

RESEARCH ARTICLE

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Predictive role of personality on cyberloafing within the Nigerian civil service and the mediatory role of ethical climate

Omonigho Simon Umukoro, Abigail Modupe Rowland-Aturu, Olubiyi Peter Tomoloju, Oghenetega Elizabeth Wadi

ABSTRACT

Economic evaluations and the cost implications of cyberloafing among employees have generated calls for scholarly attention and empirical-based interventions. This study therefore examined the influence of personality on cyberloafing, and the mediatory effect of ethical climate. The study adopted a cross-sectional survey, with the use of a structured questionnaire. A sample of 696 civil servants from the federal secretariat in Oyo State, Nigeria participated in the study. Data were obtained using a structured questionnaire consisting of Eysenck Personality Inventory (EPI), ethical work climate scale, and an adapted cyberloafing scale. Sociodemographic description of the participants showed that 63% were male with ages ranging from 28 to 56 years ($\bar{x} = 42.23$, $SD = 3.48$). Results showed that the introduction of ethical climate dimensions of law and code ($\beta_4 = -0.123$; $p < 0.05$) and rules ($\beta_4 = -0.110$; $p < 0.05$) accounted for a reduction in the predictive strength of extraversion on cyberloafing ($\beta_1 = 0.290$; $p < 0.01$; $\beta_4 = 0.076$; $p < 0.05$). This is consistent with partial mediation. The results obtained in this study imply that it is necessary for management of organizations to formulate and implement specific policies aimed

at reducing cyberloafing by restructuring ethical elements in the workplace to boost commitment toward professional and organizational ethics.

Keywords: Cyberloafing, Ethical climate, Nigerian civil service, Personality

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INTRODUCTION

Efforts of the Nigerian government to enhance productivity levels within the civil service led to the establishment of the Bureau for Public Service Reforms (BPSR), to ensure that optimum standards are set and met by employees within the public sector. The BPSR was tasked with introducing several employee targeted reforms aimed at improving employee performance [1]. However, more than a decade after the creation of the BPSR, there are still public concerns over the declining performance within the public service. While the efforts of the BPSR might have brought about significant improvements in selected sectors within the civil service, a holistic picture shows that many areas of concern, which hamper employee productivity, have not been addressed.

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One of such employee-related challenges emanates in the form of cyberloafing.

With the proliferation of the new media into the society, managements of several organizations are now faced with a trend of cyberloafing among employees. The term “cyberloafing” has been defined [2] as a set of behaviors in which an employee engages in electronically mediated activities that his or her immediate supervisor would not consider job-related. Similarly, Blanchard and Henle [3] viewed cyberloafing as the frequent and personal use of internet at work by the employees while they disguised doing the actual work. Thus, cyberloafing can be conceptualized as a phenomenon which describes the act of employees using personal internet data or internet connection of the organization to surf through online social media platforms for personal purposes during work hours, while pretending to do legitimate work.

Cyberloafing is derived from the term goldbricking, which originally referred to applying gold coating to a brick of worthless metal. While there are some benefits from positive aspects of internet usage among employees, many organizations spend time, money, and effort trying to monitor computer usage, detect what employees are doing online, and write policies for employees on acceptable internet behavior. The ease of cyberloafing has been further enhanced by the intricate features of smartphones and tablets to perform any internet-related activity. As such, the act of cyberloafing, which might have required devoted effort, is now an unconscious trend in the workplace where everyone has access to a mobile device.

Some studies [4, 5] have highlighted benefits of cyberloafing as a palliative strategy for relieving and coping with workplace stress, laying emphasis on the assertions that engaging in certain internet activities takes only few seconds and may not be harmful to organizational productivity in the long run. This view, however, calls for a clear distinction between web surfing during work hours and break/leisure hours. Pelling and White [6] attest to the benefits of leisure surfing on the web for relieving stress and helping employees to recoup their thoughts; it, however, becomes harmful to organizational productivity when it is done on the job. On an average, employees are interrupted by notifications from new media platforms, such as Twitter, Instagram, and Facebook every 10 minutes, and it takes such employees about 23 minutes to get back to work [6]. Similarly, Hartijasti and Fathonah [7] assert that cyberloafing among employees is counterproductive and detrimental to employee performance, as it reduces time spent on workplace tasks, undermines employees' ability to concentrate, and impedes employee creativity at work. Thus, from a general standpoint, cyberloafing is not a desired behavior in the workplace.

