



## The Moderating Role of Self-Regulation in the Relationship Between Social Media Addiction and Academic Procrastination

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### Keywords

- Academic procrastination
- Social media addiction
- Self-regulation
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- Moderating

**Abstract:** Social media addiction is positively associated with academic procrastination among university students. Nevertheless, the influence of self-regulation within this relationship remains underexplored in the context of Afghanistan. This study examined the association between social media addiction and academic procrastination, as well as the moderating effect of self-regulation, among university students. A cross-sectional, descriptive-correlational design was utilized with a sample of 215 students from the Faculty of Education at Bamyan University. Data were collected using standardized questionnaires and analyzed through Pearson correlation and hierarchical moderated regression analysis in SPSS-27. Before calculating the interaction term, the predictor and moderator variables were mean-centered. The results showed a significant positive link between social media addiction and academic procrastination ( $r = 0.545$ ,  $p < 0.001$ ). Self-regulation had significant negative relationships with both academic procrastination ( $r = -0.239$ ,  $p < 0.001$ ) and social media addiction ( $r = -0.228$ ,  $p < 0.001$ ). The overall regression model was significant ( $R^2 = 0.312$ ,  $F = 38.178$ ,  $p < 0.001$ ). The interaction between social media addiction and self-regulation was also significant and negative ( $\beta = -0.230$ ,  $p < 0.05$ ). This means that self-regulation reduces the positive link between social media addiction and academic procrastination. In other words, when self-regulation is higher, the connection between social media addiction and academic procrastination is weaker, leading to less academic procrastination.

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## INTRODUCTION

The growing prevalence of social media use among university students has prompted concerns regarding its effects on students' cognitive abilities and academic behaviors (Tang & He, 2025; Valencia-Ortiz et al., 2023). This issue is important because the student period plays a key role in shaping learning habits and cognitive functions, and disruptions in attention and

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self-control can lead to decreased learning quality and academic performance (Avci et al., 2024). At the same time, the expansion of digital technologies has turned this phenomenon into an educational and institutional challenge, where neglecting it may result in increased inefficient learning patterns and reduced educational productivity (Wolor, 2025), which can have negative consequences for the future of students and educational organizations (Wakili, 2025).

Griffiths' behavioral addiction framework characterizes social media addiction by six primary features: salience, tolerance, mood modification, relapse, withdrawal, and conflict. This framework underpins assessment tools such as the Bergen Social Media Addiction Scale (Peng & Liao, 2023). Evidence indicates that social media addiction extends beyond frequent use, as it is associated with difficulties in concentration, anxiety when access is restricted, and neglect of academic responsibilities (Amirthalingam & Khera, 2024). Numerous studies have identified a strong association between social media addiction and academic procrastination across diverse student populations (Avci et al., 2024; Fathoni, 2024; Naushad et al., 2025). Researchers suggest that excessive social media use depletes cognitive resources and diminishes self-regulatory capacity (Tang & He, 2025).

Academic procrastination refers to the postponement of academic tasks despite awareness of potential negative consequences (Işıkgöz et al., 2025; Naushad et al., 2025). Research indicates that social media addiction exacerbates procrastination by impairing time management, concentration, and resistance to mental fatigue (Parvizi et al., 2025; Tang & He, 2025). Consequently, procrastination is increasingly conceptualized as both a behavioral delay and a self-regulation issue, particularly in the context of digital distractions.

Self-regulation refers to the capacity to control thoughts, emotions, and behaviors to pursue long-term objectives (Masaki, 2023). This construct is essential for academic achievement, as it facilitates effective planning, monitoring, and self-evaluation (De la Fuente et al., 2022). Empirical evidence indicates that students exhibiting higher levels of self-regulation demonstrate superior time management, increased academic engagement, and a reduced likelihood of developing addictive behaviors or engaging in procrastination (Rasouli et al., 2025). Furthermore, self-regulation has been identified as a mediating factor in the relationship between social media addiction and academic procrastination (Rasouli et al., 2025; Tang & He, 2025; Wolor, 2025).

Recent studies indicate that social media addiction influences academic outcomes in diverse ways across individuals. Evidence suggests that self-regulation is a critical factor in this relationship. Individuals with higher levels of self-control are less likely to engage in academic procrastination when using social media (Üztemur & Dinç, 2023). Furthermore, the interaction between social media addiction and self-regulation has been shown to predict academic procrastination (Işıkgöz et al., 2025). Additional psychological characteristics may also modulate the impact of digital addictive behaviors on academic performance (Chen & Lyu, 2024). However, the majority of existing research emphasizes direct and mediating

effects. The moderating function of self-regulation, particularly within interaction-based studies, remains underexplored and requires more rigorous methodological approaches.

