



ORGANISATIONAL VALUE AND LIBRARIANS' DIGITAL SECURITY BEHAVIOURS IN UNIVERSITY LIBRARIES IN SOUTH-EAST, NIGERIA

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Abstract

The study focused on Organisational Values 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%. The data generated were analyzed using simple percentages, frequency tables, mean, standard deviation, and regression analysis. The study used descriptive and inferential statistics. The result revealed that among the security behaviour indicators, top on the list of digital security behaviours commonly practiced by librarians in university libraries in South-East, Nigeria was securing mobile devices ($\bar{x} = 4.15$, $SD = 1.019$), antivirus protection ($\bar{x} = 3.88$, $SD = 1.178$), scheduled backups ($\bar{x} = 3.76$, $SD = 1.227$) and firewall ($\bar{x} = 2.85$, $SD = 1.403$). The findings also revealed that strong passwords ($\bar{x} = 2.5082$; $SD = 1.303$) and securing laptops were sometimes practiced whereas the respondents do not participate in annual security awareness training. It was discovered that organizational values are generally established and prevalent in the libraries as indicated by the grand mean of 3.82($SD = 1.111$) on a 5-point Likert-type scale. The findings further revealed that integrity had the highest average mean ($\bar{x} = 4.17$, $SD = 0.867$) while employee welfare had the lowest average mean ($\bar{x} = 3.40$, $SD = 1.267$) on a 5-point Likert-type scale. In addition, the study also found that organizational value has a positive and significant influence on librarians' digital security behaviour in university libraries in South-East, Nigeria ($R^2 = 0.095$, $\beta = 0.309$, $t(239) = 5.014$, $p < 0.05$). Finally, the study 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. It was suggested that library authorities should ensure that librarians are sensitized on the importance of using strong passwords in their computers, making sure backups are done regularly for the safety of volumes of data in their systems to be protected from inside hackers and those outside. The study recommended that even though organizational values are prevalent in university libraries in South-East, Nigeria, it is pertinent that stakeholders, university management and administrations look into employee welfare to sustain and possibly improve organizational value in their libraries.

Keywords: Librarians' digital security behaviour, Organisational values, University libraries, South-East, Nigeria.

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 organisations, 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 organisational 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 organisational data, and how they use network resources. This behaviour may pose security threats. An 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 (Evans et al., 2019). There is a need to understand the role that improved librarians' security behaviours in the defense of organisational information security. Research must look to understand the range of factors that can influence the security behaviours of librarians. One such approach is to study the relationship between information sensitivity and security behaviours in the workplace (Blythe, 2015). Securely guarding sensitive information is a goal of all organisations to minimize the threat of data breaches. 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 is the organisational value prevalent in his/her university library.

Organizational values are a set of core beliefs held by an organization. They provide and give direction to the organization in the areas of accountability, respect, integrity, teamwork, and responsibility. Organisational values can be used to inspire compliance with security standards in university libraries. Looking at university libraries, organizations, companies, and businesses at all levels just to name a few, the employees' turnover rate will be reduced drastically if the above mentioned need to focus more on the individual values of employees. The fundamental purposes of any business, organization or firm are to make a profit, expand operations, and gain competitive advantage in the marketplace (Ofori & Sokro, 2022). This is also applicable to university libraries where the core responsibilities of librarians are to solve the information needs of their clients, and users, and the protection of data is paramount to the success of libraries. Meanwhile, in pursuance of these objectives, supervisors, heads of department, superiors, and enterprise managers need to take certain actions to compete more effectively and meet the needs of universities, and stakeholders as the case may be. As a result, heads of libraries in academic institutions, and managers over the last few years have been directing their attention towards cultivating core organizational values since these are the

fundamentals of security behaviour on how to handle all systems they are using to work with, on how to relate with colleagues, students, users, fellow employees, customers, vendors, and competitors. Aldag and Kuzuhara (2002) emphasize that the sharing of values is key to successful performance.

