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The Effect of Phubbing and Social Support on Students' Academic Procrastination with Self-Control as a Moderator

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Abstract

Academic procrastination has become a major challenge in higher education, particularly with the widespread use of smartphones that increases digital distractions and may interfere with students' academic responsibilities. This study aimed to examine the effects of phubbing and social support on academic procrastination, while investigating the moderating role of self-control. A quantitative cross-sectional survey design was employed involving 252 undergraduate students selected through simple random sampling. Data were collected using a structured online questionnaire and analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS. The findings revealed that phubbing significantly increased academic procrastination, whereas self-control significantly reduced academic procrastination. In contrast, social support did not significantly affect academic procrastination. Furthermore, self-control did not moderate the relationships between phubbing and academic procrastination or between social support and academic procrastination. These results indicate that academic procrastination is influenced primarily by students' behavioral and self-regulatory capacities rather than by external social support. The study concludes that reducing excessive smartphone use and strengthening self-control are more effective strategies for minimizing academic procrastination than relying solely on supportive social environments, thereby providing practical implications for universities in developing student self-regulation programs.

Keywords

Academic Procrastination, Phubbing, Self-Control, Social Support.

1. Introduction

Academic procrastination has become one of the most prevalent behavioral challenges in higher education because it negatively affects students' learning processes, academic achievement, and timely completion of academic responsibilities. This issue is particularly concerning among undergraduate students in their final year, who are required to complete complex academic tasks such as undergraduate theses. At UIN Sultan Maulana Hasanuddin Banten, students who actively participate in organizational activities were found to experience higher levels of academic procrastination than non-active students, indicating that procrastination remains a significant academic concern within the university environment (Ramanda et al., 2022). Academic procrastination affects approximately 15%–32% of individuals, reflecting its widespread occurrence among students and the general population (Ocansey et al., 2022). Ferrari et al. (1995) and Muñoz-Olano and Hurtado-Parrado (2017) reported that 61% of individuals engage in procrastination behavior, with approximately 20% experiencing chronic procrastination. Among university students, academic procrastination has been identified as a persistent behavioral pattern that contributes to delayed task completion and reduced academic performance (Steel, 2007; Kim & Seo, 2015).

The emergence of digital technology has further intensified academic procrastination behavior, particularly through excessive smartphone use. Smartphones provide immediate gratification that may encourage students to prioritize entertainment activities over academic obligations. Kim and Seo (2015) emphasized that technological advancement has increased dependence on smartphones, while Lau (2017) found that students spend considerable time accessing the internet beyond academic purposes, with social media activities occurring more frequently than educational activities. Excessive smartphone engagement may lead to dysfunctional patterns such as phubbing, defined as the tendency to focus on smartphones while ignoring individuals in face-to-face interactions (Chotpitayasunondh & Douglas, 2018). Parmaksız (2023) identified phubbing as a behavioral factor associated with academic procrastination because it reduces attention control and increases distraction during academic activities. However, previous findings remain inconsistent, as some studies reported weak or negative relationships between phubbing and procrastination, suggesting the need for further investigation into the mechanisms underlying this relationship.

In addition to technological factors, social and psychological factors also play important roles in explaining academic procrastination. Social support from family, peers, and academic environments has been recognized as a protective factor that reduces procrastination by enhancing emotional regulation, problem-solving ability, and goal-oriented behavior. Conversely, insufficient social support may increase students' vulnerability to academic difficulties. Another crucial psychological factor is self-control, as procrastination is widely considered a manifestation of inadequate self-regulation (Steel, 2007; Hidajad, 2023). Students with stronger self-control are more capable of managing distractions, regulating their behavior, and completing academic tasks effectively (Saed, 2019; Zhu, 2023). Previous studies by Sriwijaya et al. (2022) and Wang et al. (2022) have demonstrated that self-control significantly contributes to explaining academic procrastination among university students.