Economic evaluations of the cost implications of cyberloafing have been investigated across the globe. Lim and Teo [8] found that companies in the United States lost \$54–85 billion annually in production

value while Taylor [9] estimated losses of about £1.5 billion and £300 million annually to small businesses and employers, respectively. Furthermore, threats of company information leakage and virus infiltration into the computer networks of organizations through use of computer systems to access unsecure websites have been established [10]. From a Nigerian perspective, Ezech et al. [11] have also noted concerns of the negative effects of cyberloafing on the productivity of both private and public organizations. Cyberloafing behaviors therefore pose threat to productivity of the Nigerian labor force which calls for scholarly attention and empirical-based interventions. Similarly, Nwakaego and Angela [12] provided insight on the demerits of cyberloafing among users of library and information resources. Furthermore, Palladan [13] found that negative moderating effects of lecturers' cyberloafing activity between lectures innovative behavior and dimensions of lecturer's job performance in Nigerian tertiary institutions.

Cyberloafing has often been associated with individual level variables, such as self-esteem [8], and locus of control [14], owing to the personal nature of the act. However, from a psychological perspective, personality traits are the initial precursors to the development and variance of many individual level variables. Personality traits are therefore responsible for differences in habitual behaviors from one person to another [15]. Personality is defined as a set of characteristics or traits of a person which accounts for relatively stable patterns of behaviors, cognitions, and emotions in individuals. It has also been shown that personality traits are more malleable by environmental influences than researchers originally believed [16]; thus, a focus on the role of personality differences may account for significant implications in the expression of cyberloafing among employees.

LITERATURE REVIEW

Personality and cyberloafing

Variations in the types and measures of personality traits abound in the literature [17, 18], however, a more compact model of these personality traits is subsumed by Eysenck [19] and represented in two dimensions: Introversion/extraversion and neuroticism/stability. Eysenck [19] called these second-order personality traits. Extraverts are sociable and crave excitement and change, and thus can become bored easily. They tend to be carefree, optimistic, and impulsive. They are more likely to take risks and be thrill seekers because they inherit an under-aroused nervous system and so seek stimulation to restore the level of optimum stimulation [15]. Introverts on the other hand lie at the other end of this scale, being quiet and reserved. They are already over-aroused and shun sensation and stimulation. A person's level of neuroticism is determined by the reactivity of their sympathetic nervous system. A stable

person's nervous system will generally be less reactive to stressful situations, remaining calm and level headed [20]. Someone high in neuroticism on the other hand will be much more unstable, and prone to overreacting to stimuli and may be quick to worry, anger, or fear. They are overly emotional and find it difficult to calm down once upset. Neurotic individuals have an autonomic nervous system that responds quickly to stress.

Personality models have been described as “double-edged swords” where individuals at both ends of the spectrum feel equally good or bad, so the direction of the affective reaction in social situations and activities still need empirical clarifications among specific populations. Studies that have associated personality traits with cyberloafing have produced ambivalent outcomes. Sage [21] reported that personality traits of conscientiousness, extraversion, agreeableness, openness to experience, and emotional stability are negative correlates of cyberloafing, with conscientiousness being statistically significant. Other studies have shown that agreeableness and conscientiousness are significant negative correlates of cyberloafing [22] while extraversion is a significant positive correlate of cyberloafing [23]. Jia et al. [16] also found conscientiousness and emotional stability to be negatively related to cyberloafing while extraversion was positively related to cyberloafing. Some of these contradictions are often a function of differences in the population sampled and measures used.

Ethical work climate, cyberloafing, and personality

The presence of mediatory variables embedded in the association between personality traits and cyberloafing may also account for disparities in outcomes. For instance, environmental influences have been highlighted as being significant in outcomes of personality variances within specific contexts. This assertion is firmly rooted in the latent state–trait (LST) theory of personality which is a generalization of classical test theory designed to take account of the fact that personality measurement does not take place in a situational vacuum. Unlike traits, which are stable characteristics, states may account for temporary behaviors or feelings that depend on a person's situation and motives at a particular time. Thus, certain aspects of the work environment may mediate the relationship between personality and cyberloafing. This study places emphasis on how ethical work climate mediates this relationship.