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 are also noted (Ying & Mikko, 2019) and 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 South-East, Nigeria, may be true, other factors such as organisational justice could also exacerbate librarians' 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 organisational value, 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 organisational value, on digital security behaviour of librarians in university libraries in South-East, Nigeria. The specific objectives are to:

1. find out the digital security behaviour exhibited by librarians in university libraries in South-East, Nigeria;
2. determine the prevalent organisational values of librarians in university libraries in South-East, Nigeria.
3. find out the influence of organisational values on security behaviour of librarians in university libraries in South-East, Nigeria;
4. find out the challenges of the security behaviour of librarians in university libraries in South-East, Nigeria.

Research Questions

1. What are the digital security behaviours exhibited by librarians in university libraries in South-East, Nigeria?
2. What organisational values are prevalent among librarians in university libraries in South-East, Nigeria?
3. What are the challenges of security behaviour of librarians in university libraries in South-East, Nigeria?

Research Hypothesis

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

H₀₁: Organisational value has no significant influence on librarians' digital security behaviour in university libraries in South-East, Nigeria.

REVIEW OF RELATED LITERATURE

Librarians' Digital Security Behaviour

The concept of librarians' security behaviour was initially viewed in different ways by researchers such as; employees security behaviour, information security, cybersecurity, computer fraud & security,

information security behaviour, and cybercrime, for instance, Guo (2013) defined employees security behaviours as “the behaviour of employees in using organisational 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 organisational data and how they use network resources (Guo, 2013). This behaviour may either pose or moderate organisational IS security threats. The two types of employee security behaviour that will be examined are compliant behaviour (i.e. adhering to the policies, procedures, and norms of an organisation about information security) and non-compliant behaviour (i.e. intentional but no malicious behaviours of employees that may put organisational information security at risk and on-compliance to the policies, procedures and norms of an organization about information security).

Information security/librarian's 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. Information security/librarian's security is influenced by the people who use the same technologies that enable these processes in accordance with which it takes place. The increasing influence of thinking about information security policies indicates the width and complexity of the content that is being covered. Information security can be defined as a state of condition of confidentiality, integrity, and availability of data, which is achieved by applying certain standards and measures, and organizational support for business planning,

implementation, verification, and updating of standards and measures (Narodne 2007). The aim of information security activities is the detection and prevention of non-authorized information technology user activities such as librarians from malicious behaviours against organization assets that they are supposed to protect (Gollmann 1999). Chang and Lin (2007) stated that information security is a social and organisational problem since technical systems must be operated and used by people.

University libraries are vulnerable to security risks from the private and public populations. Further, 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 organisations 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 programs (3) and security education and training (4) to approaches that take into account deterrents (5) as well as cognitive factors (Posey et al, 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.

Organisational Values in Organisations

Values reflect what one feels is important in their life. At the individual level, values could include concepts such as caring, empathy, or trust, among many others. At the organisational level, examples of values might include accountability, customer service, and safety. Of course, it is certainly possible that personal and organisational values overlap or even become indistinguishable. This common ground between organisational and personal values is where a leader has the opportunity to change an organisation’s culture because ultimately values are what define a person’s standards of behavior. Because culture is the collection of expectations and norms that determine how a group behaves, values and culture are closely related. Values are the enduring beliefs that a specific mode or end state of existence is personally or socially preferable to an opposite or converse code of conduct or end state of existence (South-West College, 2016). Value is a concept that

describes those beliefs of an individual culture. According to Atta-panin (2015), values represent the judgement of what individuals or organisations consider to be important forming the basis for how decisions and actions are evaluated. The power of deeply held beliefs is that they determine how individuals act without thinking, that is, how they naturally react to various situations. A set of values may be placed into the notion of a value system.

