

Perceived Academic Stress, Cyberloafing and Academic Procrastination in University Students

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ABSTRACT

Aim of the Study: Academic stress has been a chronic problem among university students and tends to result in maladaptive responses like procrastination and cyberloafing. The digital environment, though providing academic resources, promotes distractions that affect the academic functioning of students. It is important to know the psychological processes sustaining these behaviors, especially in the context of academic settings in Pakistan. This research intended to examine the association between perceived academic stress, cyberloafing, and academic procrastination in university students.

Methodology: This quantitative correlational study involved 250 university students (males = 100, females = 150) from government universities in Pakistan, selected through non-probability purposive sampling. Data were collected using standardized tools: the Perception of Academic Stress Scale (Bedewy & Gabriel, 2015), the Smartphone Cyberloafing Scale in Classes (Polat, 2018), and the Academic Procrastination Scale (McCloskey & Scielzo, 2015).

Findings: Significant positive correlations were found among perceived academic stress, cyberloafing, and academic procrastination. Mediation analysis confirmed that cyberloafing mediated the relationship between academic stress and procrastination. Gender differences were observed in perceived academic stress and cyberloafing, with females reporting higher academic stress and males engaging more in cyberloafing. No significant gender differences were found in academic procrastination.

Conclusion: This study highlights the critical role of cyberloafing in explaining how academic stress contributes to procrastination among university students. The findings emphasize the need for institutional interventions, including stress management programs and digital literacy training, to minimize academic delays and online distractions in Pakistani higher education settings.

Keywords: Perceived Academic Stress, Cyberloafing, Academic Procrastination.

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1. INTRODUCTION

The introduction of the digital era has transformed numerous aspects of human life, among them education. Though technology has introduced many advantages to students in universities, it also comes with new challenges. Among these is the rising incidence of cyberloafing, a concept where people use their time to do anything other than work while on duty. This activity, when combined with perceived academic tension, can have a substantial effect on students' academic performance and well-being. Furthermore, academic procrastination, which is the habit of putting off academic work, also enhances these problems. In this paper, we seek to investigate the complex relationships between perceived academic stress, cyberloafing, and academic procrastination among university students. Through the examination of these correlations, we will uncover important insights into what drives these behaviors and how best to reduce their adverse effects.

Academic stress can be explained as the psychological, emotional, behavioral, and physiological tension people undergo when they see academic pressures in excess of their coping capacity (Bernstein et al., 2008; Auerbach & Grambling, 1998; Rahmawati, 2012; Pascoe et al., 2020). It happens when learners see academic demands as intrusions or dangers towards their studies, mostly caused by workload, pressure, and time limitation (Fahmi, 2011; Bedewy & Gabriel, 2015). Underlying factors involved are inadequate study habits, time management problems, difficult assignments, academic mobility, conflict with peers or professors, and emotional support deprivation (Hill et al., 2018; Pascoe et al., 2020; Agolla & Ongori, 2009). Students use different coping strategies with differences between genders in both stress and coping strategy; there is some evidence of increased stress in women, other evidence in men, and other findings of no gender difference (Karaman et al., 2019; Alyami et al., 2017; Bedewy & Gabriel, 2015; Safdar and Waseem, 2025; Yasin and Safdar, 2025). These findings, in the context of the current study, are applicable to the chosen student sample, where academic stress is investigated based on its determinants, effects, and gender-specific coping differences.

Cyberloafing, as coined by Lim (2002), is using the internet for personal use while working or studying and also referred to as personal web usage (Anandarajan & Simmers, 2005), problematic internet use (Davis et al., 2002), and cyberslacking (Vitak et al., 2011). In the academic environment, it encompasses activities such as accessing social media, viewing videos, or playing games that are not related to class (Hardiani et al., 2018; Twum et al., 2021). Lim and Teo (2005) divided it into email usage and browsing, while the others widened it to cover passive and interactive forms (Blau et al., 2006; Anandarajan et al., 2004). While some studies indicate either positive or neutral impacts (Lim & Chen, 2012), the majority link cyberloafing with low academic performance and decreased classroom participation (Ravizza et al., 2014; Taneja et al., 2015). The motive for the behavior is determined by variables such as self-control, workload, boredom, and anonymity (Marumpe et al., 2023; Cohen & Özsoy, 2024; Song et al., 2023). Cyberloafing is studied in the context of this research among students as a coping mechanism to academic pressure and stress.

