Social Media Addiction and Academic Procrastination: Social Support as a Moderator and Indecisiveness as a Mediator

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Abstract

There is a lack of comprehensive literature on the impact of social media addiction on academic procrastination, particularly in terms of social support as a moderator and indecisiveness as a mediator in Pakistan. The current study aims to fill this gap by investigating the effect of the predictor, social media addiction, on the outcome variable, academic procrastination, via the moderator, social support, and indecisiveness as a mediator among college and university students between the ages of 18 to 25, i.e., young adults. The study utilized a cross-sectional research design and purposive sampling technique to collect data from 254 participants, with the inclusion criteria being social media use for at least the last year and participants must be enrolled in college or university. The questionnaires used in the study to assess the variables were the Bergen Social Media Addiction Scale, Procrastination Assessment Scale, Indecisiveness Scale, and the Social Support Scale (shorter version). The correlational analysis of the study shows a significant positive relationship between social media addiction, academic procrastination, and indecisiveness. In contrast, social media addiction has a non-significant negative association with social support. The Hayes process 4.1, model 4, shows a significant positive mediating role of indecisiveness between social media addiction and academic procrastination. The Hayes process 4.1, model 1, also indicates an important moderating role of social support between social media addiction and academic procrastination. The study concludes with implications and recommendations.

Keywords: Social Media Addiction, Indecisiveness, Academic Procrastination.

Introduction

Social media has become an integral part of human society, serving as a vital source of information, communication, and educational enhancement while also playing a significant role in business (Purwanto et al., 2023; Sugiyantoro et al., 2022; Fatawu et al., 2023; Chugh et al., 2021). However, despite its benefits, excessive use of social media has been proven to have detrimental effects. Recent studies indicate that social media addiction can lead to clinical distress, negative emotions, and adverse mental health outcomes. Additionally, it is strongly

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associated with academic procrastination among college and university students, resulting in a decline in academic performance (Shiraly et al., 2024; Davis et al., 2024; Shahid et al., 2024). Academic procrastination refers to the tendency of students to delay or postpone completing academic tasks, such as studying for exams, completing homework, or writing essays, despite being aware of deadlines and the importance of these tasks (Senécal et al., 1995; González-Brignardello et al., 2023; Subashkevych, 2023). Research has consistently shown that excessive use of social media platforms like Facebook, Instagram, and TikTok is linked to higher levels of academic procrastination, which negatively impacts academic achievement (Manzoor et al., 2024; Przepiorka et al., 2016; Sasikala, 2023). For instance, a study involving 965 undergraduates at Nnamdi Azikiwe University found that most students exhibited high levels of academic procrastination, with social media addiction significantly predicting both procrastination and lower academic performance (Anierobi et al., 2021). Similarly, research at Semarang State University highlighted a strong correlation between social media usage intensity and academic procrastination, emphasizing the need for institutional policies to address this issue (Muslikah & Andriyani, 2018).

In Saudi Arabia, a cross-sectional study of 697 students at Taif University revealed moderate levels of academic procrastination, with social media addiction, daily usage hours, and phone use during lectures being significant predictors (Al Shaibani et al., 2020). Furthermore, a study in the Philippines demonstrated that academic procrastination fully mediates the relationship between social media addiction and academic achievement, underscoring the detrimental effects of procrastination on learning outcomes (Caratiquit & Caratiquit, 2023). Additional research in Urmia high schools found that social network addiction indirectly reduces academic achievement by increasing procrastination, academic stress, and poor sleep quality (Ahmadi & Zeinali, 1970).

Social support, defined as the assistance accessible to an individual through social ties to other individuals, groups, and the larger community (Grey et al., 2020; Scardera et al., 2020), is crucial in reducing academic procrastination and enhancing academic performance. For students, social support can alleviate stress, enhance motivation, and provide encouragement, improving their ability to manage academic tasks effectively (Li et al., 2018; Heiman, 2016; Rodríguez et al., 2017).