Although previous research by Dursun (2025) has examined the relationships between phubbing, social support, self-control, and academic procrastination separately, several theoretical gaps remain. Most existing studies have focused on self-control as a direct predictor of procrastination or as a factor influencing smartphone-related behaviors. Limited research has examined self-control as a moderating mechanism that may strengthen or weaken the effects of phubbing and social support on academic procrastination. Furthermore, studies integrating

technological, social, and psychological perspectives within a single research model remain scarce, particularly among Indonesian university students. Therefore, this study introduces a novel perspective by positioning self-control as a moderator in the relationship between phubbing, social support, and academic procrastination.

This study aims to examine the effects of phubbing and social support on academic procrastination among undergraduate students at UIN Sultan Maulana Hasanuddin Banten, while also investigating the moderating role of self-control in these relationships. Specifically, this study analyzes the direct effects of phubbing, social support, and self-control on academic procrastination. It evaluates whether self-control influences the strength of the relationships between phubbing and academic procrastination as well as between social support and academic procrastination. This study contributes to educational psychology literature by providing a more comprehensive understanding of academic procrastination through the integration of technological, social, and psychological perspectives. The findings are expected to provide empirical evidence for universities in developing targeted interventions that strengthen students' self-control, encourage supportive academic environments, and reduce excessive smartphone-related behaviors.

2. Literature Review and Hypothesis Development

2.1. The Effect of Phubbing on Academic Procrastination

Phubbing refers to the behavior of ignoring individuals in face-to-face interactions by focusing excessive attention on smartphones or digital devices (Chotpitayasunondh & Douglas, 2018). In academic contexts, excessive smartphone engagement may reduce students' attention control, disrupt time management, and increase exposure to digital distractions, which can interfere with task completion. Academic procrastination is defined as the voluntary delay of academic tasks despite awareness of potential negative consequences and is often associated with poor self-regulation abilities (Steel, 2007; McCloskey, 2012; Ko & Chang, 2019). Therefore, phubbing may become a behavioral trigger that increases academic procrastination because students allocate more attention to smartphone-related activities rather than academic responsibilities.

Previous studies support the positive relationship between phubbing and academic procrastination. Karadağ et al. (2015) found that phubbing develops from various forms of virtual addiction, including excessive smartphone dependency, which may reduce individuals' ability to regulate behavior. Similarly, Cahyadewi et al. (2022) demonstrated that phubbing contributes significantly to academic procrastination among Generation Z students, indicating that smartphone-related distractions play an important role in delaying academic tasks. Putri et al. (2022) also emphasized that phubbing behavior is increasingly common among university students and may negatively influence academic activities.

H1: Phubbing has a positive effect on academic procrastination.

2.2. The Effect of Social Support on Academic Procrastination

Social support refers to the availability of emotional, informational, and instrumental assistance obtained from family, friends, and significant others that helps individuals cope with challenges and stressful situations (Cohen & Hoberman, 1983; Sarason & Sarason, 2009). In academic environments, social support provides encouragement, motivation, and guidance that enable students to maintain academic engagement and overcome difficulties in completing academic tasks. Strong social support can reduce psychological pressure, improve coping strategies, and encourage persistence, thereby decreasing students' tendency to procrastinate (Cohen & Syme, 1985).

Several studies have confirmed the protective role of social support against academic procrastination. Ferrari et al. (1998) found that procrastinators tend to have weaker social support networks, suggesting that supportive relationships can help students manage academic challenges more effectively. Furthermore, Wahaningsih (2013) highlighted that family social support contributes to better academic outcomes by strengthening students' psychological resources. Social support also improves students' confidence and motivation in dealing with academic demands, which may reduce avoidance behavior and task delay (Sarason & Sarason, 2009). Therefore, higher levels of social support are expected to reduce academic procrastination.

H2: Social support has a negative effect on academic procrastination.