Organisational values form the norms, guidelines, principles, and expectations that prescribe acceptable behaviours by employees in particular situations and control the behaviour of organizational members towards one another and within work group. In other words, organisational values serve as a measure of Organisational culture (Thomas, 2013) by prescribing how things ought to be and how members of an organization are expected to behave (Suar & Khuntia, 2010). According to Adegoke, (2018) cited Bourne et al (2013), the significance of Organisational values is underlined by their central place in many Organisational phenomena such as identity (Ashforth et al., 1989), and culture (Schein, 1985), person-organisation fit (Cable et al, 2004) and socialization (Dose, 1997). Bronwyn (2004) contends that organizational values are a lever for change, as they underpin the culture needed to enable organisations to achieve key goals. In other words, an organization’s performance is greatly influenced by its cultural values. Therefore, useful lessons can be learnt from studying the differences in the corporate performance of different academic institutions within the same country as well as efforts to transform moribund organisations that do not either have core values to guide their operations or live out their espoused values. Puplampu (2004)

found that core organisational values and how these values are lived out greatly shape the behaviour of organisational members, set the scene for performance standards and drive managerial thinking, leading to competitive edge and higher performance of university libraries, firms and other organizations. Barrett (2005) adds that, when organisations unite around a shared set of values, they become more flexible, and less hierarchical, less bureaucratic, and develop an enhanced capacity for collective action.

Empirical Review

Sharon et al. (2020) in the study “Values at Work: The Impact of Personal Values in Organisations” This paper reviews and integrates past research on personal values in work organisations, seeking to portray the role personal values play in shaping the choices and behaviour of individuals in work settings. They said that Values play a central role in guiding organisations. Bedani (2012) investigated the influence of organisational values on stimuli and barriers to creativity in the work environment in academic libraries. The results of the study showed that the organisational value of autonomy emerged as the best predictor of both organisational support for resistance to new ideas, such as concern for community, realization, and conformity, were positively related to support new ideas, whereas the relationship with tradition and mastery was negative. The author found that the work context must favour autonomy, the overcoming of conservatism, tolerance, equality in relationships with employees, competence, success, courtesy, and respect in work relationships to foster creative processes. The study concluded that organisational values play an important role in the expression of creativity in workers.

Canova and Porto (2010) conducted a study with teachers in secondary schools to identifying the impact of organisational values on occupational stress since creativity is required for the teachers; intellectual development and students’ involvement. The researchers found that teachers who reported stronger organisational values of autonomy, well-being, ethics and concern with the community reported less occupational stress. The authors concluded that organisational values significantly influence the occupational health of teachers. Humphrey and Mark (2013) investigated ‘Organisational values: A dynamic perspective’ and made the case that there are four distinct forms of organisational values- espoused, attributed, shared and aspirational. These partial, but related forms encompass variation in temporal orientation and levels of analysis. They used the forms to reveal the dynamic nature of organisational values by delineating the evolution of gaps and overlaps between them. They set out a series of propositions, originating from institutional, organisational and managerial sources to explain the movement between these distinct forms of values and the potential implications for organisation behaviour and security behaviours. Finally, they considered the possibilities of this fine-grained analysis of the organisational values concept for future research.

Theoretical Framework

The General Deterrence Theory (GDT) is used to describe the Librarians’ Security Behaviour variable. 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 organisations 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 employee in the organisation. 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.

Value Theory is used to describe the Organisational Value variable. This theory was propounded by Rokeach in 1973. Rokeach proposed a list including two sets of values, namely the terminal values (referring to desirable and end-state existence; the goals that a person would like to achieve during their lifetime and may vary among different groups of people in different cultures) and instrumental values (referring to preferable modes of behaviour; means of achieving the terminal values).