Ethical work climate describes the prevalent moral atmosphere and ethical conduct among employees within an organization. Indices of ethical work climate include organizational policies, procedures, and practices, alongside moral awareness, considerations, and consequences among employees within an organization [24]. Ethical climate can be measured across five dimensions: (i) Caring, which describes the level of mutual

harmony, care, and empathy among employees, (ii) Law and code describe the degree to which employees value and adhere to the ethics governing their profession, (iii) Rules that describe employees' degree of adherence rules and regulations within the organization, (iv) Instrumental that describes the degree to which employees look out for their own self-interest, (v) Independence describes the level to which employees are guided by their personal moral beliefs. Ethical work climate plays a significant role in organizational survival, as it has implications on the degree to which employees are productively engaged in work [25].

While there is a dearth of empirical studies on the mediatory role of ethical work climate on personality and cyberloafing, related studies have shown that ethical climate mediates linkages among workplace variables [24, 26–28]. These studies portray ethical climate as being a potent organization level predictor accounting for differentials in employee behavior in workplace settings. Justifications for the mediatory role of ethical work climate in workplace settings stem from its intervening role in curbing counterproductive work behaviors. For instance, Salgado [29] proposes that emphasis on ethical codes and regulations within organizations may reduce deviant behaviors, such as theft, disciplinary problems, substance abuse, and organizational rule breaking. Thus, from a logical point of view, ethical work climate may have implications in the association between personality and cyberloafing. This study intends to provide empirical insights into this proposition.

HYPOTHESIS

Based on the review of literature, personality traits have been implicated in cyberloafing outcomes, while ethical climate is assumed to mediate this relationship as highlighted in the conceptual framework (Figure 1).

The following hypothesis will therefore be tested in this study

H₁: Dimensions of ethical climate will mediate the independent influence of personality (extraversion and neuroticism) traits on cyberloafing among civil servants in Nigeria.

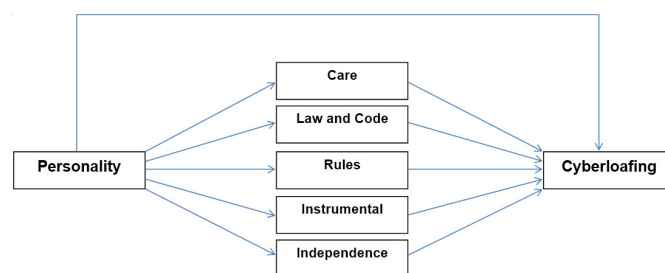


Figure 1: Conceptual framework.

MATERIALS AND METHODS

Sampling and data collection procedure

The study adopted a cross-sectional survey, with the use of a structured questionnaire. A sample of 696 civil servants from the federal secretariat in Oyo State, Nigeria participated in the study. Participants were selected via stratified random sampling, in which the various ministries within the secretariat represented different strata. The 28 ministries in Nigeria were collated into three strata via the ballot technique. This was achieved by assigning every n th term (n = every 1, 2, 3) to a ministry based on their alphabetic arrangement on a printed list. Simple random sampling was then employed to select three participating ministries from each of the strata. Participation of employees within each ministry was however obtained via convenience, depending on the availability and consent of eligible participants. Based on an estimated population of 3200 federal civil service employees in Oyo State as stipulated by the bureau of public civil service, a sample size for employees within each ministry was calculated as follows:

$3200/28$ ministries = 114 employees per ministry (equal no. of staff per ministry is assumed)

$9 \times 114 = 1028$ per stratum (If each stratum comprises nine ministries)

Therefore sample size for each stratum is calculated as follows:

$$n = N/(1 + Ne^2)$$

where n = sample size

N = population size

e = error margin

$$n = 1028/(1 + 1026 \times 0.05^2)$$

$$n = 1028/3.57$$

$$n = 287 \text{ (per stratum)}$$

$$\text{Total sample size (for the three strata)} = 287 \times 3 = 861 \text{ employees}$$

After questionnaire distribution, a response rate of 80.9% was achieved which amounted to a sample size of 696 participants. Sociodemographic description of the participants showed that 63% were male with ages ranging from 28 to 56 years (\bar{x} = 42.23, SD = 3.48). Majority of the participants were Yorubas (39%), followed by Igbos (28%), Hausas (17%), and other ethnic minorities (16%). In terms of their job rank, majority (61%) of the participants belonged to the junior cadre of the Nigerian civil service.