2.3. The Effect of Self-Control on Academic Procrastination

Self-control represents an individual's ability to regulate thoughts, emotions, and behaviors in order to achieve long-term goals despite immediate temptations or distractions (Tangney et al., 2004). In the context of academic behavior, self-control enables students to manage their time, maintain concentration, resist distractions, and prioritize academic responsibilities over short-term pleasure. Students with good self-control are more capable of controlling impulses and maintaining consistent efforts in completing academic tasks. According to self-regulation theory, procrastination occurs when individuals fail to control impulses and cannot effectively regulate their behavior toward desired goals (Steel, 2007). Therefore, students with higher self-control are expected to demonstrate lower levels of academic procrastination.

Empirical evidence consistently indicates that self-control is negatively associated with academic procrastination. Kim et al. (2017) found that self-control reduces procrastination by improving students' ability to regulate internet use and maintain goal-oriented behavior. Similarly, Saed (2019) argued that self-control functions as an important mechanism in preventing procrastination because it strengthens self-regulation capacity. Zhao et al. (2021) further demonstrated that self-control significantly predicts procrastination through its role in behavioral regulation. In Indonesia, Sriwijaya et al. (2022) also found a significant relationship between self-control and academic procrastination among university students. Thus, students with stronger self-control are expected to have lower academic procrastination because they are better able to manage distractions and remain focused on academic goals.

H3: Self-control has a negative effect on academic procrastination.

2.4. The Effect of Self-Control as a Moderating Variable

Beyond its direct influence, self-control may serve as a moderating variable that determines the extent to which external and behavioral factors influence academic procrastination. According to self-regulation theory, individuals with high self-control possess greater capacity to regulate impulses, maintain attention, and adjust their behavior according to academic goals (Steel, 2007; Saed, 2019). Therefore, self-control may weaken the negative consequences of smartphone-related distractions, such as phubbing, because students with stronger self-control are more capable of limiting unnecessary smartphone use and maintaining academic focus.

Furthermore, self-control may strengthen the beneficial effects of social support in reducing academic procrastination. Although social support provides motivation and external encouragement, its effectiveness depends on students' ability to internalize and apply such support through appropriate behavioral regulation.

Students with higher self-control are more likely to transform social encouragement into productive academic actions and maintain consistent learning behaviors. Kim et al. (2017), Ma et al. (2022), and Sartika and Nirbita (2022) found that self-control interacts with psychological and environmental factors in shaping procrastination behavior. However, limited research has examined self-control as a moderator in the relationship between phubbing, social support, and academic procrastination. Therefore, this study proposes that self-control strengthens the protective effect of social support while reducing the harmful effect of phubbing on academic procrastination.

H4: Self-control moderates the relationship between phubbing and academic procrastination.
H5: Self-control moderates the relationship between social support and academic procrastination.

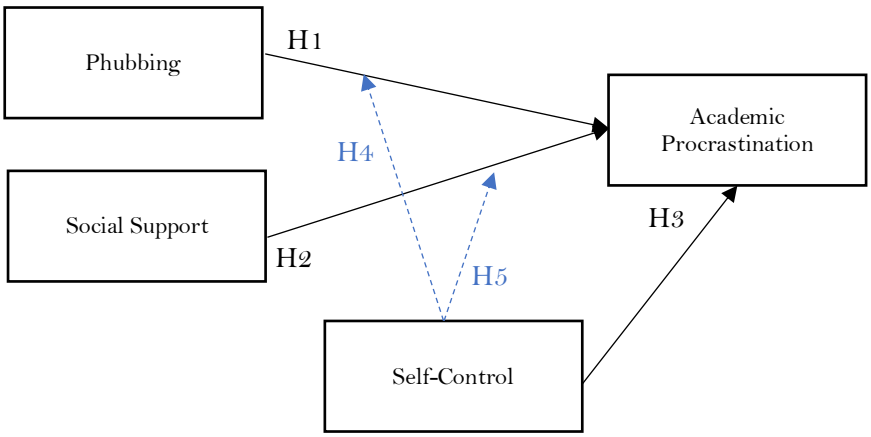

Figure 1. Research Framework

Figure 1 illustrates the proposed research framework examining the relationships between phubbing, social support, self-control, and academic procrastination. Phubbing is hypothesized to have a direct effect on academic procrastination, while social support is expected to influence academic procrastination. Furthermore, self-control is proposed as an additional predictor that may affect academic procrastination. The framework also suggests that self-control moderates the relationship between phubbing and academic procrastination as well as between social support and academic procrastination. Therefore, this model highlights the potential role of self-control in reducing the negative impact of phubbing and strengthening the beneficial influence of social support on students' academic behavior.