Despite extensive research, three significant gaps persist. First, most studies examine direct effects and mediation, yet insufficient attention is given to the conditions under which social media addiction leads to academic procrastination. Second, researchers frequently employ correlation and mediation analyses, but seldom utilize hierarchical regression models, which are more suitable for testing moderation effects. Third, the majority of existing evidence is derived from non-Afghan, homogeneous educational contexts, limiting the generalizability of findings to Afghanistan. In Afghanistan, distinct cultural, technological, and educational factors may influence students' use of digital tools. Consequently, there is limited understanding of how self-regulation moderates the relationship between social media addiction and academic procrastination, particularly within Afghan higher education.

This study examines students from the Faculty of Education at Bamyan University to determine whether self-regulation moderates the relationship between social media addiction and academic procrastination. Hierarchical regression analysis is employed to assess whether self-regulation functions as both a mediator and a protective factor that may mitigate the negative academic consequences of social media addiction. The central hypothesis is that students with higher levels of self-regulation are less susceptible to the influence of social media addiction on academic procrastination. This research seeks to clarify how individual differences shape digital behavior in an underexplored academic context.

Based on the theoretical framework presented in the following section and the previously discussed evidence, we propose the following hypotheses:

**Hypothesis 1:** There is a positive and significant relationship between social media addiction and academic procrastination.

**Hypothesis 2:** There is a negative and significant relationship between self-regulation and academic procrastination.

**Hypothesis 3:** There is a negative and significant relationship between social media addiction and self-regulation.

**Hypothesis 4:** Self-regulation moderates the relationship between social media addiction and academic procrastination.

## **THEORETICAL FRAMEWORK**

The moderating role of self-regulation can be explained in the relationship between social media addiction and academic procrastination, based on two main theories: the resource-depletion theory and the self-regulation theory. In the resource depletion theory, individuals' self-control capacity is limited, and excessive use, especially in activities like overusing social media, can deplete these resources (Baumeister et al., 2024; Baumeister & Heatherton, 1996). This results in individuals having less cognitive energy to focus on and perform

academic tasks, leading them to procrastinate these activities; this phenomenon is known as academic procrastination (Asghar et al., 2024; Steel, 2007).

On the other hand, the self-regulation theory emphasizes individuals' ability and skills in managing and controlling behavior, emotions, and cognition to achieve long-term goals (Zimmerman, 2011). Research has shown that students with higher levels of self-regulation can resist the immediate temptations of social media, better manage their time, and focus more on their academic activities. Therefore, self-regulation may play an important role in reducing the negative consequences of excessive social media use (Gökalp et al., 2023; Üztemur & Dinç, 2023).

The integration of resource depletion and self-regulation theories indicates that social media addiction may contribute to academic procrastination by reducing self-control and impairing task focus (Rasouli et al., 2025; Üztemur & Dinç, 2023). Conversely, self-regulation mitigates these effects by enabling individuals to manage impulses, avoid digital distractions, and maintain attention on academic tasks. Therefore, self-regulation serves as a moderating factor in the relationship between social media addiction and academic procrastination.

The findings indicate that social media addiction is associated with increased academic procrastination. However, higher levels of self-regulation may mitigate this association. Students exhibiting stronger self-regulation are less likely to experience the negative impact of social media addiction on academic procrastination.

## RESEARCH METHOD

This study used a quantitative, cross-sectional, correlational design to explore the relationships between social media addiction, academic procrastination, and self-regulation, as well as the moderating effect of self-regulation. There was no experimental manipulation or intervention. All variables were measured with self-report questionnaires.

The statistical population in this study comprises all students of the Faculty of Education at Bamyán University, which, according to the teaching management report for this faculty in 2025, totaled 889 students. The sample size was determined to be 269 individuals using the Morgan table. To select the statistical sample, simple random sampling was used: a complete list of students was obtained from the teaching management, each individual was assigned a numerical code, and 269 codes were randomly selected from a random number table. The questionnaires were then distributed to the students. After data collection and data entry, a data screening process was conducted to assess the quality of the students' responses. During this stage, 54 questionnaires were eliminated, including 15 with no responses, 20 with incomplete data, 10 with inconsistent response patterns (e.g., selecting the same option across all items), and 9 due to abnormal response patterns (e.g., unusual dispersion). Ultimately, 215 questionnaires with higher accuracy were used for the final analysis.

Since the research method used in this study primarily involves quantitative data collection, the appropriate tool is a questionnaire. The questionnaires used in this study are

standardized, and their validity and reliability have been examined and confirmed in several studies. Their reliability was assessed using Cronbach's alpha coefficient. Because this study involves three variables, three questionnaires were used to examine them. The questionnaires used in this research include the Social Media Addiction Questionnaire, the Academic Procrastination Questionnaire, and the Self-Regulation Questionnaire.