Recent studies conducted in Pakistan have highlighted the distinction between social media addiction and social media use. While addiction is detrimental to mental health and academic performance, social connectedness has been shown to act as an effective buffer against adverse mental health outcomes and academic procrastination. It also moderates academic performance (Fareed et al., 2024; Shahid et al., 2024; Zhang et al., 2024).

Indecisiveness refers to the generalized difficulty in making decisions, often characterized by overthinking options and repeatedly evaluating pros and cons, leading to decision-making delays (Appel et al., 2021; Lauderdale et al., 2019). While some individuals are adept at making decisions, others struggle with indecisiveness, leading to missed deadlines and incomplete tasks (Ferrari, 1994). A recent study by Fayyaz et al. (2025) found that students who lack proper support often procrastinate in academic activities due to indecisiveness. The study emphasized the need for adequate support systems and increased awareness in Pakistani society to address this issue.

Despite the growing body of literature on social media addiction and academic procrastination, there is limited research specifically focusing on the moderating role of social support and the mediating role of indecisiveness among students in Pakistan. This study addresses this gap by exploring the interplay between these factors and providing practical implications for Pakistani students. By doing so, it seeks to contribute to developing strategies that can mitigate the adverse effects of social media addiction and enhance academic performance through improved social support and decision-making processes.

Hypotheses

- 1. Social media addiction is likely to be positively and significantly associated with academic procrastination and indecisiveness while being negatively and significantly related to social support among young adults.
- 2. Indecisiveness is likely to mediate the effect of social media addiction on the outcome variable, academic procrastination, among young adults.
- 3. Social support is likely to significantly moderate the relationship between social media addiction and academic procrastination among young adults.

Methodology

A cross-sectional correlational research design was employed in this study, utilizing a purposive sampling technique. The sample comprised 254 participants, including employed and unemployed individuals and college and university students aged 18 to 25. Participants were required to be Pakistani citizens aged 18 to 25, own a smartphone with access to social media, and be currently enrolled in a college or university. A demographic questionnaire was used to gather information such as gender, age, and employment status. The Bergen Social Media Addiction Scale (BSMAS), developed by Andreassen et al. (2016), measured social media addiction using a six-item Likert scale ranging from 1 to 5, where higher scores indicated more significant addiction. The Short Form Social Support Questionnaire, developed by Sarason in 1987, assessed social support through six items rated on a 6-point Likert scale. The Indecisiveness Scale (Owen, 2016) evaluated participants' indecisiveness using 15 items with a Likert-type format, ranging from Strongly Disagree (1) to Strongly Agree (5), measuring chronic difficulty in decision-making. The Academic Procrastination Scale (Yockey, 2016) measured the tendency to delay academic tasks by using 25 items on a 5-point Likert scale. Ethical guidelines from the APA's 7th edition were strictly followed, ensuring participants' privacy, obtaining informed consent, and preventing physical or psychological harm.

Table 1: Socio-demographic Characteristics of Participants (N=254)								
Participants Characteristics	Frequency	Percentage	\overline{M}	\overline{SD}				
Age			22.19	1.92				
Gender								
Men	166	65						
Women	88	35						
Employment Status								
Employed	89	35						
Unemployed	165	65						

Results

Note: M=Mean, SD= Standard Deviation

The table above revealed that 254 participants, 166(65%) are men and 88 participants (35%) were women, with standard deviation of 1.92 and mean age of 22.19. Regarding employment status, 89 participants (35%) were employed, while 165 participants (65%) were unemployed.

Variables	1	2	3	4
1. social media addiction	-	.71**	.95**	05
2.Academic Procrastination		-	.73**	002
3.Indecsiveness			-	07
4.Social Support				-

Note: **p*<.05, ***p*<.01

The table above shows social media addiction is positively and significantly related to academic procrastination and indecisiveness while negatively but not significantly associated with social support. Furthermore, academic procastination is significantly and positively associated with indecisiveness while indecisiveness is negatively but not significantly associated with social support.