Rokeach's 18 terminal and 18 instrumental values (Rokeach, 1973)

Table 1:

Terminal Values (End-States)

Social (Focus on Others)	Personal (Self-Focused)
A World at Peace	A Comfortable Life
A World of Beauty	An Exciting Life
Equality Family	A Sense of Accomplishment
Security Freedom	Happiness
Mature Love	Inner Harmony
National Security	Pleasure Salvation
Social Recognition T	Self-respect
True Friendship	Wisdom

Instrumental Values (Behavioural)

Moral (Focus on Morality and Relations)	Competence (focus on competence)
Broadminded	Ambitious
Forgiving	Capable
Helpful	Clean
Honest	Courageous
Loving	Imaginative
Cheerful	Independent
Obedient	Intellectual
Polite	Logical
Responsible	Self-Controlled

Source: Rokeach (1973)

Methodology

The study adopted the survey research design. The population for this study comprised of two hundred and ninety-five (295) professional librarians who have a first degree, a master's degree, and a Ph.D. in library and information science and other related field 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. 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.

Result

Research Question One: What are the digital security behaviour is exhibited by librarians in University libraries in South-East, Nigeria?

Table 2
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 log-out- 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	76	103	28	7	27	3.80	1.23

devices...	(31.5%)	(42.7%)	(11.6%)	(2.9%)	(11.2%)		5
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	1.28 3
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	1.19 0
Scheduled Backups						3.76	1.22 7
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	0.95 1
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	1.24 6
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	1.31 0
I have response plans as well as continuity plans in place in case of a security breach	59 (24.5%)	113 (46.9%)	7 (2.9%)	20 (8.3%)	42 (17.4%)	3.53	1.40 0
Use of Firewall						3.51	1.43 5
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	1.42 6
My organisation 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	1.44 4
Strong password						2.85	1.40 3
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	1.54 8
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	1.57 0
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	1.20 0

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I never divulge my passwords 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

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 security behaviour of librarians in universities in South-East, Nigeria is always practiced, 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 practiced was securing mobile devices (\bar{x} = 4.15, SD = 1.019), antivirus protection (\bar{x} = 3.88, SD = 1.178), scheduled backups (\bar{x} = 3.76, SD = 1.227) and firewall (\bar{x} = 2.85, SD = 1.403). The Table further revealed that strong passwords (\bar{x} = 2.5082; SD = 1.303) and securing laptops were sometimes practiced whereas the respondents do not participate in annual security awareness training.

Research Question two: What organisational values are prevalent among librarians in University libraries in South-East, Nigeria?

Table 4.3
Organisational Values in university libraries

Organisational values	Strongly agree	Agree	Disagree	Strongly disagree	Undecided	Mean	Std.
Integrity						4.17	0.867
At the organisation I work in, honesty is highly valued	103 (42.7%)	122 (50.6%)	7 (2.9%)	3 (1.2%)	6 (2.5%)	4.30	0.802
The organisation I work in encourages open knowledge and information sharing.	76 (31.5%)	140 (58.1%)	7 (2.9%)	12 (5.0%)	6 (2.5%)	4.11	0.871
At the organisation I work in the morality of the employees is valued.	79 (32.8%)	133 (55.2%)	12 (5.0%)	7 (2.9%)	10 (4.1%)	4.10	0.928
Respect						4.12	0.914
Tolerance at work is important in my organisation as individuals tolerate each other despite of religious or ethnic differences.	83 (34.4%)	135 (56.0%)	7 (2.9%)	8 (3.3%)	8 (3.3%)	4.15	0.887
At the organisation I work in, the employees are respected.	81 (33.6%)	129 (53.5%)	12 (5.0%)	10 (4.1%)	9 (3.7%)	4.09	0.940
Accountability						3.94	1.074
At the organisation I work in, there is an inspiring work vision, mission and philosophy.	86 (35.7%)	117 (48.5%)	6 (2.5%)	19 (7.9%)	13 (5.4%)	4.01	1.090
At the organisation I work in, self-actualization is encouraged (for example, the ability to	72 (29.9%)	132 (54.8%)	10 (4.1%)	15 (6.2%)	12 (5.0%)	3.98	1.020