In this research, all ethical principles of social science research have been considered. Before data collection, the research objectives, confidentiality of students' information, and the right to withdraw were clearly and transparently explained. Given the anonymity of the data, informed consent was implied and obtained through voluntary completion of the questionnaire. Participation in this study was entirely voluntary, and all information was kept confidential and used solely for this research. This study was conducted in accordance with common ethical guidelines for research, and due to the participants' consent, low risk, and confidentiality of information, approval from the university's ethics committee was not deemed necessary.

Data analysis was conducted at two levels: descriptive and inferential statistics. In the descriptive section, the mean, standard deviation, frequency, percentage, as well as skewness and kurtosis indices were used to examine the normality of the data distribution. In the inferential section, the Pearson correlation coefficient and regression analysis were employed. To test the moderating role of self-regulation in the relationship between social media addiction and academic procrastination, hierarchical regression analysis was used. Before creating the interaction term, the predictor and moderator variables were mean-centered, and the interaction term was calculated by multiplying them and entered into the final model. To interpret the moderating effect, simple slope analyses were performed at three levels (low, medium, and high), and the results were presented in an interaction plot. The regression assumptions, including normality of data distribution (based on skewness and kurtosis), linearity of relationships, and homogeneity of error variances, were examined. Additionally, multicollinearity assessment showed that VIF values ranged from 1.07 to 1.34 and Tolerance values ranged from 0.74 to 0.93, indicating no multicollinearity issues in the model. All analyses were conducted using SPSS version 27.

**Academic Procrastination Questionnaire:** This questionnaire, designed by Solomon and Roth (1984), measures procrastination. The scale consists of 27 items that examine three components: preparation for exams (8 questions), preparation for assignments (11 questions), and preparation for end-of-semester projects (7 questions). The way respondents answer the items is as follows: they select one of the options to indicate their level of agreement with each item—Never (1), Rarely (2), Sometimes (3), Most of the time (4), and Always (5). Additionally, in this questionnaire, questions (2, 4, 6, 11, 13, 15, 16, 23, 21, 25) are reverse-coded. The validity and reliability of this questionnaire have been confirmed through numerous studies. For example, Yip and Chung (2022) confirmed a three-factor structure with good model fit and acceptable internal consistency ( $\alpha = 0.84 - 0.68$ ) (Yip & Chung, 2022). Similarly, Mortazavi et al. (2015/2022) reported adequate factorial validity and reliability for

the Persian version ( $\alpha = 0.781\text{--}0.861$ ) among Iranian medical students (Mortazavi et al., 2015). The present questionnaire has been locally translated and culturally adapted for research with students at Bamyan University, and has been approved by expert professors and Professor Rahnama (Rezai, 2025). The questionnaire's reliability was assessed using Cronbach's alpha, which was 0.766, indicating high reliability.

**Social Media Addiction Questionnaire:** This questionnaire, developed by Shahin (2017), measures the level of social media addiction among students. The instrument consists of 29 items and, based on exploratory and confirmatory factor analysis, has four subscales: Virtual Tolerance (5 questions), Virtual Communication (9 questions), Virtual Problems (9 questions), and Virtual Information (6 questions). The scoring of this questionnaire is based on a 5-point Likert scale, with options 'Strongly Disagree', 'Disagree', 'No Opinion', 'Agree', and 'Strongly Agree', which are assigned scores from 1 to 5, respectively; therefore, higher scores indicate a higher level of social media addiction. The construct validity of this tool has been confirmed through exploratory and confirmatory factor analyses, with its four-factor structure accounting for 53.16% of the variance. Additionally, the Kaiser-Meyer-Olkin (KMO) sampling adequacy measure (0.96) and Bartlett's test indicated that the data were suitable for factor analysis. The questionnaire's reliability in the main study was reported as Cronbach's alpha of 0.93 for the entire scale, and the subscale coefficients were also within acceptable ranges. In this study, the instrument's reliability was also assessed using Cronbach's alpha, which yielded a satisfactory value, indicating good internal consistency (Sahin, 2018). In another study conducted in Afghanistan, the validity and reliability of this questionnaire were confirmed (Bakhtyari & Mathur, 2024). The questionnaire's reliability was assessed using Cronbach's alpha, which was 0.935, indicating high reliability.