	Consequences								
		Indecisiveness (M)				AP (Y)			
Antecedents		β	SE	Р		β	SE	Р	
Social Media Addiction (X)	а	1.98	.03	.000	c'	.76	.56	.17	
Indecisiveness (M)	-				b	1.04	.27	.000	
Constant	Ι	11.01	.66	.000	Ι				
		$R^2 = .9$	P5 F=24	483.89	$R^2 = .53 F = 145.68$				
		P = .000				P = .000			

Note: **p*<.05, ***p*<.01, ****p*<.001,

According to the table above, there is a positive significant direct effect of social media addiction on indecisiveness ($\beta = 1.98^{***}$, SE = .03, p < .001). Furthermore, direct effect of social media addiction on academic procastination is not significantly ($\beta = .76$, SE = .56, p > .05). However, the effect of indecisiveness on academic procrastination is significantly positive ($\beta = 1.04^{***}$, SE = .27, p < .001).

Table 4: Indirect Effect					
Indirect Path	Effect	β	LLCI	ULCI	
Indecisiveness	2.08	.52	.22	.79	

Indirect effects depicts that social media addiction is significantly effecting academic procrastination via indecisiveness.

Table 5: Mod	leration	Analy	sis (N=254)						
Variables		β	SE	t	р	R^2	F	LLCI	ULCI
						.52	93.42		
SMA		1.61	.43	3.70	.000			.75	2.47
Social Suppor	t	-1.5	.54	-2.76	.006			-2.56	43
SMA X	Social	.09	.03	3.07	.002			.03	.16
support									

Note: **p*<.05. ***p*<.01, SMA= Social Media Addiction

Hayes' process 4.1, model 1 was employed to assess the moderating role of social support between social media addiction and academic procrastination. As shown in the table above, social media addiction has a direct significant effect on academic procastination ($\beta = 1.61^{***}$, SE = .43, p < .001). Additionally, social support also significantly and negatively effects academic procrastination ($\beta = -1.5^{**}$, SE = .54, p < .01). The combined effect of social media addiction and social support on academic procrastination is also significantly positive ($\beta = .09^{**}$, SE = .03, **p < .01), suggesting that social support significantly moderates the impact of social media addiction on academic procrastination in young adults.

Discussion

The objective of the study is to examine the effect of smartphone addiction on academic procrastination, mediated by indecisiveness and moderated by social support, among young Pakistani adults. This study aims to address gaps in the existing literature and provide implications for affected youth.

The first hypothesis of the study is largely supported, as the correlational analysis indicates that social media addiction is positively and significantly related to academic procrastination and indecisiveness, while it is negatively though not significantly associated with social support. The results of our study are supported by research conducted in Nigeria, which found that social media addiction is positively associated with academic procrastination among undergraduate students (Anierobi et al., 2021). Several other recent studies align with our findings, indicating that excessive internet use is linked to indecisiveness regarding career and academic decisions, thereby leading to academic procrastination (Lehmann & Konstam, 2011; Suleiman & Sani, 2020; Reddy & Vijayan, n.d; Latipah et al., 2021). Additionally, our results are consistent with studies suggesting that problematic social media use can be moderated by social support from family and peers, which enhances academic performance and reduces academic procrastination (Qi et al., 2024).

The second hypothesis of the study is also significantly supported, as indecisiveness positively and significantly mediates the effect of the predictor variable, social media addiction, on the outcome variable, academic procrastination, among young Pakistani adults. Our findings align with similar studies, such as one that found excessive internet use is related to career indecision among emerging adults (Lehmann & Konstam, 2011). Another study supports our results, showing that indecisiveness predicts academic procrastination among college and university students (Fayyaz et al., 2025). The reason indecisiveness acts as a significant mediator may be due to the excessive use of social media platforms by young students, which distracts them and reduces their focus on academic activities. This leads to procrastination, as important academic decisions and assignments are delayed in favor of immediate gratification from activities such as watching reels, chatting, or posting photos.