According to McCloskey (2011) academic procrastination is the term used to describe the propensity to put off or delay activities and behaviors associated with academic assignments. This behavior, which involves self-handicapping, is increasingly common in contemporary society. When people put off doing a task they planned to do, they may lose productivity, perform poorly, and experience more stress. Stress, remorse, subpar academic performance, and low self-esteem are all consequences of procrastinating in an academic context (Goroshit, 2018). According to Negara's (2013) study, the majority of undergraduate and graduate program subjects engaged in moderate degrees of academic procrastination, with respective percentages of 25.6% and 33.3%. Moreover, Ferrari (2010) has also found academic procrastination to be task-dependent and to occur in an array of contexts and behaviors. Still, other research has examined other variables that contribute to students' procrastination behavior and academic achievement, including personality (Mar et al., 2005), internet addiction (Duff et al., 2004), and GPA (Hen & Goroshit, 2014). Procrastination and stress related to study are highly positively correlated; it has been found that there is greater stress with a greater rate of procrastination (Goher et al., 2022; Mercado et

al., 2021). Study performance is negatively impacted by procrastination, and students who delay submissions often witness a decline in their performance (Goher et al., 2022). Academic anxiety is highly associated with cyberloafing, defined as the improper use of the internet for purposes not academic in nature (Nweke et al., 2024). Cyberloafing is more prevalent in procrastinatory students, which, in turn, distract them from their academic responsibilities (Perdomo et al., 2024).

2. LITERATURE REVIEW

Nweke et al. (2024) carried out a research study, which examined a correlation between academic stress and the possibility of cyberloafing of university students. The underlying hypothesis of the study is that the relationship between academic stress and cyberloafing touches on the fatigue moderation and the mediator of self-control. The results show that the relationship between academic stress and cyberloafing is very high positive through which fatigue is a partial mediator and self-control is a mediating variable in the relationship between academic stress and cyberloafing. Likewise, Chen et al. (2021) explored the mediating roles of Fatigue and negative coping styles between cyberloafing and perceived stress in China using a correlational design. It was found that cyberloafing was predicted significantly by perceived stress and that the relationship was exclusively mediated by negative coping styles. Besides, the interaction between perceived stress and cyberloafing had a sequential mediating effect through both exhaustion and negative coping styles.

In a study, Özyer and Altınsoy (2023) investigated the connection between internet use problems and the academic procrastination of college students. They formed a parallel framework of mediation to assess the effect of internet usage in procrastination and mediating effects of academic self-efficacy, and self-control online learning. The results indicated that the problematic net use was positively linked with the academic procrastination where both self-regulated online learning and academic self-efficacy had a negative correlation with procrastination and problematic net use. Doktorová et al. (2023) investigated the connection between high Internet usage and scholarly procrastination in high school and university students, which demonstrate the adverse effects of the problematic Internet use on academic achievements. Findings showed that there was a positive relationship between problematic Internet use and academic procrastination. Stern (2008) though, could detect no meaningful differences between high school and university students with regard to the levels of procrastination.

A correlational study by Fitriani and Sabrial (2023) explored the correlation between academic procrastination, academic stress, and life satisfaction with high academic stress and procrastination levels from semesters one to eight were involved in the study. The findings indicate a significant correlation between academic stress, academic procrastination, and life satisfaction, highlighting the real associations between these variables in the student population. And Jochmann et al. (2024) conducted a study in an attempt to investigate the detrimental impact of procrastination on the mental well-being of students, namely, depression and anxiety on the mediating effect of perceived stress. The findings showed that procrastination has been a direct cause of increased depression and anxiety symptoms over time; perceived stress did not mediate this result and procrastination did not result in an increase in perceived stress.