3. Methods

This study employed a quantitative research approach using a cross-sectional survey design to examine the effects of phubbing and social support on academic procrastination, with self-control serving as a moderating variable. A cross-sectional design was considered appropriate because the study aimed to investigate the relationships among variables based on data collected from respondents at a single point in time. The research model consisted of one dependent variable (academic procrastination), two independent variables (phubbing and social support), and one moderating variable (self-control). The conceptual framework was tested using Structural Equation Modeling Partial Least Squares (SEM-PLS), which is suitable for simultaneously analyzing complex relationships, including moderation effects, and for prediction-oriented research models.

The target population comprised undergraduate students enrolled at UIN Sultan Maulana Hasanuddin Banten. A total of 252 students participated in the study. The sample was determined using a probability sampling approach through simple random sampling, allowing each member of the population an equal opportunity to be selected and minimizing sampling bias. This sampling technique was chosen to improve the representativeness of the sample and enhance the generalizability of the findings to the target population.

Primary data were collected through a structured online questionnaire administered using Google Forms. The questionnaire consisted of previously validated measurement instruments adapted from established studies. Academic procrastination was measured using the Academic Procrastination Scale (APS) developed by McCloskey (2012), which includes 25 items representing six dimensions: psychological beliefs about abilities, distractions of attention, social factors of procrastination, time management skills, personal initiative, and laziness. Phubbing was assessed using the Generic Scale of Phubbing (GSP) developed by Chotpitayasunondh and Douglas (2018), covering four dimensions: nomophobia, interpersonal conflict, self-isolation, and problem acknowledgment. Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS) developed by Zimet et al. (1988), encompassing support from family, friends, and significant others. Self-control was measured using the Brief Self-Control Scale (BSCS) developed by Tangney et al. (2004), consisting of 13 items across five dimensions: self-discipline, deliberation, healthy habits, work ethic, and reliability. All measurement items employed a four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree).

Data analysis was conducted using SmartPLS software following the SEM-PLS procedure. The measurement model (outer model) was first evaluated by assessing convergent validity through outer loading values (>0.60) and Average Variance Extracted (AVE >0.50). Construct reliability was assessed using Cronbach's alpha and Composite Reliability (CR), with acceptable values exceeding 0.70. After confirming the validity and reliability of the measurement model, the structural model (inner model) was evaluated by examining the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and path coefficient significance through bootstrapping analysis. Subsequently, the structural model (inner model) was evaluated using the coefficient of determination (R^2) to assess the model's explanatory power, the Variance Inflation Factor (VIF < 5) to detect multicollinearity, and the bootstrapping procedure to test the significance of the proposed hypotheses. Moderation analysis was performed using the interaction effect approach to determine whether self-control moderated the relationships between phubbing and academic procrastination and between social support and academic procrastination. Statistical significance was established at $p < 0.05$ with t-values greater than 1.96.

4. Results

This study looked at how social support and phubbing affected academic procrastination in UIN Sultan Maulana Hasanuddin Banten students, using self-control as a moderating variable. An online survey was used to gather data, and 252 valid replies were obtained (N = 252). Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS was used to examine the data.

Table 1. Respondent Characteristics

Gender	Frequency (n)	Percentage (%)
Male	72	28.6
Female	180	71.4
Total	252	100.0

Table 1 presents the demographic characteristics of the respondents based on gender. Of the 252 undergraduate students who participated in this study, 180 respondents (71.4%) were female, while 72 respondents (28.6%) were male. These results indicate that female students constituted the majority of the sample, suggesting that the findings primarily reflect the perceptions and behavioral characteristics of female undergraduate students at UIN Sultan Maulana Hasanuddin Banten.