The third hypothesis of the study is also considerably supported, as social support significantly and positively moderates the effect of social media addiction on academic procrastination among young adults. Recent research aligns with our results, indicating that problematic social media use can be moderated by social connectedness among students (Shahid et al., 2024). Another study supports our findings, showing that social support is inversely associated with academic procrastination among young adults, meaning that social support reduces academic procrastination. Similarly, a study found that healthy family support may contribute to lower levels of social media addiction among Chinese university students (Qi et al., 2024). The reason social support acts as a significant moderator may be due to its role in providing emotional encouragement, guidance, and accountability for academic results. Social support may reduce psychological distress, improve students' focus on their studies, and help them prioritize academic tasks over social media distractions, thereby motivating them to work toward a brighter future. Pakistan, being a collectivistic society, places significant importance on social support, which may play a vital role in reducing social media addiction and enhancing academic performance by minimizing academic procrastination through social support mechanisms.

Conclusion

The objective of the study was to examine the mediating role of indecisiveness and the moderating role of social support between the predictor (social media addiction) and the outcome (academic procrastination) among young college and university students aged 18 to 25. The study utilized Hayes process 4.1, model 4 for mediation analysis, which significantly

supported the hypothesis, indicating that indecisiveness mediates significantly between social media addiction and academic procrastination. Similarly, Hayes process 4.1, model 1 was used for moderation analysis, revealing a significant moderating role of social support between social media addiction and academic procrastination. Thus, the study fulfils its goal of providing implications for young Pakistani students and addressing the gap in the existing literature.

Limitations and Recommendations

The first limitation of the study is the limited cohort size of 254 participants. It is recommended to use a larger sample size in future research to generalize the results across the entire Pakistani population. The second limitation of the study is its cross-sectional research design. A longitudinal design might yield more effective results by allowing researchers to observe changes in variables over time. Therefore, it is recommended to adopt a longitudinal research design in future studies. The third limitation of the study is the imbalance in gender and employment status among participants. Due to this imbalance, mean differences among demographic categories could not be analyzed. Future studies should ensure a balanced representation of demographic variables, such as gender and employment status, to allow for more comprehensive analyses.

Implications

The findings of this study affirm its objectives and highlight the need for actionable implications to support college and university students in Pakistan who struggle with problematic smartphone use and academic procrastination. First, it is essential to promote help-seeking behavior among students, encouraging them to seek psychological assistance from mental health professionals. Universities can facilitate this by organizing seminars, webinars, and workshops, with higher authorities inviting mental health experts to enhance student performance. Workshops should also be arranged to train parents in fostering their children's decision-making skills, such as time management, to help them overcome academic procrastination and improve academic performance. Additionally, parents should be encouraged to create a supportive and guiding environment for their children, ensuring they feel emotionally secure and motivated to succeed academically. Awareness programs should also be provided to parents to educate them on the importance of supporting their children for better academic performance.

References

- Ahmadi, J., & Zeinali, A. (1970). The impact of social network addiction on academic achievement of Stu-dents: The mediating role of sleep quality, academic procrastination and academic stress. *Research in School and Virtual Learning*, 6(2), 21-32.
- Al Shaibani, M. H., Hejab, M., & Shaibani, A. (2020). Academic procrastination among university students in Saudi Arabia and its association with social media addiction. *Psychology and Education Journal*, *57*(8), 1118-1124.
- Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of addictive behaviors*, *30*(2), 252.
- Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of addictive behaviors*, *30*(2), 252.
- Anierobi, E. I., Etodike, C. E., Okeke, N. U., & Ezennaka, A. O. (2021). Social media addiction as correlates of academic procrastination and achievement among undergraduates of Nnamdi Azikiwe

University Awka, Nigeria. International Journal of Academic Research in Progressive Education and Development, 10(3), 20-33.

