



The Impact of Social Media Overuse on Academic Stress Through Academic Procrastination Among College Students

Vaishnavi Kannan, Amity University, Noida

Vaishnavikannan2004@gmail.com

Abstract: As social media becomes increasingly popular among college students, the effect that overuse of these websites has on college students' academic functioning has been called into question. Academic stress has long been a common problem for students in higher education, which often is positively correlated with maladaptive academic behavior such as academic procrastination. This study seeks to investigate the proposition that social media overuse will be positively related to academic stress, and this relationship will be mediated by student procrastination. Social media overuse is defined as excessive, uncontrollable use of social networking websites that stimulates disruption of both the student's academic and non-academic life. Academic procrastination is defined as voluntary delay of an academic task despite adverse consequences. This study will use a quantitative research design with data obtained from standardized self-report scales measuring social media overuse, academic procrastination, and academic stress. The data will be analyzed for direct relationships between the variables and possible mediation by student procrastination. As hypothesized, social media overuse will significantly positively relate to academic procrastination and academic stress. Through providing explanation about how overuse of social media impacts students' academic job performance, this study aims to provide insight into how to encourage more healthy digital lifestyles for college students to reduce academic stress.

Keywords: *Academic Stress, College Students, Academic Procrastination, Social Media Addiction.*

1. Introduction

1.1 *Social Media Use Among College Students*

Digital media are transforming how people communicate, learn and socialise, with college students using social networking sites such as Snapchat, What's App, YouTube, Twitter and Instagram regularly. Social media can enhance learning when used appropriately providing opportunities for students to share ideas, collaborate and access course material (Cheng et al., 2009). There are concerns, however, about excessive and uncontrolled use. For example, research indicates that social media may impair learning by decreasing concentration and attention (Kuss & Griffiths, 2017; Rosen et al., 2014), and persistent alerts and ongoing streams of new content can reduce the time students spend without distraction.

1.2 *Academic Stress Among College Students*

Academic stress is defined as a state of mental health problem experienced by college students which occurs when demands placed on the individual outweigh the personal and social resources the individual is able to mobilize (Lazarus & Folkman, 1984). Academic stress can stem from pressure related to exams and deadlines, competition among academics, fear of failure and family expectations. Academic stress has been linked to anxiety, depression, sleeping problems, lack of motivation and poor academic performance (Misra & McKean, 2000; Pascoe et al., 2020). With the introduction of the internet and constant online access, this additional availability may add to student distractions and time pressure.

1.3 *Self-Regulation Problems Behind Academic Procrastination*

Academic procrastination is considered to be prevalent among college students and to be associated with poor academic outcome. It is "the act of needlessly and irrationally delaying an intended course of action despite expecting to be worse off for the delay" (Solomon & Rothblum, 1984). Studies have proposed that procrastination is a self-regulatory failure rather than poor time management, and that emotional, motivation and cognition factors affect procrastination behaviour (Steel, 2007). Students may procrastinate to temporarily relieve positive and negative emotions, such as anxiety, boredom and fear about academic work, but later feel guilty and pressurized.

1.4 *Excessive use of social networking and academic delaying*

The IV of social media use has also been proposed as potentially leading to academic procrastination. Social media use, particularly if it becomes uncontrolled, has the potential to interfere with one's usual routines, namely academic goals, as highlighted below (Andreassen, 2015). Social media is specifically designed in a way that can promote its use to be frequent due to constant updates and tailored information (Kuss et al., 2014). This use of social media

though may initially be to help relax by destressing or alleviating boredom, but over a period of time can be expected to contribute to avoidance of academic tasks. Wu et al., (2018) found that: “higher social media use was prospectively related to distractibility, procrastination, and frequent task switching.”

1.5 Relationship Between Academic Stress and Procrastination

Existing findings also reveal a correlation between academic procrastination and increased academic stress. Procrastination seems to intensify pressure, induce work to be completed haphazardly and increase anxiety related to academic achievement (Sirois et al., 2013). As students procrastinate until nearer to deadlines, time pressure and pressure are likely to be experienced. From a coping strategy point of view, procrastination may be considered an avoidance-based coping strategy while problem-focused strategies are generally more effective; therefore, procrastination may exacerbate academic stress thus establishing a feedback loop between academic stress and procrastination.

