one number	95 (39.4%)	25 (10.4%)	36 (14.9%)	41 (17.0%)	44 (18.3%)	3.36	1.570
I avoid opening emails from unknown senders to minimize phishing and security risks.	19 (7.9%)	23 (9.5%)	71 (29.5%)	65 (27.0%)	63 (26.1%)	2.46	1.200
I never divulge my passwords in order to protect the privacy and security of my accounts.	25 (10.4%)	7 (2.9%)	49 (20.3%)	55 (22.8%)	105 (43.6%)	2.14	1.295
Secure Laptops						2.82	1.303
I often update software and applications on your laptop	84 (34.9%)	13 (5.4%)	77 (32.0%)	35 (14.5%)	32 (13.3%)	3.34	1.420
I prioritize avoiding online and workplace security risks.	66 (27.4%)	36 (14.9%)	45 (18.7%)	47 (19.5%)	47 (19.5%)	3.11	1.489
I follow established procedures for reporting security breaches involving my laptop	55 (22.8%)	37 (15.4%)	48 (19.9%)	57 (23.7%)	44 (18.3%)	3.01	1.429
I get awareness of potential laptop security threats when using my laptop at work	21 (8.7%)	13 (5.4%)	93 (38.6%)	72 (29.9%)	42 (17.4%)	2.58	1.108
I refrain from sharing my digital devices, including phones, computers, and tablets, to maintain security and privacy.	7 (2.9%)	17 (7.1%)	54 (22.4%)	73 (30.3%)	90 (37.3%)	2.08	1.068
Grand Mean						3.50	1.261

Source: Researcher's Field Survey, 2023

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Decision Rule: Always= 4.20-5.0; Sometimes= 3.40-4.19; Hardly =2.60-3.39; Never=1.80-2.59; Undecided= 1.0-1.79

The digital security behaviour of librarians in universities in South-East, Nigeria is always practised, as presented in Table 1 shows a grand mean of 3.50 (SD = 1.261) on a 5-point Likert-type scale. This suggests that security behaviour is a common practice among librarians in universities in South-East, Nigeria. Top on the list of security behaviours practised was securing mobile devices ($\overline{x}$ = 4.15, SD = 1.019), antivirus protection ($\overline{x}$ = 3.88, SD = 1.178), scheduled backups ($\overline{x}$ = 3.76, SD = 1.227) and firewall ($\overline{x}$ = 2.85, SD = 1.403). The Table further revealed that strong passwords ($\overline{x}$ = 2.5082; SD = 1.303) and securing laptops was sometimes practised whereas the respondents do not participate in annual security awareness training.

5. **Research Question Two**: What is the level of organizational justice among librarians in universities in South-East, Nigeria?

Table 2
Organisational Justice in the University Library

Organisational Justice	Very high level	High level	Moderate level	Low level	Very low level	Mean	Std.
Interactional Justice						3.73	0.960
My supervisor treats me with kindness, respect and dignity when decisions are made about my job to a…	68 (28.2%)	80 (33.2%)	77 (32.0%)	14 (5.8%)	2 (0.8%)	3.82	0.938
My supervisor offers adequate justification for decisions made about my job to a…	53 (22.0%)	86 (35.7%)	81 (33.6%)	17 (7.1%)	4 (1.7%)	3.69	0.947
My supervisor explains clearly any decision made about my job to a…	58 (24.1%)	85 (35.3%)	77 (32.0%)	18 (7.5%)	3 (1.2%)	3.73	0.951
The manager offers explanations that make sense to me when making decisions about my job to a…	57 (23.7%)	81 (33.6%)	79 (32.8%)	17 (7.1%)	7 (2.9%)	3.68	1.005
Distributive Justice						3.62	0.952
My work schedule is fair to a…	73 (30.3%)	89 (36.9%)	67 (27.8%)	10 (4.1%)	2 (0.8%)	3.92	0.904
My job responsibilities are fair to a…	60 (24.9%)	83 (34.4%)	86 (35.7%)	9 (3.7%)	3 (1.2%)	3.78	0.907
My level of pay is fair to a…	38 (15.8%)	71 (29.5%)	94 (39.0%)	33 (13.7%)	5 (2.1%)	3.43	0.981
My overall rewards are fair to a…	31 (12.9%)	71 (29.5%)	97 (40.2%)	30 (12.4%)	12 (5.0%)	3.33	1.015
Procedural Justice						3.49	1.043
My supervisor collects accurate and complete	57	81	85	16	2	3.73	0.926

