

SELF-EFFICACY AND ACADEMIC PROCRASTINATION AMONG UNIVERSITY STUDENTS: THE ROLE OF MINDFUL AWARENESS

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KEYWORDS

Academic Procrastination, Self-Efficacy, Mindfulness, University Students

CITE THIS ARTICLE:

Sarfraz, S., Ali, S. F., & Urooj, A. (2026). Self-efficacy and academic procrastination among university students: the role of mindful awareness. *Pakistan Journal of Positive Psychology*, 3(6), 149-156.

ABSTRACT

Academic procrastination is a common academic behavior that may interfere with students' performance, well-being, and effective self-regulation. The present quantitative correlational study examined the relationships among academic procrastination, general self-efficacy, and mindfulness among university students. The sample comprised 200 young adult university students aged 19–25 years from universities in Islamabad. Data were collected through convenience sampling using the General Self-Efficacy Scale (GSE), Academic Procrastination Assessment Scale–Students (PASS), and Mindful Attention Awareness Scale (MAAS). Descriptive statistics, Pearson correlations, and an independent samples t-test were used to examine the study variables and gender differences. The reported findings showed a negative relationship between general self-efficacy and academic procrastination ($r = -.29, p < .01$), a positive relationship between general self-efficacy and mindfulness ($r = .23, p < .01$), and a negative relationship between academic procrastination and mindfulness ($r = -.19, p < .01$). The reported gender comparisons did not indicate statistically significant differences for general self-efficacy, academic procrastination, or mindfulness. The findings highlight the relevance of self-efficacy and mindful awareness in understanding academic procrastination among university students and provide a basis for considering self-regulatory approaches in academic settings.

I. INTRODUCTION

Academic procrastination refers to the intentional postponement of academic responsibilities despite awareness that delay may have undesirable consequences. Among university students, it may involve postponing assignments, avoiding study activities, missing deadlines, delaying reading or written work, and preparing for examinations at the last moment. Procrastination has been associated with academic difficulties, stress, and poorer psychological well-being (Steel, 2007; Sirois & Pychyl, 2013). Because university education requires students to regulate time, attention, motivation, and effort with increasing independence, understanding psychological factors associated with procrastination is important. Self-efficacy is one of the central concepts of Bandura's Social Cognitive Theory. It refers to beliefs about one's capability to organize and execute actions required to attain desired outcomes (Bandura, 1977, 1982, 1997). In academic contexts, students with stronger efficacy beliefs are more likely to approach difficult tasks with confidence, persist when difficulties arise, and regulate their learning behavior. Conversely, weaker efficacy beliefs may make demanding academic activities appear less manageable and may be

associated with delaying task initiation or completion. Previous work has linked academic procrastination with low self-efficacy and difficulties in self-regulation (Klassen et al., 2008, 2010; Weschler et al., 2014).

Mindfulness provides a second self-regulatory perspective relevant to academic procrastination. Mindfulness involves awareness of present-moment experiences with an attitude of openness and non-judgmental acceptance (Brown & Ryan, 2003; Kabat-Zinn, 1994). In academic situations, present-focused awareness may help students notice distracting thoughts, emotional reactions, and avoidance tendencies without immediately acting on them. Mindfulness has also been discussed in relation to attention, emotional regulation, stress management, and psychological well-being (Shapiro et al., 2006; Tang et al., 2007). These processes may be relevant when students have to begin or sustain effort on tasks that are difficult, unpleasant, or associated with fear of failure. Research has increasingly examined the links among procrastination, self-efficacy, and mindfulness. Sirois and Tosti (2012) reported an association between mindfulness and lower procrastination, while later work has continued to examine mindfulness, coping, self-regulation, and academic behavior. Self-efficacy has likewise been identified as an important factor in procrastination and academic functioning. Together, these constructs provide a useful framework for understanding how students' beliefs about their abilities and their awareness of present experiences may relate to delaying academic tasks. Within Pakistan, examining these variables among university students is relevant because the transition through higher education requires students to manage academic responsibilities alongside social and personal demands. The present study therefore focuses on university students in Islamabad and examines the relationships between academic procrastination, self-efficacy, and mindfulness. The study also examines whether the reported levels of these constructs differ between male and female students.