**Self-Regulation Questionnaire:** This questionnaire, designed by Boufard and colleagues (1995), measures self-regulation in learning. The responses are provided on a five-point Likert scale, ranging from strongly agree (5) to disagree (1) strongly strongly. The total score for each individual can range from 7 to 14. The questionnaire consists of two components: cognitive strategies (items 3, 5, 8, 9, 10, 12, 13) and metacognitive strategies (items 1, 2, 4, 6, 7, 11, 14). The total score for each ranges from 7 to 14; a higher score on a component indicates a greater tendency to use it. A score between 14 and 28 indicates a low level of self-regulation. A score between 28 and 42 indicates a moderate level of self-regulation. A score above 42 indicates a high level of self-regulation. The scoring method uses the Likert scale, with items 5, 13, and 14 reverse-coded. Its validity was examined by Kadiyar (2002), using construct validity. Factor analysis results showed that the correlation coefficients among questions were appropriate, and the test explained 0.52 of the variance in self-regulation. Its construct validity is also considered acceptable (Kadevari, 2012). The questionnaire's validity was confirmed by Kadevari (2012) with a Cronbach's alpha coefficient of 0.71, and in Jabbari's report (2005), the test's reliability coefficient was 0.76, while Mahmoudi (2002) reported a reliability coefficient of 0.77. The questionnaire's reliability was obtained using Cronbach's alpha, which was 0.84, indicating good reliability (Kadevari et al., 2012).

## FINDINGS

**Table 1:** Graphic Statistics of Participants

		F	%
Average grades	90 - 100	28	13%
	80 – 89	96	44.7%
	70 – 79	76	35.3%
	60 – 69	14	6.5%
	below 55	1	0.5%
Class	Second Class	64	29.8%
	Third class	42	19.5%
	Fourth grade	109	50.7%
Age	18 – 20 years old	37	17.2%
	21 – 23 years old	150	69.8%
	24 – 26 years old	24	11.2%
	More than 26 years	4	1.9%

results examine the demographic variables, showing that the highest frequency and percentage of students' average scores are in the 80–89 range (96, 44.7%), followed by 70–79 (76, 35.3%), 90–100 (28, 13%), 55–69 (14, 6.5%), and below 55 (1, 0.5%). In terms of grade level, the most participants are in fourth grade (109, 50.7%), followed by second grade (64, 29.8%) and third grade (42, 19.5%). Regarding students' ages, the distribution is as follows: 21–23 years old (150, 69.8%), 18–20 years old (37, 17.2%), 24–26 years old (24, 11.2%), and over 26 years old (4, 1.9%).

**Table 2:** Descriptive statistics and normality indicators of the research variables

Variable	M	SD	Skewness	Kurtosis	Normality
AP	3.18	0.50	-0.304	0.339	Normal
SR	3.51	0.69	-0.549	0.661	Normal
SMA	2.70	0.79	0.220	-0.255	Normal
AP					
Preparation for the exam	3.24	0.63	-0.371	0.130	Normal
Preparation of lesson projects	3.13	0.52	-0.177	0.501	Normal
Assignments and Study	3.19	0.64	-0.007	0.161	Normal
SR					
Cognitive strategies	3.51	0.72	-0.559	0.564	Normal
Metacognitive strategies	3.51	0.73	-0.593	0.371	Normal

	SMA				
Tolerance and increased consumption	2.65	0.85	0.354	-0.241	Normal
Inability to control	2.82	0.82	0.210	-0.214	Normal
Negative consequences	2.61	0.92	0.212	-0.739	Normal

Note : Academic procrastination(AP), self-regulation(SR), Social media addiction (SMA)

Descriptive statistics of the main variables and subscales in the study are presented in the table. The results showed that the mean scores for academic procrastination ( $M = 3.18$ ,  $SD = 0.50$ ), self-regulation ( $M = 3.51$ ,  $SD = 0.69$ ), and social media addiction ( $M = 2.70$ ,  $SD = 0.79$ ) are moderate. An examination of the distribution indices also indicates that all variables follow a normal distribution; the skewness values range from -0.593 to 0.354, and kurtosis values range from -0.739 to 0.661, all within acceptable limits for normality. Additionally, analysis of the subscales revealed that the dimensions of academic procrastination, including exam readiness ( $M = 3.24$ ,  $SD = 0.63$ ), preparation of academic projects ( $M = 3.13$ ,  $SD = 0.52$ ), and assignments and studying ( $M = 3.19$ ,  $SD = 0.64$ ), as well as the dimensions of self-regulation, including cognitive strategies ( $M = 3.51$ ,  $SD = 0.72$ ) and metacognitive strategies ( $M = 3.51$ ,  $SD = 0.73$ ), and components of social media addiction, including tolerance and increased consumption ( $M = 2.65$ ,  $SD = 0.85$ ), inability to control ( $M = 2.82$ ,  $SD = 0.82$ ), and negative consequences ( $M = 2.61$ ,  $SD = 0.92$ ), all follow a normal distribution. Overall, the data's distributional characteristics indicate their adequacy for conducting inferential analyses, especially hierarchical regression in this study.