information to make job decisions to a…	(23.7%)	(33.6%)	(35.3%)	(6.6%)	(0.8%)		
The management makes job decisions in an unbiased manner to a…	48 (19.9%)	71 (29.5%)	92 (38.2%)	22 (9.1%)	8 (3.3%)	3.54	1.016
All concerned employees are heard before job decisions are made by the supervisor to a…	49 (20.3%)	72 (29.9%)	80 (33.2%)	29 (12.0%)	11 (4.6%)	3.49	1.084
Employees are allowed to challenge or appeal job decisions made by the manager to a …	32 (13.3%)	64 (26.6%)	84 (34.9%)	38 (15.8%)	23 (9.5%)	3.18	1.144
Grand Mean						**3.61**	**0.985**

Source: Researcher's Field Survey, 2023 Decision Rule: 4.20-5.0 = Very high level, 3.40-4.19 = High level; 2.60-3.39 = Low level; 1.80-2.59 = Very low level; 1.0-1.79 = Undecided

The Table reveals that the level of organizational justice in university libraries in South-East, Nigeria is high with a grand mean of 3.61 (SD = 0.985) on a 5-point Likert-type scale. From the table it is evident that the average mean of the following indicators is high: interactional justice with the highest mean of ($\bar{x}$ = 3.73, SD = 0.960), distributive justice ($\bar{x}$ = 3.62, SD = 0.952) and procedural justice with the lowest mean of ($\bar{x}$ = 3.49, SD = 1.043). This implies that there is a high level of interactional justice, distributive justice and procedural justice among librarians studied. One could infer from the findings that a cordial relationship exists between the librarians and library management at University in South-East, Nigeria.

6. **Research Question Three**: What are the challenges of the security behaviour of librarians in universities in South-East, Nigeria?

Table 3
Challenges affecting librarians' security behaviour

Challenges	Yes		No	
	N	%	N	%
Lack of laid down security policies and procedures	174	(72.2%)	67	(27.8%)
Carefree attitude among co-workers in handling sensitive data in the library	157	(65.1%)	84	(34.9%)
There is a general lack of awareness safeguarding of information in my library	145	(60.2%)	96	(39.9%)
Lack of supervisory support in my library	124	(51.4%)	117	(48.6%)
Lack of Financial resources to update antivirus protection	110	(45.6%)	131	(54.3%)
My working environment is poor	100	(41.5%)	141	(58.5%)
I am not sufficiently motivated in	98	(40.7%)	143	(59.5%)

my library				
I am not adequately rewarded in my library	94	(39%)	147	(61%)
I experience unfair treatment from my supervisor	74	(30.7%)	167	(69.3%)
I lack the knowledge to retain strong password	69	(28.7%)	172	(71.4%)

Source: Researcher's Field Survey, 2023

Table 3 shows the result of challenges of librarians' digital security behaviours in university libraries in South-East, Nigeria, and found that lack of laid down security policies and procedures (72.2%) was the number one challenge barring librarians' digital security behaviour in university libraries. Other challenges include carefree attitude among co-workers in handling sensitive data in the library (65.1%), lack of awareness of safeguarding of information in the library (60.2%), Lack of supervisory support in my library (51.4%), and Lack of Financial resources to update antivirus protection.

However, the findings also show that university libraries in South-East, Nigeria have qualified librarians who have the knowledge to retain strong passwords (71.4%), quite a number of personnel attest their supervisors treat them well (69.3%), and are rewarded adequately. Based on the findings, it can be inferred that librarians in University libraries in Southeast, Nigeria, need constant training as regards compliance to security on organization data protection.

Hypothesis One: Organisational justice has no significant influence on librarians' security behaviour in University libraries in South-East, Nigeria.