Academic Procrastination

Academic procrastination is a specific form of procrastination involving the unnecessary or intentional delay of learning-related responsibilities. Steel (2007) described procrastination as a self-regulatory failure in which an intended action is postponed despite expecting negative consequences. University students frequently report procrastination, and research has connected it with reduced academic effectiveness, stress, and difficulties in well-being. The behavior may be influenced by task aversion, fear of failure, emotion regulation, and difficulties in managing attention and time (Sirois & Pychyl, 2013; Sarala et al., 2022). Academic procrastination is therefore not simply a problem of time management. It may also involve motivational and emotional processes. When students doubt their ability to complete a task or anticipate discomfort, postponement can provide short-term relief while creating later pressure. This perspective is consistent with research describing procrastination as a behavior connected to short-term mood regulation (Sirois & Pychyl, 2013).

Self-Efficacy

Self-efficacy concerns a person's perceived capacity to perform actions required to achieve particular goals. Bandura's framework proposes that efficacy beliefs influence choice, effort, persistence, and reactions to obstacles. In academic settings, students with stronger self-efficacy may be more willing to initiate challenging work and continue despite setbacks. Research has linked self-efficacy with academic performance and lower procrastination (Klassen et al., 2008, 2010; Johnson et al., 2022). The General Self-Efficacy Scale (GSE) used in the present study assesses generalized beliefs about one's ability to cope with difficult tasks and adversity (Schwarzer & Jerusalem, 1995). Examining general self-efficacy alongside academic procrastination allows the study to assess whether students who report stronger efficacy beliefs also report less delay of academic responsibilities.

Mindfulness

Mindfulness refers to present-moment awareness and an accepting, non-judgmental orientation toward ongoing experience. Brown and Ryan (2003) conceptualized mindfulness as a quality of consciousness associated with awareness and attention to present experience. The Mindful Attention Awareness Scale (MAAS) assesses dispositional attention and awareness. In academic settings, greater present-moment awareness may support students in recognizing distraction, avoidance, and emotional responses while maintaining engagement with the task at hand. Mindfulness has also been considered relevant to stress and self-regulation. Studies have reported relationships between mindfulness and psychological well-being and have examined mindfulness-based approaches in educational settings (Shapiro et al., 2008; Sirois & Gougère, 2018). These findings provide a rationale for examining mindfulness in relation to academic procrastination and self-efficacy.

Theoretical Framework

The present study is grounded primarily in Bandura's Social Cognitive Theory (SCT). SCT explains behavior through reciprocal interactions among personal factors, behavior, and environmental influences. Self-efficacy is a central personal factor because beliefs about capability influence motivation, effort, persistence, and behavioral choices. Applied to academic procrastination, students who believe that they can manage academic demands may be more likely to initiate and sustain academic tasks, whereas lower efficacy beliefs may be associated with avoidance or delay. Although mindfulness is not a core construct originally formulated within SCT, its emphasis on awareness and self-regulation is compatible with the theory's focus on cognitive and behavioral processes. Mindful awareness may help students notice internal experiences and environmental distractions before responding to them. In this sense, mindfulness can be considered alongside self-efficacy as a psychological resource relevant to academic self-regulation. The theoretical model of the study therefore links self-efficacy and mindfulness with academic procrastination without assuming a causal direction in the correlational design. University students are required to manage increasingly independent academic responsibilities, making self-regulatory capacities particularly important. Academic procrastination can interfere with timely task completion, while self-efficacy and mindfulness may represent psychological resources associated with more effective regulation. The present study was designed to clarify the relationships among these variables in university students from Islamabad.

Objectives

1. To examine the relationship between academic procrastination, self-efficacy, and mindfulness
2. To examine gender differences among males and females in academic procrastination, self-efficacy, and mindfulness.

Hypotheses

1. There is likely to be a significant relationship between academic procrastination, self-efficacy, and mindfulness among university students.
2. There is likely to be a significant difference between males and females in academic procrastination, self-efficacy, and mindfulness among university students.