The services of a contact person (of mid-level cadre) within each ministry was sought to facilitate questionnaire distribution and collection. The contact person was intimated about the study and trained on the modalities for questionnaire distribution and retrieval. Copies of the questionnaire were distributed to the participants during work hours, with instructions to provide sincere responses to questionnaire items at their own convenience. Information about the study and

instructions on how to complete the instrument were made available in print for potential participants. To cater for confidentiality of employee responses, branded envelopes were provided alongside each questionnaire for participants to seal questionnaires after completion. All other ethical issues relating to informed consent, confidentiality, nonmaleficence, and beneficence were provided in print. Specifically, informed consent was achieved by including an item in which participants were to indicate their willingness to participate in the study. This item was prefixed by the following statement

"Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, kindly indicate your willingness and consent by placing a tick on the 'I agree' icon. Please note that after you indicate your consent, you are still free to withdraw at any time and without giving a reason. Withdrawing from this study will not have any effect on you or significant others. If you wish to withdraw from the study before data collection is completed, simply destroy and dispose the questionnaire...."

Consenting participants were expected to return completed questionnaires to the contact person within five working days of its receipt. Contact persons were adequately compensated for their services upon questionnaire retrieval.

Measures

Demographic data: Age was measured on a continuum (in years), job cadre was measured as an ordinal variable in junior and senior categories, while sex and ethnic affiliation were measured as nominal variables. Demographics with high intercorrelations among the predictors were controlled for to ensure that stable regression estimates were established between the precursors and cyberloafing.

Personality: The personality traits of the participants were measured using the EPI [19]. The EPI measures two pervasive, independent dimensions of personality, extraversion-introversion and neuroticism-stability, which account for most of the variance in the personality domain. Each form contains 57 "Yes-No" items with no repetition of items. The inclusion of a falsification scale provides for the detection of response distortion. The traits measured are extraversion and neuroticism. When the EPI is filled, three scores are obtained; the "lie score" (9 items), the "E score" (24 items), and the "N score" (24 items). The lie score measures how socially desirable respondents are trying to be, such that those who score 5 or more on this scale are probably trying to make themselves look good and are not being totally honest in their responses. Higher "E scores" tend toward extraversion traits while lower E scores tend toward introversion traits. Higher "N scores" tend toward neurotic traits while lower N scores tend

toward emotionally stable traits. Studies have established acceptable reliability coefficients ($\alpha = 0.65-0.86$) for the scale across various populations [30, 31].

Ethical work climate: Ethical work climate of the participants was measured using Victor and Cullen's [32] ethical work climate questionnaire. The 26-item scale assesses five dimensions of ethical work climate: law and code (4 items), rules (4 items), caring (7 items), independence (4 items), and instrumental (7 items). Items in the scale are structured to reflect participants' feelings and descriptions of the present situation in their organizations in line with different facets of ethical conduct. The scale has a six-point response format ranging from "completely disagree = 1" to "completely agree = 6." The original authors of the scale obtained reliability coefficient estimates ranging from 0.64 to 0.84 across the five dimensions of the scale as follows: law and rules (0.831), caring (0.835), independence (0.727), instrumental (0.638), and efficiency (0.657).

Cyberloafing: Cyberloafing was measured using a 22-item scale modified from two cyberloafing scales developed by Blanchard and Henle [3] and Lim et al. [33]. The scale outlines various cyber activities with respondents expected to indicate the extent to which they are involved in such activities during work periods. The Items are rated on a 5-point scale ranging from "not at all = 1" to "a great deal = 5." However, a column (0 = not applicable) was added to the response format for respondents that performed any of these activities as part of their job. For example, customer relation employees who are required to communicate with clients via instant messaging platforms may indicate that item 11 (send/received instant messaging) on the scale is not applicable. Results from an initial pilot study produced an acceptable reliability coefficient of 0.81.

RESULTS

The Baron and Kenny [34] method was used to test the study hypothesis. In this method for mediation, there are two paths to the dependent variable. The independent variable must predict the dependent variable, and the independent variable must predict the mediator. Thus, three regression conditions must be met for results to support mediation.