1.6 Academic Procrastination as a Mediating Mechanism

While there has been research on the uses of social media, academic procrastination and academic stress independently, less research on the relations among these variables exist. Academic procrastination may serve as a mediating variable between high use of social media and academic stress. Excessive use of social media may be found to attenuate important self-regulatory skill (e.g., attentional control, time management, persistence on task) that would promote less academic procrastination. This increased procrastination and the resulting greater academic stress may emerge.

1.7 Objectives of the Study

The current study will be able to find out the relation between social media overuse, academic procrastination and academic stress in college students. Furthermore, this study will examine whether social media overuse predicts academic procrastination and academic stress, and whether academic procrastination mediates the relationship between social media overuse and academic stress.

1.8 Rationale of the Study

Given that there is a high report of social media use among college students, yet high pressures and procrastination for academics, it is important to explore the associations of these variables. While students may realize that their social media use is excessive, there is still a struggle to manage their digital consumption and their academic workloads. This proposed research study seeks to add to this body of literature by exploring the interaction of social media over usage, academic procrastination, and academic stress.

2. Review of Literature

There have been numerous researches done on the relationship between digital technologies and academic procrastination in university students. For instance, Irfan et al. (2025) examined the relationship between mobile telephone addiction and academic procrastination, with psychological health as a moderating variable, with 168 university students. It was found that mobile telephone addiction, academic procrastination, and psychological health all had positive but non-significant relationships, but psychological health played a significant moderating role in the link between mobile phone addiction and academic procrastination. Gender significantly affected the results, whereby males reported higher mobile phone addiction and academic procrastination scores, while females reported slightly higher psychological health scores. Parallel to this, Wu, Zhang, and Jo (2025) looked at the relationship between fear of missing out (FoMO) and online social anxiety, with irrational procrastination and media multitasking as mediators, with 451 university students. Results indicated that FoMO was positively related to online social anxiety and both irrational procrastination and media multitasking served as partial mediators. In addition, Li, Gao, and Xu (2020) investigated 483 college students and looked at the mediating effects of academic self-efficacy on the relationship between smartphone addiction and academic procrastination. Results showed that there was a positive relationship between smartphone addiction and academic procrastination and a negative association between academic self-efficacy and both smartphone addiction and academic procrastination. Academic self-efficacy played a partial mediating role in the relationship between smartphone addiction and academic procrastination.

Liu et al. (2022) analyzed the data from 1,129 Chinese university students and found that both smartphone addiction and academic procrastination were positively correlated, with negatively correlation to time management and learning strategies. It was found that time management and learning strategies sequentially mediated the relationship between smartphone addiction and academic procrastination. Finally, Nadarajan, Hengudomsub, and Wacharasin (2023) looked at the relationship between internet addiction and academic procrastination with 470 Thai university students. They found that internet addiction was significantly positively correlated with academic procrastination and that academic procrastination could predict internet addiction. All in all, most of these studies show that excessive use of digital technologies such as mobile phones and the internet is associated with academic procrastination in university students, with psychological health factors acting as mediators.

3. Methodology

This research was conducted using a quantitative approach and cross, sectional correlational design in order to explore the relationships between social media addiction, academic procrastination, and academic stress, as well as to measure the role of academic procrastination as a mediator between social media addiction and academic stress. The participants were 156 university students who used social media. Sampling was done using the non, random, convenience technique.

3.1 Aim of the study

The objectives of this study are, to test the effect of social media addiction on academic stress between university students and to explore the mediating role of academic procrastination.

3.2 Research Objectives

- a) To explore the relationships between social media addiction, academic procrastination and academic stress between university students.
- b) To test the hypothesis that whether social media addiction is a significant predictor of academic procrastination.
- c) To check the hypothesis that academic procrastination is a significant predictor of academic stress.
- d) To see whether academic procrastination mediates the relationship between social media addiction and academic stress.