- Appel, H., Englich, B., & Burghardt, J. (2021). "I Know What I Like"–Indecisiveness Is Unrelated to Behavioral Indicators of Evaluation Difficulties. *Frontiers in Psychology*, *12*, 710880.
- Caratiquit, K. D., & Caratiquit, L. J. C. (2023). Influence of social media addiction on academic achievement in distance learning: Intervening role of academic procrastination. *Turkish Online Journal of Distance Education*, 24(1), 1-19.
- Chugh, R., Grose, R., & Macht, S. A. (2021). Social media usage by higher education academics: A scoping review of the literature. *Education and information technologies*, 26(1), 983-999.
- Davis, C. E., Eche-Ugwu, I. J., & Alcindor, N. (2024). Social Media Use and Psychological Distress Among Undergraduate Nursing Students: A Review. *Journal of Nursing Education*, 63(8), 540-545.
- Fareed, S., Jabeen, S., Aurangzeb, S., & Aslam, R. (2024). Social media addiction, social media use and aggression in young adults. *Pakistan Journal of Humanities and Social Sciences*, *12*(3), 2411-2416.
- Fatawu, A., Fuseinii, M. A. B., & Khalid, A. M. (2023). The Benefits and Challenges of Social Media in Higher Education. In *Advances in Information Communication Technology and Computing: Proceedings of AICTC 2022* (pp. 107-122). Singapore: Springer Nature Singapore.
- Fayyaz, M., Nizam din, S., Malik, F., & Tareen, N. (2025). The Relationship between Indecisiveness and Academic Procrastination in Pakistani Students from Single-Parent Households. *Pakistan Journal of Humanities and Social Sciences*, 13(1), 72–76.
- Ferrari, J. R., & Olivette, M. J. (1994). Parental authority and the development of female dysfunctional procrastination. Journal of research in Personality, 28(1), 87-100.
- González-Brignardello, M. P., Sánchez-Elvira Paniagua, A., & López-González, M. Á. (2023). Academic procrastination in children and adolescents: A Scoping review. *Children*, *10*(6), 1016.
- Grey, I., Arora, T., Thomas, J., Saneh, A., Tohme, P., & Abi-Habib, R. (2020). The role of perceived social support on depression and sleep during the COVID-19 pandemic. *Psychiatry research*, 293, 113452.
- Hayes, A. F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: does method really matter? *Psychological science*, *24*(10), 1918-1927.
- Heiman, T. (2006). Social support networks, stress, sense of coherence and academic success of university students with learning disabilities. *Social psychology of education*, *9*, 461-478.
- Latipah, E., Adi, H. C., & Insani, F. D. (2021). Academic procrastination of high school students during the Covid-19 pandemic: Review from self-regulated learning and the intensity of social media. *Dinamika Ilmu*, 21(2), 293-308.
- Lauderdale, S. A., Martin, K. J., & Moore, J. (2019). Aversive indecisiveness predicts risks for and symptoms of anxiety and depression over avoidant indecisiveness. Journal of Rational-Emotive & Cognitive-Behavior Therapy, 37(1), 62-83.
- Lehmann, I. S., & Konstam, V. (2011). Growing up perfect: Perfectionism, problematic internet use, and career indecision in emerging adults. *Journal of Counseling & Development*, 89(2), 155-162.
- Li, J., Han, X., Wang, W., Sun, G., & Cheng, Z. (2018). How social support influences university students' academic achievement and emotional exhaustion: The mediating role of self-esteem. *Learning and individual differences*, *61*, 120-126.
- Manzoor, R., Sajjad, M., Shams, S., & Sarfraz, S. (2024). TikTok Scrolling Addiction and Academic Procrastination in Young Adults. *Pakistan Journal of Humanities and Social Sciences*, 3290-3295.
- Muslikah, M., & Andriyani, A. (2018). Social media user students' academic procrastination. *Psikopedagogia Jurnal Bimbingan Dan Konseling*, 7(2), 53-57.
- Przepiorka, A., Błachnio, A., & Díaz-Morales, J. F. (2016). Problematic Facebook use and procrastination. *Computers in Human Behavior*, 65, 59-64.