Step One: $Y = B_0 + B_1X + e$

Results from Table 1 show that extraversion emerged as a significant predictor of cyberloafing among civil service employees in Nigeria ($\beta = 0.290$; $p < 0.01$); such that extraverts are more likely to engage in cyberloafing than introverts. On the other hand, the neuroticism-stability continuum of personality had no significant influence on cyberloafing among civil service employees in Nigeria ($\beta = -0.012$; $p > 0.05$). Based on the results obtained, the first condition for mediation is met.

Step Two: $Y = B_0 + B_1M + e$

Table 1: Multiple regression summary showing influence of personality on cyberloafing

DV	IV	β	t	p
Cyberloafing	Extraversion	0.290	7.957	<0.01
	Neuroticism	-0.012	-0.341	>0.05

DV: Dependent variable, IV: Independent variable

Results from Table 2 show that ethical climate dimensions of law and code ($\beta = -0.262$; $p < 0.01$), and rules ($\beta = -0.163$; $p < 0.01$) emerged as significant negative predictors of cyberloafing among civil service employees in Nigeria. This suggests that a climate which imbues employees to adhere to professional ethics and organizational rules is likely to stem down the tide of cyberloafing at work. Further results show that ethical climate dimensions of independence ($\beta = -0.040$; $p > 0.05$), care ($\beta = 0.032$; $p > 0.05$) and instrumental ($\beta = 0.028$; $p > 0.05$) did not emerge as significant predictors of cyberloafing among civil service employees in Nigeria. The results from Table 2 indicate that the second condition for mediation is supported.

Table 2: Multiple regression summary showing influence of ethical climate on cyberloafing

DV	IV	β	t	p
Cyberloafing	Law and code	-0.262	-6.821	<0.01
	Independence	-0.040	-0.825	>0.05
	Care	0.032	0.199	>0.05
	Rules	-0.163	-4.228	<0.01
	Instrumental	0.028	0.584	>0.05

DV: Dependent variable, IV: Independent variable

Step Three: $M = B_0 + B_1X + e$

The influence of personality on ethical climate dimensions which predicted cyberloafing was sought in Table 3. Results showed that extraversion predicted positive perceptions of law and code ($\beta = 0.364$; $p < 0.01$) and rules ($\beta = 0.275$; $p < 0.01$) while neuroticism had no significant influence on the selected ethical dimensions. The results from Table 3 indicate that the third condition for mediation is supported. Thus, establishing a zero-order relationship among the study variables implies that mediation may exist.

Table 3: Multiple regression summary showing predictive influence of personality on ethical climate

DV	IV	β	t	Sig.
Law and code	Extraversion	0.364	10.283	<0.01
	Neuroticism	0.003	0.072	>0.01
Rules	Extraversion	0.275	7.525	<0.01
	Neuroticism	-0.020	-0.536	>0.01

DV: Dependent variable, IV: Independent variable

Step Four: $Y = B_0 + B_1M + B_2M + e$

Results from Table 4 show that the personality trait of extraversion ($\beta = 0.076$; $p < 0.05$) had a significant positive influence on cyberloafing while ethical climate dimensions of law and code ($\beta = -0.123$; $p < 0.01$) and rules ($\beta = -0.110$; $p < 0.01$) had significant negative influence on cyberloafing. In evaluating the mediatory role of the significant dimensions of ethical climate in the link between personality and cyberloafing, the compared results of beta (β) weights and p value of the variables in Steps 1 and 4 of the model are presented in Table 5.

Results from Table 5 show that the influence of extraversion on cyberloafing in Step 1 of the model ($\beta = 0.290$; $p < 0.01$) was significantly reduced in Step 4 of the model ($\beta = 0.076$; $p < 0.05$) when dimensions of ethical climate were introduced. Thus, the introduction of law and code ($\beta_4 = 0.123$; $p < 0.05$) and rules ($\beta_4 = -0.110$; $p < 0.05$) accounted for a reduction in the strength of influence from extraversion on cyberloafing ($\beta_1 = 0.290$; $p < 0.01$; $\beta_4 = 0.076$; $p < 0.05$). This is consistent with partial mediation in which the path from X to Y is reduced in absolute size but is still different from zero when the mediator is introduced. However, the influence of neuroticism traits on cyberloafing was not significant in both Step 1 ($\beta = -0.012$; $p > 0.05$) and Step 4 ($\beta = -0.011$; $p > 0.05$) of the model, irrespective of the introduction of ethical climate dimensions.