The indigenous research on academic stress, procrastination, and cyberloafing or use of the internet has been studied in an isolated manner with very few studies taking an integrated view. Independent research has studied the relationship between academic stress and procrastination (Jauhar et al., 2024; Goher et al., 2022), the impact of use of the internet on academic achievement (Rizwan et al., 2016), and psychological correlates of procrastination such as worry, rumination, and test anxiety (Khan et al., 2019). While such contributions provide valuable insights into how procrastination and stress influence academic performance, and how internet use can both enhance and retard performance, they primarily isolate these variables. How these constructs influence one another specifically, the interactions of academic stress and procrastination with digital behaviors such as cyberloafing is under researched in the Pakistani academic context.

2.1 Theoretical Framework

The relationship between perceived academic stress, cyberloafing and academic procrastination among university students is possibly explained by Cognitive load theory (sweller, 1998). The Cognitive Load Theory (CLT), which differentiates between intrinsic, extraneous, and germane loads, stipulates that successful learning occurs when cognitive load is controlled (Sweller, 1988). It is sometimes challenging for learners to process information and achieves their learning goals when they are under cognitive overload caused by high academic pressure (Zeidner, 1998). Academic Stress, a form of extraneous load which is not directly related to learning material but comes from environmental or emotional pressure which could be fear of failure, deadlines or expectation from parents and teachers. Cyberloafing, or internet use that is not related to academics, is a coping mechanism utilized by students to alleviate feelings of overloads in reaction to this stress (Chou, 2018). But by delaying critical assignments and initiating a cycle of procrastination that further depletes cognitive resources, this habit can perpetuate academic stress (Goher et al., 2022). Procrastination heightens anxiety, decreases available time, and leads to last-minute cramming, all of which undermine maximum cognitive processing. It's a behavioral influence that impacts cognitive functioning outside the central content.

Hence, the mixture of academic stress and cyberloafing might detract from students' learning performance and academic achievement. Excessive academic pressure, as proposed by the Cognitive Load Theory, tends to overload students' cognitive capacity, prompting them to postpone academic work and resort to cyberloafing as an avoidant strategy to escape challenging tasks.

2.2 Objectives of the study

- It seeks to examine the relationships among perceived academic stress, cyberloafing and academic procrastination in university students.
- To explore if cyberloafing mediates the interrelationship between perceived academic stress and academic procrastination in university students.
- To explore the gender differences among perceived academic stress, cyberloafing and academic procrastination in university students.

2.3 Hypotheses of the study

H¹. There is likely to be a relationship among perceived academic stress, cyberloafing and academic procrastination in university students.

H². The relationship between perceived academic stress and academic procrastination is likely to be mediated by cyberloafing in university students.

H³. There is likely to be gender differences across perceived academic stress, cyberloafing and academic procrastination in university students.

3. METHODS AND MATERIAL

3.1 Research Design

The correlational research design was employed for this investigation. University students' perceived academic stress, cyberloafing, and academic procrastination was studied. The study's variables were examined without being controlled.

3.2 Instruments

The Perception of Academic Stress Scale. The Perception of Academic Stress Scale (Bedewy & Gabriel, 2015) scale that was constructed to capture the perception of academic stress. The PAS has three primary subscales, namely, academic expectations subscale, workload and examinations subscale, and

students' academic self-perceptions subscale. The associated items of those school stresses were transformed to 18 items, 5 points of Likert of type questionnaire, and it came up with the PAS.

The Smart Phone Cyberloafing Scale in Classes (SPCSC). The Smart Phone Cyberloafing Scale in Classes (SPCSC) was adopted by Polat (2018) to identify the extent of cyberloafing performed by university students using their smart phones within the classes. It has a total of three sub-dimensions, and a total of 16 items. It was scored based on a Likert Scale of 6 points. Browsing-Related Cyberloafing Sub-Dimension (BCSD) has 7 items, and Interactive Cyberloafing Sub-Dimension (ICSD) contains 6 items. The ECSD is composed of 3 items.

The Academic Procrastination Scale (APS). The Academic Procrastination Scale (APS) was developed by Justin McCloskey and Shannon A. Scielzo (2015). It measures the tendency of students to needlessly delay completing academic-related tasks. The APS consists of 25 items. Item no. 1, 8, 12, 14 and 25 were reverse coded. The empirical data indicated that academic procrastination is best understood as a single, overarching construct rather than distinct subscales.