3.3 Measures

Bergen Social Media Addiction Scale (BSMAS): The BSMAS is a self-report measure used to determine problematic social media use. Based upon six core elements of addiction; salience, mood modification, tolerance, withdrawal, conflict and relapse, the BSMAS assesses the degree to which users present addiction-like tendencies in relation to their social media use. Higher scores on the BSMAS are indicative of a social media addiction which includes preoccupations with social media, diminished impulse control and interference with normal daily functioning, including use within the classroom.

The Tuckman Procrastination Scale (TPS; Tuckman, 1991): The Tuckman Procrastination Scale (TPS) is a self-report inventory that measures individuals' tendencies to procrastinate on academic tasks. The Tuckman Procrastination Scale (TPS) measures procrastination on academic tasks that happen to be avoidant such as delaying studying, avoiding writing, avoiding preparing for tests, papers, and projects, and generally not time

managing. Higher scores on the Tuckman Procrastination Scale reflect greater academic procrastination.

Perceived Academic Stress Scale-PASS: The perceived academic stress scale measures student self-reports of how stressful students perceive their academic experience. The scale assesses feelings of pressure, workload, competition, time and performance expectations, and feelings of being overwhelmed by academic tasks. The higher the score, the more stressful the students perceive the academic environment to be.

Data were analyzed by using a Jamovi statistical software. Descriptive statistics were used to report characteristics of the sample and study variables. Pearson's correlation analysis was conducted to test the correlations among social media addiction, academic procrastination, and perceived academic stress. Mediation analysis was applied to test whether academic procrastination mediated the association between social media addiction and academic stress.

3.4 Sample

The population for this study sample consisted of 156 university students, obtaining a convenience sample for ease of data collection from an easily accessible sample of willing participation. The age range was 17, 28, thus including late adolescence and early adulthood, mostly documenting the age range during which academic behaviors such as technology use, technology, related procrastination and general procrastination are occurring. The mean age of this sample was 21.6 (SD = 1.77) with little variation.

For gender, The sample consisted of more male participants (n = 119, 76.3%) than female participants (n = 37, 23.7%). The gender discrepancy within the sample should be taken into account when applying the results as this may not be representative of the population.

3.5 Hypotheses

H1: There will be a significant relationship between smartphone addiction, academic procrastination and academic stress among university students.

H2: Greater degree of smartphone addiction will bring significantly higher level of academic procrastination of university students.

H3: Academic procrastination will positively and significantly predict academic stress among university students.

H4: Academic procrastination will be a significant mediator between smartphone addiction and academic stress.

3.6 Procedure

Data for the study were collected through a survey from a sample of college students. The participants were given informed permission, were informed of the purpose of the study,

and were told they could choose to participate in the study voluntarily prior to participating in the data collection for the study. Participants' responses were kept confidential and used solely for academic research purposes.

An online questionnaire was used to collect data. The questionnaire consisted of demographic questions and the standardized self-report scales (Bergen Social Media Addiction Scale, Tuckman, Procrastination Scale, and Perceived Academic Stress Scale). Participants could access and complete the questionnaire in the comfort of their own homes due to the online format. They were required to answer all questions as truthfully as possible and to consider that there were no correct or incorrect responses to any of the questions. When finished, the questionnaires were inspected for missing responses, of which there were none. Responses were then scored and compiled into a database using Microsoft Excel, where a scale score was obtained for each scale in accordance with the prescribed scoring method.

The final data set was loaded on Jamovi 2.6 to get statistical results. Descriptive statistics were calculated for demographic variables and variables of study. Pearson's correlation analysis was performed to test the correlations between social media addiction, academic procrastination, and perceived academic stress. Mediation analysis was performed to test the mediating effect of academic procrastination between social media addiction and perceived academic stress, applying a bootstrapping procedure with 5,000 resamples.

4. Results

Table 4.1: *Descriptive Statistics of Study Variables*

Statistic	Age	Bsmas_total	Tps_total	Pas_total
N	156	156	156	156
Missing	0	0	0	0
Mean	21.6	19.5	43.3	54.8
Standard deviation	1.77	4.97	8.63	9.44
Minimum	17	6	20	22
Maximum	28	30	68	90

This table presents the descriptive statistics of the study variables. The mean age of the participants was 21.6 years ($SD = 1.77$). The average score for smartphone addiction was $M = 19.5$ ($SD = 4.97$), academic procrastination was $M = 43.3$ ($SD = 8.63$), and academic stress was $M = 54.8$ ($SD = 9.44$).