Table 2. Descriptive Statistics of The Study

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Academic Procrastination	252	35	88	57.27	8.86
Phubbing	252	15	54	34.68	5.45
Social Support	252	21	48	38.04	5.32
Self-Control	252	17	49	34.03	4.16

Table 2 presents the descriptive statistics of the study variables based on 252 respondents. Academic procrastination had scores ranging from 35 to 88, with a mean of 57.27 and a standard deviation of 8.86, indicating a relatively moderate level of procrastination with the greatest variability among the variables. Phubbing recorded a mean of 34.68 (SD = 5.45), with scores ranging from 15 to 54, suggesting a moderate level of smartphone-related distraction among the respondents. Meanwhile, social support had the highest mean score (M = 38.04, SD = 5.32), indicating that respondents generally perceived relatively high levels of support from family, friends, and significant others. Self-control showed a mean of 34.03 with the lowest standard deviation (SD = 4.16), suggesting that respondents' self-control was relatively consistent across the sample.

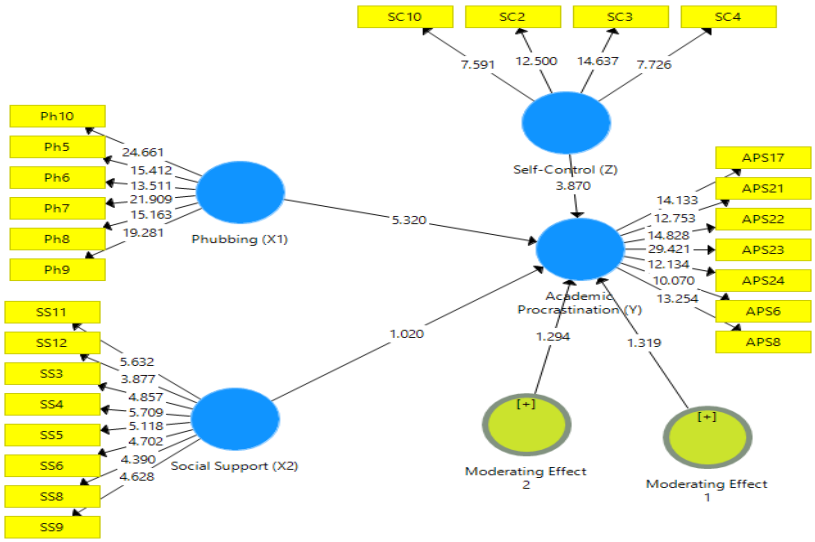

Figure 2. Path Diagram

Based on the outer loading results presented in Figure 2, all indicators measuring the constructs of phubbing, social support, self-control, and academic procrastination exhibited t-statistic values above the recommended threshold of 1.96, ranging from 3.870 to 24.661. These findings indicate that all indicators significantly represent their respective latent constructs, thereby demonstrating satisfactory indicator validity within the measurement model. Consequently, all measurement items were retained for further analysis, as they adequately captured the intended constructs

and fulfilled the validity requirements for proceeding to the structural model assessment.

Table 3. Reliability and Validity Test

Variable	AVE	Cronbach's Alpha	Composite Reliability
Academic Procrastination	0.466	0.809	0.859
Phubbing	0.548	0.834	0.879
Social Support	0.516	0.686	0.809
Self-Control	0.510	0.864	0.892

Table 3 presents the results of the reliability and convergent validity assessment for the study constructs. The Cronbach's alpha values ranged from 0.686 to 0.864, while the composite reliability values ranged from 0.809 to 0.892, indicating that all constructs demonstrated satisfactory internal consistency because the composite reliability values exceeded the recommended threshold of 0.70. Regarding convergent validity, phubbing (AVE = 0.548), social support (AVE = 0.516), and self-control (AVE = 0.510) met the recommended AVE threshold of 0.50, indicating adequate convergent validity. Although academic procrastination produced an AVE value of 0.466, which was slightly below the recommended threshold, the construct remained acceptable because its composite reliability (0.859) exceeded 0.60, indicating sufficient construct reliability despite the marginal AVE value. Overall, the measurement model demonstrates acceptable reliability and convergent validity for subsequent structural model analysis.