3.3 Sample and Sampling Technique

Non-probability purposive sampling strategy was used in this research for the selection of the sample. The sample of the study consisted of 250 university students recruited from government universities in Lahore. Participants were unmarried undergraduate students enrolled in the 3rd and 4th years of a 4-year BS program, specifically from the behavioral sciences department to ensure consistency in academic background. Only students who owned and regularly used a mobile phone were included. Additionally, students working in IT-related fields, those engaged in online jobs, and individuals with a diagnosed history of severe psychiatric conditions that could hinder effective participation were not included in the study.

4. RESULTS

Various analyses were used to analyze the data using statistical software, IBM SPSS Statistics version 30.0.0. The statistical analyses used in the research included descriptive statistics of demographics, reliability analysis of the study variables. Person Correlation analysis was run to examine the relationship between study variables. Mediation regression through PROCESS SPSS macro by Andrew F. Hayes (2022) was used to see if cyberloafing mediates the relationship between perceived academic stress and academic procrastination. Also, an independent sample t-test was run to explore gender differences across the study variables.

The demographic sheet consist of personal and family information of the participants. It includes the age of the participants, gender, marital status, birth order, department name, current semester, current residence, CGPA, and monthly income.

Table 1: Descriptive statistics of demographic variables of university students (N=250)

Characteristics	M	SD	f	%
Age of Participants	21.80	1.79		
Gender				
Male			100	40
Female			150	60
Birth Order				
First born			65	26
Middle born			115	46
Last born			64	25.6
Only child			4	2.4
Current Semester				
5 or 6 semester			122	48.8

7 or 8 semester CGPA	3.29	.38	126	50.4
Current Residence				
Urban			233	93.2
Rural			16	6.4

Note. *M*= Mean, *SD*= Standard Deviation, *f*= Frequency, %= Percentage

Cronbach's alpha reliability for the perceived academic stress Scale was $\alpha = .738$, the smartphone cyberloafing scale was $\alpha = .890$ which was the highest among all the scales and the academic procrastination scale was $\alpha = .869$.

Table 2: Descriptive statistics and Reliability of Perceived Academic Stress, Cyberloafing and Academic Procrastination (*N*=250).

Scales	M	SD	Range	Cronbach's α
The Perceived Academic Stress Scale	55.28	9.70	31-81	.74
The Smart Phone Cyberloafing Scale	65.77	14.92	27-96	.89
The Academic Procrastination Scale	71.49	15.61	33-122	.87

Note. α = reliability coefficient, *M*= Mean, *SD*= Standard Deviation

4.1 Correlational Analysis

Pearson product-moment correlation revealed significant relationships among Perceived Academic Stress, Cyberloafing, and Academic Procrastination.

Table 3 Descriptive Statistics and Correlations for Study Variables (*N*=250)

Variables	M	SD	1	2	3	4	5	6	7
Academic Expectations	11.84	3.27	-	.23***	.16*	.18**	.16*	.27***	.60
Workload and Examinations	23.23	5.73		-	.32***	.65	.16*	.00	.13*
Students' Academic Self-Perceptions	20.22	4.55			-	.06	.08	.17**	.24***
Browsing-Related Cyberloafing	26.34	7.15				-	.67***	.51***	.20**
Interactive Cyberloafing	24.90	6.67					-	.46***	.19**
Entertainment Cyberloafing	14.54	3.69						-	.12
Academic Procrastination	71.49	15.61							-

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

The results show that academic expectations was positively correlated with workload and examinations, students' academic self-perceptions, and all forms of cyberloafing, but not with academic procrastination. Workload and examinations correlated positively with academic self-perceptions, interactive cyberloafing, and academic procrastination. Students' academic self-perceptions also showed a strong positive link with academic procrastination and entertainment cyberloafing. Browsing-related cyberloafing had strong correlations with both interactive and entertainment cyberloafing and a low positive correlation with academic procrastination. Interactive cyberloafing was strongly correlated with entertainment cyberloafing and moderately with academic procrastination. However, entertainment cyberloafing did not significantly correlate with academic procrastination, indicating that browsing and interactive cyberloafing are more associated with procrastination than entertainment-based activities.