give meaning to oneself).							
At the organisation I work in, the employees who are devoted to the job are valued	58 (24.1%)	135 (56.0%)	15 (6.2%)	13 (5.4%)	20 (8.3%)	3.82	1.113
Equality						3.90	1.050
At the organisation I work in, tolerance is encouraged (especially among ethnic groups).	67 (27.8%)	139 (57.7%)	15 (6.2%)	13 (5.4%)	7 (2.9%)	4.02	0.906
At the organisation I work in, the morality of the employees is valued	67 (27.8%)	136 (56.4%)	14 (5.8%)	11 (4.6%)	13 (5.4%)	3.97	1.004
Timely and constructive feedback to the employees on performance is provided at the organisation I work in.	65 (27.0%)	108 (44.8%)	29 (12.0%)	11 (4.6%)	28 (11.6%)	3.71	1.241
Team spirit						3.88	1.057
At the organisation I work in, employees are encouraged to feel like part of the organization.	68 (28.2%)	133 (55.2%)	16 (6.6%)	16 (6.6%)	8 (3.3%)	3.98	0.957
At the organisation I work in, team-work is encouraged.	68 (28.2%)	130 (53.9%)	14 (5.8%)	8 (3.3%)	21 (8.7%)	3.90	1.119
Employee achievements are recognized at the organisation I work in (for example employees are praised, and acknowledged).	55 (22.8%)	123 (51.0%)	32 (13.3%)	13 (5.4%)	18 (7.5%)	3.76	1.095
Creativity						3.85	1.133

At the organisation I work in, the employees who are productive and work effectively are valued.	73 (30.3%)	125 (51.9%)	14 (5.8%)	10 (4.1%)	19 (7.9%)	3.93	1.112
At the organisation I work in, healthy competition between employees is encouraged.	68 (28.2%)	118 (49.0%)	21 (8.7%)	17 (7.1%)	17 (7.1%)	3.84	1.125
At the organisation I work in, initiatives and new ideas provided by the employees are valued	57 (23.7%)	132 (54.8%)	18 (7.5%)	9 (3.7%)	25 (10.4%)	3.78	1.162
Compliance with security, rules and regulations						3.54	1.368
At the organisation I work in, there are understandable written rules of work policies.	78 (32.4%)	125 (51.9%)	6 (2.5%)	13 (5.4%)	19 (7.9%)	3.95	1.130
At the organisation I work in, job security is provided.	63 (26.1%)	108 (44.8%)	19 (7.9%)	14 (5.8%)	37 (15.4%)	3.61	1.344
At the organisation I work in, response to threats are handled with immediate effect	64 (26.6%)	94 (39.0%)	10 (4.1%)	23 (9.5%)	50 (20.7%)	3.41	1.489
At the organisation I work in, verbal agreements are upheld.	53 (22.0%)	83 (34.4%)	25 (10.4%)	20 (8.3%)	60 (24.9%)	3.20	1.507
Safety and health						3.54	1.269
At the organisation I work in, the health of the employees is cared for (for example, health courses, and sporting events are initiated)	49 (20.3%)	74 (30.7%)	58 (24.1%)	22 (9.1%)	38 (15.8%)	3.31	1.325

At the organisation I work in suitable work conditions are provided (for example, there is provision for fans and air conditions)	61 (25.3%)	110 (45.6%)	35 (14.5%)	14 (5.8%)	21 (8.7%)	3.73	1.161
An adequate physical work environment for the employees is provided at the organisation I work in (for example, the necessary tools are provided).	62 (25.7%)	98 (40.7%)	31 (12.9%)	16 (6.6%)	34 (14.1%)	3.57	1.321
Employee welfare						3.40	1.267
At the organisation I work in, salaries are paid on time.	72 (29.9%)	85 (35.3%)	59 (24.5%)	9 (3.7%)	16 (6.6%)	3.78	1.117
At the organisation I work in, bonuses are provided according to performance.	50 (20.7%)	53 (22.0%)	75 (31.1%)	28 (11.6%)	35 (14.5%)	3.23	1.305
The organisation I work in provides all social guarantees (for example, paid vacations, health insurance, pension plan, benefits in the event of accidents, maternity/paternity benefits, benefits in cases of serious illness)	52 (21.6%)	56 (23.2%)	61 (25.3%)	29 (12.0%)	43 (17.8%)	3.19	1.379
Grand Mean						3.82	1.111