- Purwanto, A., Fahmi, K., & Cahyono, Y. (2023). The benefits of using social media in the learning process of students in the digital literacy era and the education 4.0 era. *Journal of Information Systems and Management (JISMA)*, 2(2), 1-7.
- Qi, Y., Zhao, M., Geng, T., Tu, Z., Lu, Q., Li, R., ... & Gao, Y. (2024). The relationship between family functioning and social media addiction among university students: a moderated mediation model of depressive symptoms and peer support. *BMC psychology*, *12*(1), 341.
- Reddy, E. A., & Vijayan, D. Indecisiveness as an Underlying Factor for Procrastination among Young Adults.
- Rodríguez, M. S., Tinajero, C., & Páramo, M. F. (2017). Pre-entry characteristics, perceived social support, adjustment and academic achievement in first-year Spanish university students: A path model. *The Journal of psychology*, *151*(8), 722-738.
- Sarason, I. G., Shearin, P., & Sarason, B. (1987). Social support questionnaire. *Journal of Social* and Personal Relationships, 4(4), 497-510.
- Sasikala, A. (2023). Exploring the Relationship between Instagram Addiction and Procrastination among College Students. *International Journal of Science and Social Science Research*, 1(3), 117-126.
- Scardera, S., Perret, L. C., Ouellet-Morin, I., Gariépy, G., Juster, R. P., Boivin, M., ... & Geoffroy, M. C. (2020). Association of social support during adolescence with depression, anxiety, and suicidal ideation in young adults. *JAMA network open*, *3*(12), e2027491.
- Senécal, C., Koestner, R., & Vallerand, R. J. (1995). Self-regulation and academic procrastination. *The journal of social psychology*, *135*(5), 607-619.
- Shahid, M. S., Bashir, S., & Fatima, S. (2024). Social media addiction and aggression in Pakistani young adults: Social connectedness as a moderator. *Journal of Professional & Applied Psychology*, 5(3), 424-433.
- Shahid, M. S., Yousaf, R., & Munir, H. (2024). Social media addiction, depression and aggression in young adults. *Journal of Professional & Applied Psychology*, *5*(2), 276-285.
- Shiraly, R., Roshanfekr, A., Asadollahi, A., & Griffiths, M. D. (2024). Psychological distress, social media use, and academic performance of medical students: the mediating role of coping style. *BMC Medical Education*, 24(1), 999.
- Subashkevych, I. (2023). Study of the features of academic procrastination of youth students. *Socioeconomic relations in the digital society*, *3*(49), 86-96.
- Sugiyantoro, N. L. A., Wijaya, M., & Supriyadi, S. (2022). Benefits of WhatsApp as a communication media on small business social networks. *The Journal of Society and Media*, 6(1), 1-16.
- Suleiman, M. M., & Sani, S. (2020). Social networks as integral of ICT: A predictor of academic procrastination. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 1(2), 229-241., M. M., & Sani, S. (2020). Social networks as integral of ICT: A predictor of academic procrastination. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 1(2), 229-241.
- Yockey, R. D. (2016). Validation of the short form of the academic procrastination scale. *Psychological reports*, *118*(1), 171-179.
- Zhang, Y., Guo, H., Ren, M., Ma, H., Chen, Y., & Chen, C. (2024). The multiple mediating effects of self-efficacy and resilience on the relationship between social support and procrastination among vocational college students: a cross-sectional study. *BMC public health*, 24(1), 1958.