Table 4: Multiple regression summary showing predictive influence of personality traits and ethical climate dimensions on cyberloafing

DV	IV	β	t	p
Cyberloafing	Extraversion	0.076	1.622	<0.05
	Neuroticism	-0.011	-0.312	>0.05
	Law and code	-0.123	-5.457	<0.01
	Rules	-0.110	-3.307	<0.01

DV: Dependent variable, IV: Independent variable

Table 5: Comparison of β weights in Step 1 and Step 4 of the model

IV	MV	Step 1		Step 4	
		β	p	β	p
Extraversion		0.290	<0.01	0.076	<0.05
Neuroticism		-0.012	>0.05	-0.011	>0.05
	Law and code			-0.123	<0.05
	Rules			-0.110	<0.05

IV: Independent variable, MV: Mediating variable

DISCUSSION

Issues of cyberloafing among employees have been on the front burner of academic discourse in the wake of surges and revolutionary trends in social media across the globe. This study therefore hypothesized that the usage patterns of social media during work hours may be influenced by employees' personality structure and mediated by the ethical climate at work. Having tested the empiricism of this hypothesis via a field survey of civil service employees in Nigeria, it was found that personality traits of extraversion were a significant positive predictor of cyberloafing among employees. This may be attributed to the vulnerable nature of extraverts toward socially stimulating environments which endears them to social online platforms and other sources of entertainment via web surfing and cyberloafing [35]. Extraverts are often described as talkative, sociable, action-oriented, enthusiastic, friendly, and outgoing. On the negative side, they are sometimes described as attention-seeking, easily distracted, and unable to spend time alone without interactions. These characteristics of extraverts highlight the basis for their propensity to engage in cyberloafing. Similar results on the influence of extraversion on cyberloafing have been obtained in other related studies [16, 21, 22, 36].

Further results showed that ethical climate dimensions of law and code and rules mediated the influence of extraversion on cyberloafing. This was evident in the fact that the introduction of law and code and rules as dimensions of ethical climate reduced the predictive influence of extraversion on cyberloafing among civil service employees in Nigeria. This mediatory impact of law and code and rules as dimensions of ethical climate may stem from the fact that both constructs are based on adherence to regulations. While law and code describe a climate that fosters upholding professional values, rules describe a climate that fosters adherence to organizational principles. A climate that nurtures commitment to professional or organizational values may dampen the exhibition of individual-based characteristics, in a bid to conform to group norms. Thus, the influence of individual personality traits on cyberloafing may be dampened within a workplace that fosters adherence to regulations.

The mediating role of ethical climate dimensions on associations of extraversion and cyberloafing may be theoretically hinged on the operant conditioning theory [37] which contends that a certain behavior and a consequence, either a reward or punishment, have a connection which brings about learning (or unlearning). The reward or punishment acts as a reinforcer which increases (or decreases) the frequency or rate of a behavior by means of presenting a stimulus shortly after the display of behavior. In this instance, cyberloafing impulses may be unlearned if ethical dimensions of "law and code" and "rules" are prominent features of workplace policies with attendant rewards and punishments.

In support of these findings, ethical climates have been found to promote prosocial behavior [35] and have been associated with stronger work performance [36]. Similarly, the social identity theory [38] suggests that ethical climates have a positive impact on employees' behavioral tendencies [39, 40]. The central statement of the social identity approach is that, whereas in many situations people think about themselves as unique and independent individuals, who behave on the basis of their own idiosyncratic characteristics, in many other contexts they are inclined to think of themselves (and others, in turn) in terms of group membership (e.g., in terms of their belonging to an organization). This latter position plays out through the specific contextual factors with mediatory effects over personal inclinations.

CONCLUSION

Results from this study highlight the influence of personality on cyberloafing, suggesting that extraverts within the workplace are more likely to engage in cyberloafing. However, it may not be practically possible to implement personality modification interventions in a bid to mitigate practices of cyberloafing among civil service employees. However, results of the significant mediators in the study draw on interventions aimed at reducing cyberloafing through structure and policy modifications within the workplace. It may therefore be necessary for management of organizations to formulate and implement specific policies aimed at reducing cyberloafing by structuring ethical elements in the workplace to boost commitment toward professional and organizational ethics.