**Table 3:** Correlation between research variables

		1	2	3
<b>1. AP</b>	r	—		
	p	—		
<b>2. SMA</b>	r	0.545	—	
	p	< .001	—	
<b>3. SR</b>	r	-0.239	-0.228	—
	p	< .001	< .001	—

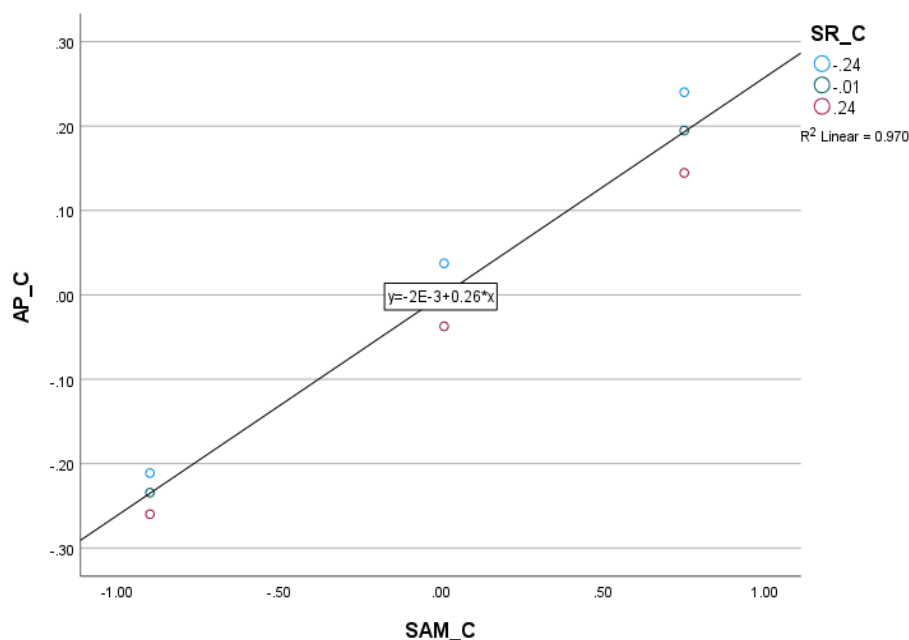
The results of Pearson correlation analysis showed that the pattern of relationships among the research variables aligns well with the proposed hypotheses, indicating good empirical coherence. Specifically, a positive and significant relationship was observed between social media addiction and academic procrastination ( $r = 0.545$ ,  $p < 0.001$ ), with a moderate to high strength, suggesting that increased social media engagement is associated with a significant increase in procrastination behaviors; this finding supports the first hypothesis. Additionally, a negative and significant relationship was found between self-regulation and academic procrastination ( $r = -0.239$ ,  $p < 0.001$ ), indicating that higher levels of self-regulation are associated with reduced procrastination and confirming the second hypothesis. However, the effect size is reported as weak to moderate. Furthermore, the

relationship between social media addiction and self-regulation was negative and significant ( $r = -0.228, p < 0.001$ ), suggesting that increased dependence on social media is associated with weakened self-regulation, thereby providing empirical support for the third hypothesis. Overall, the direction and significance of the correlation coefficients, in line with the research hypotheses, suggest a good conceptual fit for the proposed model and lay the groundwork for more advanced tests, such as regression analyses and moderation models.

**Table 4:** Examining the Moderating Role of Self-Regulation in the Relationship Between Social Media Addiction and Academic Procrastination

	B	SE	$\beta$	t	p	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F
<b>Constant</b>	-0.002	0.020	—	-3.119	0.04				
<b>SMA</b>	0.260	0.027	0.521	9.654	<0.001	0.558	0.312	0.303	38.178
<b>SR</b>	-0.156	0.089	-0.106	-1.755	0.03				
<b>SMA × SR</b>	-0.26	0.117	-0.23	-2.509	<0.05				

The results of the hierarchical multiple regression analysis, including the interaction term, indicated that the model had a satisfactory fit and was statistically significant ( $R = 0.558, R^2 = 0.312, \text{Adjusted } R^2 = 0.303, F = 38.178, p < 0.001$ ), explaining 31.2% of the variance in academic procrastination. Social media addiction was a strong positive predictor ( $\beta = 0.521, p < 0.001$ ), whereas self-regulation showed a significant negative association with academic procrastination ( $\beta = -0.106, p < 0.05$ ). Importantly, the interaction between social media addiction and self-regulation was negative and significant ( $\beta = -0.23, p < 0.05$ ), confirming the moderating role of self-regulation. This pattern indicates that higher levels of self-regulation weaken the positive relationship between social media addiction and academic procrastination, suggesting a buffering effect.