Table 4. Coefficient Determination

Indicator	Value
Dependent Variable	Academic Procrastination
R-Square	0.281
R-Square Adjusted	0.266

Table 4 presents the coefficient of determination (R^2) for the structural model. The R-square value of 0.281 indicates that 28.1% of the variance in academic procrastination is explained jointly by phubbing, social support, self-control, and the proposed interaction effects in the model. Meanwhile, the adjusted R-square value of 0.266 shows that, after accounting for the number of predictors, the model explains 26.6% of the variation in academic procrastination. These results suggest that the model has weak to moderate explanatory power, implying that the remaining 73.4% of the variance is influenced by other factors not included in this study.

Table 5. Hypothesis Test

Hypothesis	Path Coefficient	Standard Deviation	t-statistic	p-value
Phubbing → Academic Procrastination	0.331	0.062	5.320	0.000
Self-Control → Academic Procrastination	-0.306	0.079	3.870	0.000
Social Support → Academic Procrastination	-0.070	0.068	1.020	0.308
Phubbing × Self-Control → Academic Procrastination	-0.074	0.056	1.319	0.187
Social Support × Self-Control → Academic Procrastination	-0.077	0.059	1.294	0.196

Table 5 presents the results of the hypothesis testing using the bootstrapping procedure. The findings indicate that phubbing has a significant positive effect on academic procrastination ($\beta = 0.331$, $t = 5.320$, $p < 0.001$), indicating that students

with higher levels of phubbing are more likely to engage in academic procrastination. Therefore, H1, which states that phubbing has a positive effect on academic procrastination, is supported. Furthermore, self-control has a significant negative effect on academic procrastination ($\beta = -0.306$, $t = 3.870$, $p < 0.001$), suggesting that students with stronger self-control tend to exhibit lower levels of academic procrastination. Thus, H3 is supported.

In contrast, social support does not have a significant effect on academic procrastination ($\beta = -0.070$, $t = 1.020$, $p = 0.308$). Although the relationship is negative as hypothesized, the effect is statistically insignificant; therefore, H2 is not supported. Likewise, the interaction effect between phubbing and self-control on academic procrastination is insignificant ($\beta = -0.074$, $t = 1.319$, $p = 0.187$), indicating that self-control does not moderate the relationship between phubbing and academic procrastination. Consequently, H4 is not supported. Similarly, the interaction effect between social support and self-control on academic procrastination is also insignificant ($\beta = -0.077$, $t = 1.294$, $p = 0.196$), suggesting that self-control does not moderate the relationship between social support and academic procrastination. Therefore, H5 is not supported. Only H1 and H3 are supported, while H2, H4, and H5 are rejected.

5. Discussion

The findings demonstrate that phubbing increases academic procrastination, indicating that students who frequently prioritize smartphone use over face-to-face interactions are more likely to postpone academic responsibilities. This result suggests that excessive engagement with smartphones reduces students' ability to maintain attention on academic tasks and encourages a preference for immediately rewarding digital activities. According to Temporal Motivation Theory, individuals are inclined to choose activities that provide instant gratification rather than tasks whose rewards are delayed (Steel, 2007). Smartphones continuously offer immediate stimulation through social media, messaging applications, and digital entertainment, making academic assignments comparatively less attractive. Consequently, students become more vulnerable to delaying coursework despite recognizing its importance. This finding is consistent with previous studies reporting that phubbing contributes to academic procrastination among university students (Cahyadewi et al., 2022). Likewise, Karadağ et al. (2015) argued that phubbing originates from various forms of digital addiction that reduce behavioral control, while Chotpitayasunondh and Douglas (2018) explained that phubbing reflects excessive smartphone dependence capable of disrupting individuals' attention and daily functioning. Therefore, reducing unnecessary smartphone use may represent an important strategy for minimizing academic procrastination.