Source: Researcher's Field Survey, 2023

Decision Rule: 4.20-4.99 = Strongly agree; 3.40-4.19 = Agree; 2.60-3.39 = Disagree; 1.80-2.59 = Strongly disagree; 1.0-1.79 = Undecided;

Table 4.4 shows what librarians in university libraries in South-East, Nigeria agreed that organisational values are generally established and prevalent in the libraries as indicated by the

grand mean of 3.82(SD = 1.111) on a 5-point Likert-type scale. Organisational value was categorized into employee welfare, team spirit, integrity, equality, creativity, accountability, compliance to security, rules and regulations, respect, and safety and health. The findings further revealed that integrity had the highest average mean ($\bar{x} = 4.17$, SD = 0.867) while employee welfare had the lowest average mean ($\bar{x} = 3.40$, SD = 1.267) on a 5-point Likert-type scale. While one would expect robust employee welfare package in university libraries to top the list, however, this is not the case as shown in the study ($\bar{x} = 3.40$, SD = 1.267). Therefore, one could infer from the findings that, a quite number of respondents agreed that employee welfare is considered important in securing organisations' data from hackers in the university libraries in South-East, Nigeria.

Research Question Three: What are the challenges facing librarians' security behaviours in Universities in South-East, Nigeria?

Table 4.4 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 to 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 my library	98	(40.7%)	143	(59.5%)
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. The findings revealed the challenges of librarians' digital security behaviour in the study 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 acarefree attitude among co-workers in handling sensitive data in the library (65.1%), lack of awareness to 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 finding, it can be inferred that librarians in University libraries in South-East, Nigeria, needs constant training as regard compliance to security on organization data protection.

Hypothesis Two: Organisational values have no significant influence on librarians' digital security behaviour in university libraries in South-East, Nigeria.

Table 4.8 Simple linear regression analysis of organisational values and librarians' digital security behaviour

Predictors	B	Std. Error	Beta (β)	T	P	R ²	Adj. R ²	F	ANOVA (Sig.)
(Constant)	2.518	0.189		13.325	0.000	0.095	0.091	25.144	0.000
Organisational Value	0.246	0.049	.309	5.014	0.000				
Dependent Variable: Librarians' Security Behaviour Predictor: (Constant), Organisational Value DF (F-Statistic) = 1, 240 DF (T-Statistic) = 239									

Source: Field Survey Results, 2023

Estimated model

The model for the regression output is estimated as:

$$LSB = \beta_0 + \beta_1 OV + \mu$$

Where LSB = Librarians' security behaviours, OV = Organisational value, and μ = error term

Table 4.8 shows that organisational value has a positive and significant influence on librarians' security behaviour in university libraries in South-East, Nigeria ($R^2 = 0.095$, $\beta = 0.309$, $t(239) = 5.014$, $p < 0.05$). The $\beta =$

0.246 and t -value of 5.014 affirms that the regression coefficient for organisational values is statistically significant. The model shows that organisational values explain 9.5% ($R^2 = 0.095$) variation in librarians'

security behaviours in university libraries in South-East, Nigeria. This implies that organisational value is a significant predictor which predicts the librarians' security behaviours. Therefore, the null hypothesis (H_02) which states that organisational value has no significant influence on librarians' security behaviour in university libraries in South-East, Nigeria was rejected. The hypothesis is therefore restated as: Organisational value has a significant influence on librarians' security behaviour in university libraries in South-East, Nigeria. This result suggests that an increase in organisational values leads to better digital security behaviour among librarians in university libraries in South-East, Nigeria.