**Figure 1:** Moderating Effect of Self-Regulation on the Relationship Between Social Media Addiction and Academic Procrastination

Figure 1. Shows the moderating effect of self-regulation on the relationship between social media addiction and academic procrastination. As observed, the relationship between social media addiction and academic procrastination is positive and significant at all levels of self-regulation; however, the strength of this relationship decreases as the level of self-regulation increases. Specifically, the regression slope is highest at the low self-regulation level ( $\beta = 0.322$ ), moderate at the medium level ( $\beta = 0.257$ ), and lowest at the high level ( $\beta = 0.198$ ). This pattern indicates a diminishing moderating role of self-regulation, such that higher levels of self-regulation weaken the positive association between social media addiction and academic procrastination. The results of simple slope analysis also showed that all conditional slopes are significant at  $p < 0.001$  (see Table 4).

## DISCUSSION

This study examined how self-regulation moderates the relationship between social media addiction and academic procrastination. The results show that people who are more addicted to social media tend to procrastinate more, while those with better self-regulation are less likely to do so. These patterns fit with self-regulatory and cognitive control theories. Using social media often gives people quick rewards, which can lead them to prefer instant gratification and lose interest in tasks that take longer and offer delayed rewards, such as academic work. This can lead to more procrastination. On the other hand, people with stronger self-regulation can focus better, avoid digital distractions, and stay on track with their goals. Because of this, self-regulation may help protect against the negative effects of social media addiction on academic procrastination.

Previous studies have identified a link between social media addiction and academic procrastination in various educational settings (Avci et al., 2024; Naushad et al., 2025; Fathoni, 2024). Cognitive and motivational factors play a role in this connection. Social media platforms offer immediate feedback, which can encourage a preference for instant rewards and reduce the value of long-term goals. Over time, this may weaken individuals' ability to focus and persist with tasks that require delayed gratification, such as academic work. As a result, students may find academic tasks less appealing and more difficult, increasing the risk of procrastination or disengagement.

The observed negative associations among self-regulation, academic procrastination, and social media addiction align with previous research (Rasouli et al., 2025; Tang & He, 2025; Wolor, 2025). Prior studies have identified self-regulation as a key factor mediating the impact of social media addiction on academic performance, indicating that frequent digital distractions can undermine self-control and increase procrastination. The present findings extend this literature by demonstrating that self-regulation is a stable executive function that varies among individuals and moderates the extent to which social media addiction contributes to academic procrastination. Thus, self-regulation not only elucidates the underlying mechanism but also influences the relationship by promoting goal-directed behavior in the presence of digital distractions.

The results show that self-regulation moderates the relationship between social media addiction and academic procrastination. A significant interaction ( $\beta = -0.23$ ,  $p < 0.05$ ) indicates that as self-regulation increases, the link between addiction and procrastination weakens. Simple slope analysis confirms this effect decreases from low to high self-regulation ( $\beta = 0.322, 0.257, 0.198$ ). Individuals with higher self-regulation manage their attention more effectively and are less prone to digital distractions, while those with lower self-regulation are more likely to procrastinate. Thus, self-regulation acts as a protective factor against the negative effects of social media addiction on academic procrastination.

This interactive pattern can be interpreted within the framework of a 'psychological buffer.' Specifically, self-regulation may serve as an internal resource that enhances an individual's ability to cope with digital distractions, return to tasks, and maintain focus. This interpretation aligns with the findings of Üztemur and Dinç (2023) and Işıkgöz et al. (2025), who reported the moderating role of self-control variables. Additionally, meta-analytic evidence from Chen and Lyu (2024) indicates that individual characteristics can alter the strength of the relationships between digital behaviors and academic outcomes, providing a broader theoretical framework for interpreting the current findings.

These findings indicate that self-regulation plays two roles in digital behavior and academic outcomes: it acts as both a mediator and a moderator. While previous studies focused on self-regulation as the pathway linking social media addiction to academic procrastination, our results show that self-regulation also determines the strength of this relationship. This means self-regulation influences not only how, but also when and for whom this effect is most significant. By integrating both process and condition perspectives, our research clarifies how individual differences shape the impact of social media use on academic performance.

The findings suggest that simply cutting back on social media may not be enough, as its effects depend on how well students can regulate their use. Because self-regulation helps prevent academic procrastination, building these skills could be a more effective and lasting approach. Schools might want to add programs that teach attention management, impulse control, and goal-setting, especially in digital environments. Including self-regulation, time management, and digital awareness training in the main curriculum, rather than offering them only in separate workshops, can help students manage online distractions and strengthen these skills through regular practice.