4.2 Regression Analysis

Mediation regression analysis was run to see if cyberloafing mediates the relationship between perceived academic stress and academic procrastination.

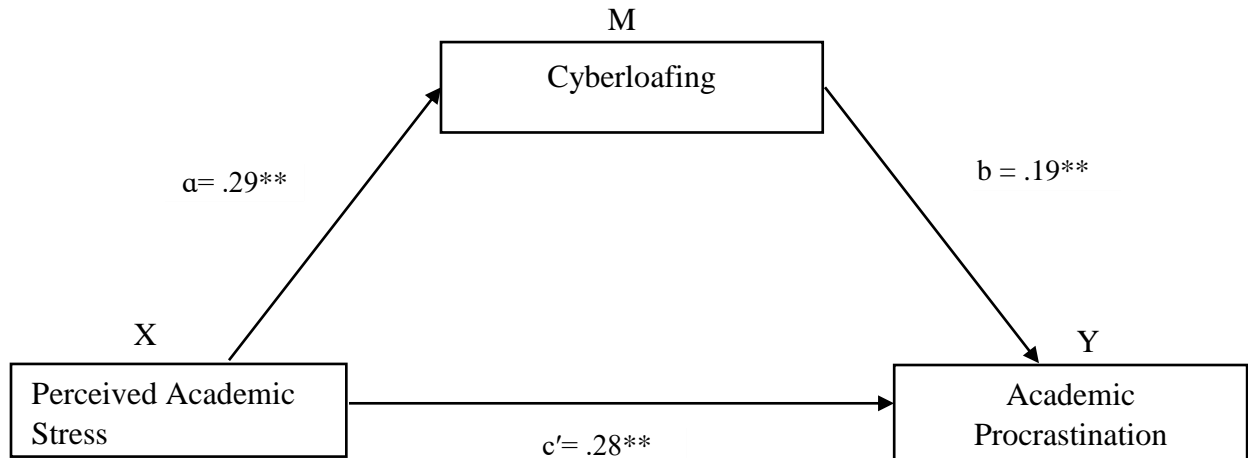
Table 4 Mediation analysis through Process (N=250)

Antecedent		M (Cyberloafing)				Y (Academic Procrastination)		
		B	SE	β		B	SE	β
X (Academic Stress)	α	.29**	.09	.19**	\acute{c}	.28**	.10	.17**
M (Cyberloafing)		-	-		b	.19**	.07	.18**
		R ² = .035				R ² = .073		
		F(1, 248)= 8.97, p<.01				F(2, 247)= 9.75, p<.01		

Note. B= unstandardized regression co-efficient; SE= standard error; β = standardized regression co-efficient; F= degree of freedom; R²= coefficient of determination.

Table 4 and following figure 1 shows, Perceived Academic Stress was positively associated with Cyberloafing (α = .29), and Cyberloafing was positively associated with Academic Procrastination (b = .19). A bootstrap confidence interval for the indirect effect (ab = .053) based on 5000 bootstrap resample was entirely above zero (0.011 to 0.107), suggesting that Cyberloafing mediates the association between Perceived Academic Stress and Academic Procrastination.

Figure 1: Mediation Model



4.3 Group Differences across Study Variables

To find about the mean differences in gender across study variables, an independent sample t-test was run. Results reveals that males and females had a significant difference, with females having a great level of academic expectation and entertainment cyberloafing than males do. Results also indicated males and females had a significant difference in workload and examinations and students' academic self-perceptions, with males having a greater mean difference than females do. No significant gender difference was found in browsing-related cyberloafing, interactive cyberloafing and academic procrastination.