Discussion of Findings

Research question one sought to find the level of librarians' security behaviour 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 Ogedoihu and Adinchezor (2022) who found that library staff in two academic libraries in South-East, Nigeria, practiced 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 was available and practiced 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 practiced 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.

Research question two sought to identify organizational values prevalent in academic libraries in South-East, Nigeria. Among the values prevalent in academic libraries in South-East, Nigeria are integrity, respect, accountability, equality, team spirit, creativity, compliance with security, rules and regulations, safety and health and employee welfare. This study corroborates the findings of Souse and Porto (2016) who established prevalent organizational values in Brazil. This finding also supports the finding of Gorenak and Kosir (2012) who reported explicit organizational values among librarians in Slovenia. Correspondingly, this study agrees with the study of Bedani (2012) who submitted that organizational value was in place and was the best predictor of organizational support in academic libraries in Brazil. This finding is also in line with the assertion of Canova and Porto (2010) who concluded a prevalent organizational value system was in place in Brazil.

Hypothesis two revealed that organizational value has a positive and significant influence on librarians' security behaviour in academic libraries in universities in South-East, Nigeria. This finding is consistent with the finding of Riemenschneider, Burney & Bina (2023) who reported that organizational values influence security behaviour in USA. Similarly, this finding is in line with Gjerdrum, et al. (2018) findings which show that organisational values influence all variables in the model as hypothesized.

Conclusion and Recommendations

1. The research was conducted on organizational value and librarians' security behaviours in university libraries in South-East, Nigeria. It was carried out to ascertain the influence of

organizational value on librarians' security behaviours and also the challenges facing security behaviours. The findings showed that organizational values are generally established and prevalent in the libraries and based on the findings of this study, the study concluded that organizational values play an important role in enhancing and ensuring librarians' security behaviour in university libraries in South-East, Nigeria. The study recommended that even though organizational values are prevalent in university libraries in South-East, Nigeria, it is pertinent that stakeholders, university management and administrations look into employee welfare to sustain and possibly improve organizational value in their libraries. Furthermore, library authorities should ensure that librarians are sensitized on the importance of using strong passwords in their computers, making sure backups are done regularly for the safety of volumes of data in their systems to be protected from inside hackers and those outside.

References

- Adegoke, O. (2018). Financial information use and organizational values as determinants of ethical work behaviour and employee performance in stock broking firms in Lagos, Nigeria. PhD (Doctor of Philosophy) Thesis, Babcock University.
- Atta-Panin, J. (2015). Organizational behaviour: attitudes, and job satisfaction in a global market place. *Danish Journal of Psychology Sciences*, 45-50
- Ashfort, B. E., & Gibbs, B. W. (1990). The double-edge of organizational legitimation. *Organization Science*, 1, 177-194
- Aldag, R., & Kuzuhara, L. (2002). *Organizational behavior and management: an integrated skills approach*. South-Western Thomson Learning, Cincinnati, OH. Open Access
- Arieli, S., Sagiv, L., & Roccas, S. (2018). Values at work: the impact of personal values in organizations. *Applied Psychology, (Open science)*, – doi:10.1111/apps.12181
- Sharon, A., Sagiv, L., & Roccas, S. (2018). Values at work: the impact of personal values in organizations. *applied psychology, An International Review* 69 (2), 230–275, – doi:10.1111/apps.12181
- Babalola. Y.T., & Soyemi, O. D. (2014). Strategies for effective information security management in Nigerian Universities. *proceedings of 1st international Conference on Advanced Computerised Systems and Emerging Technologies: Computer Science Department, Babcock University, Nigeria (ICACSET)*. 174