Previous research has examined the direct and indirect connections between social media addiction and academic procrastination. This study extends that work by demonstrating that self-regulation influences the relationship between these factors. The results show that self-regulation impacts both the process and strength of this association, as indicated by the interaction effect and simple slope analyses. By identifying self-regulation as a protective factor, this research clarifies when and how social media addiction contributes to academic procrastination, particularly in understudied educational contexts.

## **CONCLUSION**

This study examined how social media addiction and academic procrastination are related, particularly with respect to self-regulation. The results show that social media addiction is linked to more academic procrastination, while self-regulation is linked to less of both. Also, stronger self-regulation makes the connection between social media addiction and academic procrastination weaker.

This study contributes to existing research by demonstrating that self-regulation not only accounts for certain outcomes but also affects their magnitude. The findings clarify how individual differences shape the academic effects of digital habits. Practically, the results indicate that strengthening self-regulation skills may help mitigate academic risks associated with heavy social media use.

This study provides valuable insights but has several limitations that indicate areas for improvement. First, the cross-sectional design does not establish causality. Future research should use longitudinal or experimental methods to clarify how social media addiction and academic procrastination interact over time. Second, reliance on self-report measures may introduce biases, including social desirability and inaccurate self-perception. Incorporating objective data, such as behavioral records, digital usage logs, or reports from multiple sources, would improve accuracy. Third, the sample was limited to a single faculty member at Bamyan University, limiting generalizability. Studies across different academic fields, institutions, and cultural contexts are needed to determine if these findings apply elsewhere. These limitations underscore the need for tailored interventions that address individual differences in self-control and the varied digital environments students face. Schools may benefit from ongoing programs that combine self-regulation training with real academic challenges, supported by regular monitoring and feedback. Researchers should also consider additional factors, such as motivation, emotional regulation, and digital literacy, to develop more comprehensive models of students' academic behavior in the digital age.

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## **STATEMENT OF DATA AVAILABILITY**

Data supporting the findings of this study are available upon request from the corresponding author.

## CONFLICT OF INTEREST STATEMENT

The authors declare that they have no financial, personal, or organizational conflicts of interest related to the subject of this article.

## REFERENCES

- Amirthalingam, J., & Khera, A. (2024). Understanding social media addiction: A deep dive. *Cureus*, 16(10). <https://doi.org/10.7759/cureus.72499>
- Asghar, A., Haneef, M., Dhillon, N. R., & Jan, R. (2024). The influence of social media use on academic performance: exploring the role of cognitive load, self-regulation, and motivation among student. *Review of Applied Management and Social Sciences*, 7(4), 725–740. <https://doi.org/10.47067/ramss.v7i4.409>
- Avci, S., Cakir, M., & Akinci, T. (2024). Examining Social Media Addiction as a Predictor of Academic Achievement and Academic Procrastination: A Cohort of Undergraduate Students. *Journal on Efficiency and Responsibility in Education and Science*, 17(4), 286–298. <https://doi.org/10.7160/eriesj.2024.170402>
- Bakhtyari, M. B., & Mathur, K. (2024). An Analysis of Social Network Addiction and Emotional Competence among Adolescents in India and Afghanistan. *Indian Journal of Positive Psychology*, 15(4).
- Baumeister, R. F., André, N., Southwick, D. A., & Tice, D. M. (2024). Self-control and limited willpower: Current status of ego depletion theory and research. *Current Opinion in Psychology*, 60, 101882. <https://doi.org/10.1016/j.copsyc.2024.101882>
- Baumeister, R. F., & Heatherton, T. F. (1996). Self-regulation failure: An overview. *Psychological inquiry*, 7(1), 1–15. [https://doi.org/10.1207/s15327965pli0701\\_1](https://doi.org/10.1207/s15327965pli0701_1)
- Chen, G., & Lyu, C. (2024). The relationship between smartphone addiction and procrastination among students: A systematic review and meta-analysis. *Personality and Individual Differences*, 224, 112652. <https://doi.org/10.1016/j.paid.2024.112652>
- De la Fuente, J., Martínez-Vicente, J. M., Santos, F. H., Sander, P., Fadda, S., Karagiannopoulou, E., Boruchovitch, E., & Kauffman, D. F. (2022). Advances on self-regulation models: A new research agenda through the SR vs ER behavior theory in different psychology contexts. *Frontiers in Psychology*, 13, 861493. <https://doi.org/10.3389/fpsyg.2022.861493>
- Fathoni, A. R. (2024). The Influence of Social Media Addiction on Academic Procrastination. *Journal of Mental Health and Social Rehabilitation*, 2(1), 31–37. <https://doi.org/10.52472/jmhsr.v2i1.457>
- Gökalp, Z. Ş., Saritepeci, M., & Durak, H. Y. (2023). The relationship between self-control and procrastination among adolescent: The mediating role of multi screen addiction. *Current Psychology*, 42(15), 13192–13203. <https://doi.org/10.1007/s12144-021-02472-2>