Table 5 Results of *t*-test Independent sample examining Gender Differences across Study variables

Variables	Males		Females		t(250)	p	Cohen's d
	M	SD	M	SD			
Academic Expectations	11.08	2.90	12.34	3.41	-3.03	.003	.39
Workload & Examinations	24.32	6.06	22.51	5.38	2.47	.014	.31
Students' Academic Self-Perceptions	21.90	4.73	19.09	4.06	4.85	.000	.63
Browsing-Related Cyberloafing	25.72	7.12	26.75	7.16	-1.12	.264	.14
Interactive Cyberloafing	25.45	6.72	24.53	6.63	1.07	.284	.13
Entertainment Cyberloafing	13.80	3.62	15.03	3.67	-2.59	.010	.33
Academic Procrastination	73.53	15.52	70.13	15.56	1.69	.091	.21

Note. *n*=number of participants; *M* = Mean; *SD* = Standard Deviation

5. DISCUSSION

The results discussion has been divided into sub-sections according to the research hypothesis.

5.1 Relationship between perceived academic stress, cyberloafing and academic procrastination in university students

The hypothesis, that there is likely to be a relationship between perceived academic stress and academic procrastination, was tested. It was found that there was a significant positive correlation between perceived academic stress and academic procrastination suggesting that students with higher academic stress levels tend to procrastinate more. This implies that stress can hinder students' concentration, time management, motivation and other factors such as fear of failure can result in avoidance behaviors such as procrastination. This concurs with the work of Vincens (2021) who established a high correlation between procrastination and academic stress and also Goher et al. (2022) whose findings established a high positive correlation between stress and procrastination, meaning that increasing stress levels have increasing procrastination.

The research also speculates an extensive correlation between cyberloafing and academic procrastination, especially with browsing as well as interactive cyberloafing behavior. This implies that learners who indulge in specific types of cyberloafing have a greater likelihood of academically procrastinating. Such behavior may serve as a distraction or avoidance mechanism, where students escape academic demands by engaging in online activities, thereby delaying academic tasks. This is consistent with Margaretha et al. (2022), who researched the association between procrastination and cyberloafing activities and discovered that self-regulated learning moderates this relationship. Özyer and Altınoy (2023) also demonstrated that problematic internet use predicts academic procrastination, which was mediated by academic self-efficacy as well as self-regulated learning within an online context.

The third part of hypothesis is that there will be a substantial association between perceived academic stress and cyberloafing. A strong positive correlation was found in the study between cyberloafing and perceived academic stress, and it showed that students who experienced higher stress were more likely to utilize cyberloafing as an adaptation mechanism. The academic stress sources such as academic work load and student's academic self-perception leads to unhealthy coping mechanism if engaging in non-work related activities such as seeking entertainment sources and interaction related activities through smart phone usage. This is supported by Nweke et al. (2024), who discovered that cyberloafing and academic stress have a positive correlation, and fatigue serves as a partial mediator. Chen et al. (2021) also established that cyberloafing is predicted by perceived stress via negative coping strategies. Overall, these findings identify how important it is to regulate academic stress and cyberloafing to reduce procrastination and increase academic performance.

5.2 Cyberloafing as a mediator for Academic Procrastination in University Students

The second hypothesis of this research was to assess if the relation between perceived academic stress and academic procrastination is likely to be mediated by the level of Cyberloafing. The findings reveal that cyberloafing does mediate the relationship between perceived academic stress and academic procrastination. It was seen that academic stress was directly predicting academic procrastination and it was also seen to be predicting indirectly through cyberloafing, we can say that cyberloafing was a partial mediator for academic procrastination. Vines (2021) confirms a significant correspondence between procrastination and academic stress. This strong correlation suggests that as procrastination increases, so do levels of academic stress among students. It was also seen in this research that perceived academic stress was directly predicting academic procrastination. Most importantly, the mediation analysis indicated a significant indirect pathway: perceived academic stress increased cyberloafing, which in turn elevated academic procrastination. This mediation aligns with findings from Hibrian et al. (2022) and Chen et al. (2021), who found that students under stress often resort to online distractions as a coping mechanism, which subsequently contributes to procrastination. This indirect effect highlights the maladaptive role of cyberloafing as an emotion-focused coping response that exacerbates academic delay.