- Bedani, M. (2012). O impacto dos valores organizacionais na percepção de estímulos e barreiras à criatividade no ambiente de trabalho. *Revista de Administração Mackenzie*, 13(3), 150-176.
- Blythe, J. A., Richard B. B., & Lynne C. C. (2022). The Workplace information sensitivity appraisal (WISA) scale. *Computers in Human Behavior Reports*, 8, 10024. <https://doi.org/10.1016/j.chbr.2022.100240>
- Bourne, H., & Jenkins, M. (2013). Organizational Values: a dynamic perspective. *Organization studies*, 34(4), 495–514. doi:10.1177/0170840612467155
- Cable, D. M., & Edwards, J. R. (2004). Complementary and supplementary fit: a theoretical and empirical integration. *Journal of Applied Psychology*, 89(5), 822-834. Doi:10.1037/0021-9010.89.5.82
- Canova, K. R., & Porto, J. B. (2010). O impacto dos valores organizacionais no estresse ocupacional: um estudo com professores de ensino médio. *Revista de Administração Mackenzie*, 11(5), 4-31.
- Campbell, T. (2016). Practical information security measurement. appress. Australia.
- Dose, J. J. (1997). Work values; an integrative framework and illustrative application to organizational socialization. *Journal of Occupational and Organizational Psychology*, 70, 219-240
- Guo, K. H. (2013). Security-related behavior in using information systems in the workplace: A review and synthesis. *Computers & Security*, 32(), 242-251. doi:10.1016/j.cose.2012.10.003
- Lincoln, A. J. (1984). *Crime in the Library: A study of patterns, impact, and security*. New York: Bowker.
- Mabawonku, T., & Madukoma, E. (2022). Information security awareness and information security compliance in University Libraries in South-West, Nigeria. ResearchGate.
- Michael, M. W. (2023). The role of organizational culture in cybersecurity: building a security-first culture council for medical schemes, policy research and monitoring, Pretoria, South Africa.
- Mayowa-Adebara, O., & Aina, F. R. (2016). Work environment and organizational commitment of staff in academic libraries in Lagos State, Nigeria. *Journal of Applied Information and Technology*, 9(1), 39-48.
- Nath, R., & Deka, D. (2020). Practice of security systems in University Libraries of Assam
- Ofori, D. F., & Sokro, E. (2022). Examining the impact of organisational values on corporate performance in selected Ghanaian. *Global Management Journal*, 54(6)
- Oguedoihu, J. C., & Adinchezor I. P. (2022). Library and information services and security challenges in two selected academic libraries in Southeast Nigeria. *Ghana Library Journal*, 27(2)
- Posey, C., Roberts, L. T., & Lowry, B. P. (2016). The impact of organizational commitment on Insiders' motivation to protect organizational information assets. *Journal of Management Information Systems* 32(4):179-214. ResearchGate.

- Reis , O., Oliha, J. S., Osasona, F., & Obi, O. C. (2024). Cybersecurity dynamics in Nigerian Banking: trends and strategies review. *Computer Science & IT Research Journal*. 5(2); 336-364, 2024 DOI: 10.51594/csitrj.v5i2
- Schein, E. (1985). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.
- Suar, D. & Khuntia, R. (2010). Influence of personal values and value congruence on unethical practices and work behaviour. *Journal of Business Ethics*, 97(3), 443-460.
- South-Western College (2012). Core Values. Retrieved from <https://www.swmich.edu/about-SMC/accreditation-mission>, 2012
- Rokeach, M. (1973). *The nature of human values*, New York, NY: Free Press.
- Thecla, A., & Aroh. C. C. (2020). Management of information security in Public Universities in Nigeria. *International Journal of Digital Society (IJDS)*, 11(1); 1576. <http://dx.doi.org/10.20533/ijds.2040.2570.2020.0196>
- Thomas, T. P. (2013). The effect of personal values, organizational values, and person organisation fit on ethical behaviours and organizational commitment outcomes among substance abuse counselors; A preliminary investigation. PhD (Doctor of Philosophy) Thesis, University of Iowa. Retrieved from <http://ir.uiowa.edu/etd/4920>.
- Ying, L., Nan, Z., & Mikko, S. (2019). Keeping secure to the end: a long-term perspective to understand employees' consequence-delayed information security violation. *Behaviour & Information Technology*, 38(5).