LIMITATIONS OF THE STUDY

There are some limitations to this study. As noted by researchers, a common concern of self-report data is social desirability (i.e., the bias in self-report data accounted for by respondents' desire to look good, which is because of the respondents' need for self-protection and social approval). Since the data for the study were collected using self-report questionnaires, the participants' responses may have been influenced by social desirability. This, in turn, might have affected the predictive power of some independent variables on the criterion variables. Moreover, the scales in this study were used in their original format, and not adapted specifically for a Nigerian population. This may have psychometric implications for responses to items that are not culturally relevant. Moreover, some of the scale dimensions had reliability coefficients that were below the acceptable 0.7. It is therefore recommended that further related studies should make use of scales developed and standardized for the population of interest.

The research design of this study was cross-sectional and it is thus enough to specifically infer a causal relationship. Undertaking research at one period in time can only reflect that period in time. Therefore, it would be interesting to replicate this study, with a longitudinal design, assessing individual cyberloafing during different stages of their professional careers alongside changes in various contextual factors. The study was limited to civil employees in Oyo State, therefore elements of cultural differences may account for some variances in study outcomes. Further studies should be more diverse and have national coverage, so that economic, cultural, ethnic, and geographical differences can be highlighted.

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Authors declare no conflict of interest.

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All relevant data are within the paper and its Supporting Information files.

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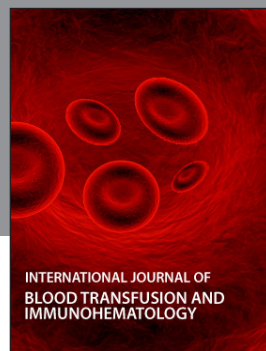
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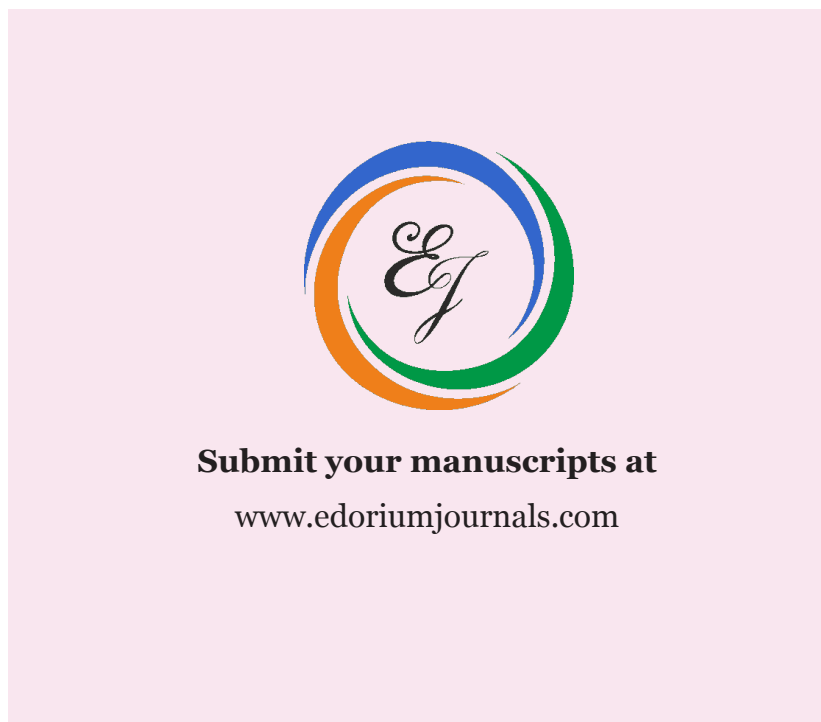
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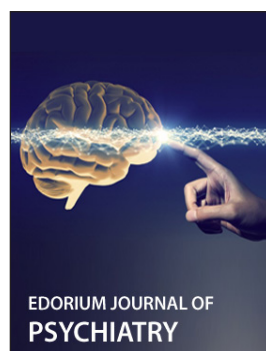
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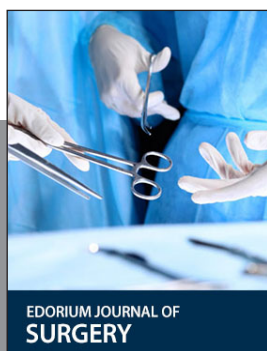
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