Table 4

Simple linear regression analysis of organizational justice and librarians' digital security behaviour

Predictors	B	Std. Error	Beta (β)	T	*P*	R^2	*Adj.* R^2	F	ANOVA (Sig.)
(Constant)	2.537	0.159		15.963	.000				
Organisational Justice	0.254	0.043	.355	5.872	.000	0.126	0.122	34.486	0.000
Dependent Variable: Librarians' Security Behaviour Predictor: (Constant), Organisational Justice DF (F-Statistic) = 1, 240 DF (T-Statistic) = 239									

Source: Field Survey Results, 2023

Table 4 reveals that organizational justice has a positive and significant influence on librarians' security behaviour in university libraries in South-East, Nigeria (R^2 = 0.126, $β$ = 0.355, t (239) = 5.872, $p <$ 0.05). The *t-value* of 5.872 affirms that the regression coefficient for organizational justice is statistically significant. The model shows that organizational justice explains a 12.6% (R^2 = 0.126) variation in librarians' security behaviours in university libraries in South-East, Nigeria. This implies that organizational justice is a significant predictor which predicts the librarians' security behaviours. Therefore, the null hypothesis ($H_0$1) which states that organizational justice has no significant influence on librarians' security behaviour in university libraries in South-East, Nigeria was rejected. The hypothesis is therefore restated as: Organizational justice has a significant influence on librarians' security behaviour in academic libraries in universities in South-East, Nigeria. This result suggests that an improved organizational justice system in libraries automatically leads to a higher security behaviour among librarians in university libraries in South-East, Nigeria.

The study found that the level of librarians' security behaviour is high as the librarians agreed to practice security behaviours. This finding agrees with the study of Oguedoihu and Adinchezor (2022) who found that library staff in two academic libraries in Southeast, Nigeria, practised security measures available to them. The result from this present study is in tandem with the previous study conducted by Mabawonku and Madukoma (2022) on information security awareness and information security compliance in university libraries in South-West, Nigeria who reported that security measures were available and practised in the libraries. The findings of this present study are also in agreement with those of Nath and Deka (2020) who stated that information security measures were moderately available and practised in university libraries in Assam. The finding of this study is however in contrast with the finding of Jagadish and Sarasvathy (2016) who reported low-security practices in Karnataka University Libraries.

The study found that organizational justice is high in university libraries in South-East, Nigeria. Similarly, the finding of this study is consistent with the findings of Soyemi and Oloyede (2022) and Soyemi and Babalola (2022) who established a high level of organizational justice among academic librarians in South-West, Nigeria. Similarly, the finding of this study

supports the finding of Adewoyin (2020) who revealed a high level of organizational justice among library personnel in public universities in South-West, Nigeria. This finding also agrees with the finding of Chukwu (2019) who asserted that organizational justice was high among employees in Nigeria. In the same vein, this study also corroborates the study of Mayowa (2018) who established a high level of organizational justice in university libraries in South-West, Nigeria. Additionally, this present study supports the findings of Moon (2017) and Baba and Ghazali (2017) who revealed a high level of organizational justice. Furthermore, this finding is in agreement with the findings of Demikiran et al. (2016), Sokhanvar et al. (2016) and Abdul Rauf (2014) who reported a high level of organizational justice in Turkey, Tehran, Iran and Sri Lanka respectively. In contrast, the finding of this study is a disparity with the findings of Nikookar, Nowkarizi and Sharif (2016) who submitted a low level of organizational justice in public libraries in Iran.

The finding from the test of hypothesis one indicated that organizational justice has a positive and significant influence on librarians' security behaviour in university libraries in universities in South-East, Nigeria. This result supports the position of Soyemi and Babalola (2022) who established that organizational justice significantly and positively influences librarians' turnover intentions in South-West, Nigeria. This finding agrees with the finding of Young Meng, Lu, & Chen, (2020) who found that organizational justice positively and significantly influenced behavioural outcomes in Nigeria. This finding also is in agreement with the submission of Adewoyin (2020) whose findings showed that organizational justice had a significant influence on the security behaviours of librarians. The finding of this present study is also coherent with the documentation of Ajala (2016) who documented that there exists a significant relationship between organizational justice and employees' organizational behaviours in Ondo and Oyo States. Similarly, the result of this study corroborates the finding of Shan (2015) who reported that organizational justice has a significant influence on the job performance of librarians in Pakistan. In contrast, this study is in disparity with the study of Nikookar et al. (2016) who discovered that organizational justice had no influence on organizational behaviour in public libraries in Iran.

Conclusion and Recommendations

The study has shown that organizational justice is important in shaping librarians' digital security behaviours. It is recommended that universities should implement policies to ensure fairness and equity among their staff members. This will help create a positive working environment where employees feel valued and respected. Additionally, training programs on cybersecurity best practices should be provided to all library personnel to enhance their knowledge of safe online behaviour. Finally, regular audits should be conducted to assess the effectiveness of these measures and make necessary adjustments as needed.

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