- Işıkgöz, M. E., Sezan, T., Yüksel, A., & Öztunç, M. (2025). Structural Modeling of Turkish Sports Science Students' Addiction on Social Media and Academic Procrastination: The Mediating Role of Academic Self-Efficacy. *SAGE Open*, 15(3).  
<https://doi.org/10.1177/21582440251376854>
- Kadevari, P., Vaezi, H., & Dastaa, A. (2012). Examining the causal relationship between achievement goals and self-regulated learning strategies with mathematical problem-solving performance. *Educational Psychology Journal*, 8(23), 96–118.
- Masaki, F. (2023). Self-regulation from the sociocultural perspective—A literature review. *Cogent Education*, 10(2), 2243763. <https://doi.org/10.1080/2331186X.2023.2243763>
- Mortazavi, F., Mortazavi, S. S., & Khosrorad, R. (2015). Psychometric properties of the Procrastination Assessment Scale-Student (PASS) in a student sample of Sabzevar University of Medical Sciences. *Iranian Red Crescent Medical Journal*, 17(9), e28328.  
<https://doi.org/10.5812/ircmj.28328>
- Naushad, K., Jamil, B., Khan, N. A., & Jadoon, M. (2025). Correlation between social media addiction and academic procrastination in medical students at public and private medical colleges at Peshawar. *Pakistan Journal of Medical Sciences*, 41(3), 837.
- Parvizi, F., Jowkar, B., & Abnavi, Z. (2025). Mediating Role of Problematic Social Media Use in the Relationship Between Perceived Social Support and Academic Procrastination. *Iranian Journal of Applied Educational Research*, 1–14.
- Peng, P., & Liao, Y. (2023). Six addiction components of problematic social media use in relation to depression, anxiety, and stress symptoms: a latent profile analysis and network analysis. *BMC psychiatry*, 23(1), 321. <https://doi.org/10.1186/s12888-023-04837-2>
- Rasouli, A., Nejad-Ebrahim Soumee, Z., Tirgari Seraji, H., Ramzi, F., & Saed, O. (2025). The Self-Control Bridge: Connecting Social Media Use to Academic Procrastination. *Psychological Reports*, 00332941251330538.
- Rezai, A. S. (2025). *An Investigation into Predicting Academic Procrastination Based on Social Media Addiction among Students of the Faculty of Education, Bamyan University, 2025* Bamyan University, Faculty of Education].
- Sahin, C. (2018). Social media addiction scale-student form: the reliability and validity study. *Turkish Online Journal of Educational Technology-TOJET*, 17(1), 169–182.
- Steel, P. (2007). The nature of procrastination: a meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological bulletin*, 133(1), 65.
- Tang, Y., & He, W. (2025). Impact of social media addiction on college students' academic procrastination: a chain mediated effect of lack of self-control and fear of missing out. *Frontiers in Psychology*, 16, 1668567.  
<https://doi.org/10.3389/fpsyg.2025.1668567>

- Üztemur, S., & Dinç, E. (2023). Academic procrastination using social media: A cross-sectional study with middle school students on the buffering and moderator roles of self-control and gender. *Psychology in the Schools*, 60(4), 1060–1082.
- Valencia-Ortiz, R., Garay-Ruiz, U., & Cabero-Almenara, J. (2023). Problematic use of online social networks: the case of mexican students. *ALTERIDAD. Revista de Educación*, 18, 23–33. <https://doi.org/0000-0003-4656-5456>
- Wakili, S. A. (2025). *Studying on the Effect of Mobile- Based Social Networks on Academic Progress of Bamyán University Students in 2025* [Bamyán University]. Afghanistan.
- Wolor, C. W. (2025). SOCIAL MEDIA ADDICTION, SELF-REGULATED LEARNING, AND ACADEMIC PROCRASTINATION: A MEDIATION ANALYSIS. *Jurnal Pendidikan Ekonomi, Perkantoran, dan Akuntansi*, 6(2), 389–400.
- Yip, M. C., & Chung, O. L. (2022). Psychometric properties of the Chinese version of procrastination assessment scale for students. *Frontiers in Psychology*, 13, 1016116. <https://doi.org/10.3389/fpsyg.2022.1016116>
- Zimmerman, B. J. (2011). Motivational sources and outcomes of self-regulated learning and performance: Graduate center of city university of new york. In *Handbook of self-regulation of learning and performance* (pp. 63–78). Routledge.