Table 4.2: *Gender distribution of participants*

Gender	Counts	% Of Total	Cumulative %
1	119	76.3	76.3
2	37	23.7	100

This table presents the gender distribution of the participants. The sample consisted of 119 females (76.3%) and 37 males (23.7%).

Table 4.3: *Correlation Matrix of Smartphone Addiction, Academic Procrastination, and Test Anxiety*

		BSMAS_total	TPS_total	PAS_total
BSMAS_total	Pearson's r	—		
	95% CI Upper	—		
	95% CI Lower	—		
TPS_total	Pearson's r	0.368***	—	
	95% CI Upper	0.496	—	
	95% CI Lower	0.224	—	
PAS_total	Pearson's r	-0.204*	-0.315***	—
	95% CI Upper	-0.049	-0.166	—
	95% CI Lower	-0.35	-0.45	—

Note. * $p < .05$, ** $p < .01$, *** $p < .0$

Pearson's correlation analysis revealed a significant positive relationship between smartphone addiction and academic procrastination ($r = .368$, $p < .001$). Academic procrastination was significantly associated with academic stress ($r = -.315$, $p < .001$). Smartphone addiction also showed a significant relationship with academic stress ($r = -.204$, $p < .05$).

Table 4.4: *Mediation analysis*

Effect	Estimate	Se	Lower	Upper	Z	P
Indirect	-0.194	0.0796	-0.358	-0.0517	-2.43	0.015
Direct	-0.194	0.1394	-0.459	0.0908	-1.39	0.164
Total	-0.388	0.1514	-0.695	-0.0904	-2.56	0.01

Mediation analysis using bootstrapping (5000 samples) indicated that academic procrastination significantly mediated the relationship between smartphone addiction and test anxiety. The indirect effect was significant ($\beta = -0.194$, $p = .015$), as the 95% confidence interval did not include zero. The direct effect of smartphone addiction on test anxiety was not significant ($p = .164$), indicating full mediation.

5. Interpretation Of Results

The findings from the mediation analysis demonstrate that academic procrastination serves as a significant intermediary in the relationship between smartphone addiction and academic stress. Smartphone addiction exerted a significant indirect influence on academic stress through academic procrastination, as supported by the bootstrapped indirect effect and confidence intervals that excluded zero. When academic procrastination was entered into the model, the direct association between smartphone addiction and academic stress was no longer statistically significant. This means that the effect of smartphone addiction is largely mediated by procrastination related behaviours rather than a direct effect.

These findings suggest a complete mediating effect, which means that high levels of academic procrastination partially explain how high levels of smartphone addiction is related to high academic stress levels. Thereby, excessive usage of smartphone seems to increase academic stress levels that are associated with various indicators such as going for delayed time on academic chores, ineffective management of time and avoidance of academic chores. One possible explanation for these findings can be given from the perspectives of self, regulation theories and behavioural addiction theories in Psychology. Students who excessively use mobile phones might face difficulties in developing constant attention and self-control while starting and continuing academic tasks. As their procrastination levels increase, they have to undergo more pressure of time stress, need to rush for finishing the academic tasks and experience apprehension regarding their academic achievement.

The present results have points for interventions aimed at reducing academic stress among students with heavy smartphone use. Specifically, these results highlight the significance of focusing on academic procrastination when developing interventions for this population. An intervention approach that adds training in time management skills, regulation strategies, self, and prudent use of technology would likely be beneficial for this group of students.