The results further reveal that social support does not significantly influence academic procrastination, suggesting that encouragement from family, friends, and significant others is insufficient to directly reduce students' tendency to postpone academic tasks. Although social support provides emotional reassurance, advice, and motivation, completing academic responsibilities ultimately depends on students' own willingness and capacity to regulate their behavior. This finding implies that external support alone cannot guarantee productive academic behavior without adequate internal self-management. The result partially contrasts with the perspective of Cohen and Hoberman (1983) and Cohen and Syme (1985), who proposed that social support serves as an important psychological resource for coping with stressful situations. It also differs from Ferrari et al. (1998), who found that stronger social support networks help reduce procrastination tendencies. One possible explanation is that university students, particularly those in higher education, possess greater academic autonomy, making individual characteristics

more influential than environmental support in determining academic behavior. Consequently, interventions aimed at reducing procrastination should emphasize the development of students' internal competencies rather than relying solely on external support systems.

Another important finding is that self-control reduces academic procrastination, indicating that students with stronger self-control are better able of regulate impulses, organize priorities, and maintain commitment to long-term academic goals. This finding supports Self-Regulation Theory, which considers procrastination a consequence of failures in behavioral regulation (Steel, 2007). Students possessing stronger self-control are generally more capable of resisting distractions, allocating study time effectively, and consistently completing academic tasks despite competing temptations. Conversely, limited self-control encourages a preference for pleasurable short-term activities over demanding academic work. These findings are consistent with Kim et al. (2017), who demonstrated that self-control significantly decreases procrastination by improving behavioral regulation and reducing internet-related distractions. Similarly, Saed (2019) emphasized that self-control functions as a central mechanism of self-regulation that prevents unnecessary task delays, while Zhao et al. (2021) concluded that self-control is among the strongest predictors of academic procrastination. The present findings are also supported by Sriwijaya et al. (2022), who reported that students with higher self-control exhibit significantly lower levels of academic procrastination. These results highlight the importance of strengthening students' time management, self-discipline, and digital self-regulation skills to improve academic performance.

The findings indicate that self-control does not moderate the relationships between phubbing and academic procrastination or between social support and academic procrastination. This suggests that self-control acts as an independent predictor rather than strengthening or weakening the effects of phubbing and social support on academic procrastination. One possible explanation is that smartphone use has become a habitual behavior that operates automatically, making its influence on procrastination relatively stable regardless of students' level of self-control. Similarly, while social support contributes to students' psychological well-being, its effect on procrastination appears to depend more on individual self-regulation than on external encouragement. These findings are consistent with Steel (2007), who viewed procrastination as a form of self-regulation failure, and Sirois and Pychyl (2013), who argued that procrastination is primarily driven by short-term mood regulation. The results also align with Zhao et al. (2021) and Ma et al. (2022), who identified self-control as a direct predictor of procrastination but did not consistently support its moderating role.

6. Conclusion

This study concludes that phubbing and self-control are significant determinants of academic procrastination among undergraduate students, whereas social support does not significantly influence academic procrastination. The findings also demonstrate that self-control does not moderate the relationships between phubbing and academic procrastination or between social support and academic procrastination, indicating that self-control functions primarily as an independent predictor rather than as a boundary condition. These results emphasize that students' ability to regulate their own behavior plays a more substantial role in reducing procrastination than external support alone.

The findings provide practical implications for higher education institutions by highlighting the importance of developing interventions that strengthen students' self-control, time management, and responsible smartphone use. Universities may consider implementing digital well-being programs, self-regulation training, and academic counseling to help students manage distractions and improve academic

discipline. This study is subject to several limitations. First, the cross-sectional design does not permit causal inference. Second, the sample was limited to students from a single university, restricting the generalizability of the findings. Third, the relatively modest explanatory power of the model suggests that other factors influencing academic procrastination were not included. Future studies are therefore encouraged to employ longitudinal designs, involve more diverse student populations, and incorporate additional variables such as academic motivation, self-efficacy, resilience, digital literacy, or academic stress to obtain a more comprehensive understanding of academic procrastination.

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