5.3 Gender differences across study variables

The third hypothesis is that gender differences are going to exist among perceived academic stress and cyberloafing and academic procrastination in the university students. Independent sample t -test was performed to ensure the gender checking in study variables. T-test results shows that there exist gender differences in terms of perceived academic stress. The magnitudes of stress males portrayed in the area of workload and stress in the area of examination and as well as academic self-perceptions of stress were also higher than the magnitudes of stress females portrayed in all these areas. These results can be correlated with the research carried out by Jauhar et al. (2024) which have shown that academic procrastination is a large positive predictor of academic stress. Also, male learners indicated the higher degree of academic stress and academic procrastination among high university girls. But on the subscale of academic expectations, females rated their stress to be higher. It implies that it has been seen that female students internalizes expectations more deeply and due to higher personal standards and academic ambition (Misra & Castillo, 2004). Subsequently, we find here that there were no differences in gender effect on cyberloafing except in the case of entertainment related cyberloafing. Females were incited to have more entertainment related cyberloafing compared to general males. One can compare it to the work by Chan et al. (2024), significant findings were obtained in terms of gender (women cyberloafed significantly more than men) and how it is perceived as a societal norm (the more students perceived cyberloafing to be a societal norm, the more acceptable it was to them). In addition, it was postulated that indeed gender differences exists in academic procrastination but the conclusion showed that no gender differences existed in procrastination in academic studies among university students. This can be corroborated by a study by Olaosebikan et al. (2023) who investigated academic self-efficacy, gender and procrastination among undergraduates in the University of Ilorin. The study found no significant gender differences in procrastinatory behavior, indicating that gender does not play a determining role in academic procrastination among university students.

5.4 Limitations and Suggestions

- The cross-sectional design utilized in the study captures data at a single point in time and thereby restricts the potential to create causal links among academic stress, cyberloafing and academic procrastination.
- Self-reported questionnaires are susceptible to social desirability bias where participants may underreport or overreport behaviors.
- Use a longitudinal design to better understand the direction and causality between stress, cyberloafing, and procrastination.

- Incorporate qualitative methods (e.g., interviews or focus groups) to explore deeper subjective experiences of academic stress and online behavior.
- Studies could explore how different patterns of device use (e.g., laptop vs. phone) influence cyberloafing, especially with the rise of hybrid or online learning.
- Based on the mediating role of cyberloafing, future research can develop and test interventions aimed at stress management and digital behavior regulation in academic settings.

5.5 Implications

- The study contributes to theory by identifying cyberloafing as a mediator between academic stress and procrastination.
- The study emphasizes the need for academic institutions to restructure workloads and deadlines to reduce perceived academic stress, which can indirectly reduce procrastination and cyberloafing.
- Findings suggest that university counseling centers should address stress and digital distractions in their support programs, helping students adopt healthier coping strategies.
- This study contributes to the theoretical understanding of how emotion-focused coping behaviors like cyberloafing can worsen academic delay, emphasizing the complex interplay between psychological stressors and behavior in university students.

6. CONCLUSION

The present study focuses on the significant relationships between cyberloafing, perceived academic stress, and academic procrastination in university students. On the basis of findings obtained and supported by existing research work, it has been found that perceived academic stress is positively associated with cyberloafing and academic procrastination, and cyberloafing itself is positively associated with academic procrastination. This implies that those students who are under more academic pressure tend to exhibit greater cyberloafing behavior, thereby promoting greater academic procrastination. This is in line with previous research quoting stress and maladaptive coping strategy as a factor for academic delay. In addition, the research established that cyberloafing mediates the relationship between stress in academics and procrastination, thereby indicating the indirect route through which stress acts on procrastination via internet distractions. Interestingly, differences by gender were noted in academic stress perceived and some of the cyberloafing activities and not procrastination in academics, adding further nuance to our understanding of these variables in university students. The findings of this study add to our understanding of the contribution that academic stress and coping behaviors such as cyberloafing have to procrastination, and emphasize the importance of stress management and technological distraction interventions. Through intervention against academic stress and dysfunctional online behavior, this study can be applied to guide interventions for increasing students' academic involvement and well-being, ultimately to healthier and more productive learning outcomes.

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Conflict of Interest

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