6. Discussion

The current study investigated overuse of social media and perceived academic stress in college students with academic procrastination as the mediator. Given the fact that social media has become integrated into students' everyday life, it is vital to research how social media overuse affects their academic functioning. The results imply that social media overuse can lead to academic failure by way of maladaptive academic behaviours like procrastination. The result indicated that there was a positive relationship between social media addiction and academic procrastination. This suggests that students who are addicted to social media would tend to delay academic work. Social media caters to the needs of the students of instant connectivity and infinite entertainment; this dependence on social media may make students less focused and they might, therefore, delay studying and other academic work till the last minute. The data also revealed a positive correlation between academic procrastination and academic pressure. Procrastinating in relation to academic work can lead students to have even less time to complete a task within deadlines, thereby increasing their academic pressure. However, while this avoidance strategy may be effective as a short-term loss-avoidance action, the cumulative effect of procrastinating on academic tasks can result in increased academic pressure and perceived lack of control. Also, although social media addiction was initially positively associated with academic stress perception, the association was no longer statistically significant after academic procrastination was accounted for in the mediation model, suggesting that academic procrastination mediates the association between social media addiction and academic stress perception.

These results could be explained based on self-regulation theory and the related theory of behavioural addiction. The citation hypothesizes that greater social networking consumption may consume the limited cognitive and emotional resources needed to achieve self-regulation and toward goal-directed efforts. As a result of weakened self-control, students may lose track of and have difficulty concentrating on external goals, and become more prone to procrastination and, ultimately, higher levels of academic stress. This research also has significant implications for educators and mental health professionals. Rather than eliminating social media entirely, interventions should help students develop better self-regulation skills such as time management and self-control. Interventions that have shown to reduce procrastination could likely also alleviate students' academic stress. Despite the strengths mentioned above, this study has limitations as well. Since the study employed a cross-sectional design, it is not possible to establish causal directions among the key variables. Future studies should use a longitudinal design with more representative samples. In summary, this paper

emphasizes the significance of academic procrastination in linking addiction to social media with perceived academic stress among college students. Thus, intervention toward overuse of social media as well as reduction of procrastination behaviors are deemed necessary for alleviation of academic stress.

7. Conclusion

In the present study, the relationship between social media addiction and perceived college academic stress was examined among college students with academic procrastination mediating the connection. Findings revealed that social media addiction was positively related to academic procrastination, which was positively related to perceived college academic stress. The mediation analysis revealed that academic procrastination fully mediated the effect of social media addiction on perceived college academic stress, showing that social media addiction among college students increases their perceived college academic stress indirectly via academic procrastination. The present results indicated the importance of the psychological process of academic procrastination which mediates the impact of excessive social media usage on college students' subjective academic well, being. Excessive digital overuse results in academic postponement, which results in increased stress affliction and intensity. For interventions targeting college students' perceived academic stress reduction, teachers and practitioners, should target at intervention techniques that reduce procrastination behaviors, and enhance academic time management and emotion control skills, and promote healthy, moderate social media usage.

References

- Irfan, A., Abbas, N., Shahid, M. S., Ashraf, J., & Asif, A. (2025). Smartphone addiction and academic procrastination in university students: Psychological wellbeing as a moderator. *Qualitative Research Journal for Social Studies*, 2(2), 973–983.
- Li, L., Gao, H., & Xu, Y. (2020). The mediating and buffering effect of academic self-efficacy on the relationship between smartphone addiction and academic procrastination. *Computers & Education*, 159, 104001. <https://doi.org/10.1016/j.compedu.2020.104001>
- Liu, F., Xu, Y., Yang, T., Li, Z., Dong, Y., Chen, L., & Sun, X. (2022). The mediating roles of time management and learning strategic approach in the relationship between smartphone addiction and academic procrastination. *Psychology Research and Behavior Management*, 15, 2639–2648. <https://doi.org/10.2147/PRBM.S381587>

- Nadarajan, S., Hengudomsub, P., & Wacharasin, C. (2023). The role of academic procrastination on internet addiction among Thai university students: A cross-sectional study. *Belitung Nursing Journal*, 9(4), 384–390. <https://doi.org/10.33546/bnj.2394>
- Wu, W., Zhang, J., & Jo, N. (2025). Fear of missing out and online social anxiety in university students: Mediation by irrational procrastination and media multitasking. *Behavioral Sciences*, 15(1), 84. <https://doi.org/10.3390/bs15010084>