II. METHOD

A quantitative, correlational, cross-sectional research design was used to examine associations among academic procrastination, self-efficacy, and mindfulness. The design allowed the variables to be measured without manipulation and was consistent with the purpose of examining relationships among naturally occurring psychological characteristics.

Participants

The study included 200 young adult university students between 19 and 25 years of age. Participants were drawn from universities in Islamabad. The original thesis reports that the population consisted of young adult students and that convenience sampling was used. The sample included 97 males and 103 females. Almost all participants were reported as undergraduates ($n = 199$, 99.5%). Eligibility required participants to be currently enrolled as undergraduate or graduate university students, to fall within the stated age range of 19–25 years, and to provide informed consent. Students below 19 or above 25 years and individuals who were not currently enrolled were excluded.

Measures

[I] The General Self-Efficacy Scale (GSE), developed by Schwarzer and Jerusalem (1995), assesses generalized beliefs concerning an individual's ability to deal with difficult tasks and adversity. The scale was refined from an earlier longer version to a 10-item form. It is a self-report measure applicable to adults and adolescents, with scores ranging from 10 to 40; higher scores indicate stronger perceived self-efficacy. The thesis reports Cronbach's alpha values for the scale and describes its psychometric support. **[II]** The Mindful Attention Awareness Scale (MAAS) is a 15-item measure of dispositional mindfulness, particularly awareness and attention to present-moment experiences. Items are rated on a six-point response format ranging from 1 (almost always) to 6 (rarely).

The thesis describes the measure as suitable for college, community, and patient samples and notes that it can generally be completed in about 10 minutes. [III] The Academic Procrastination Assessment Scale–Students (PASS), developed by Solomon and Rothblum (1984), assesses the frequency and perceived problematic nature of procrastination in academic domains. Its first section addresses procrastination across academic areas and includes ratings of frequency, the extent to which procrastination is a problem, and the desire to reduce procrastination. The second section addresses reasons for procrastination using a five-point response format.

Procedure

After departmental approval and issuance of the support letter, data were collected from university students in Islamabad. Participants completed the demographic information and the three study measures. Participation was voluntary, and the collected information was treated as confidential. The study used convenience sampling and a cross-sectional procedure. Participants were informed about the purpose of the research and were told that participation was voluntary. Confidentiality of personal information was emphasized, participants were given an opportunity to ask questions, and the right to withdraw was communicated. The thesis reports that the study was approved by the Department of Psychology at Szabist University and that a support letter was issued before data collection. Data were kept confidential.

III. RESULTS

Data from 200 university students were analyzed using descriptive statistics, reliability estimates, Pearson correlations, and independent samples t-tests. The reported results are presented below without alteration of the numerical values reported in the thesis.

Table I: Frequencies and Percentage of Demographic Variables (N = 200)

Variables	Categories	n	%
Gender	Male	97	48.5
	Female	103	51.5
Qualification	Undergraduate	199	99.5
	Graduate	1	.5
Academic performance	Below average	17	8.5
	average	107	53.5
	above average	105	53.5

Note. n = frequency, % = percentage

The sample included 97 males (48.5%) and 103 females (51.5%). The thesis reports 199 undergraduate participants (99.5%) and also reports academic-performance categories as shown in Table 1. The demographic values are reproduced as reported.

Table II: Psychometric properties for General Self-Efficacy, Academic Procrastination, and Mindfulness Scale (N = 200)

Variables	<i>M</i>	<i>SD</i>	Range	α
General Self-Efficacy	28.73	4.86	23	.76
Academic Procrastination	34.75	6.42	41	.70
Mindfulness	53.81	11.17	57	.71

The reported internal consistency estimates were .763 for GSE, .709 for academic procrastination, and .719 for MAAS. Descriptive values and ranges are shown in Table 2.

Table III: Inter-correlations between General Self-Efficacy, Academic Procrastination and Mindful Attention Awareness Scale (N = 200)

Variables	1	2	3
1. General Self-Efficacy	--	-.29**	.23**
2. Academic Procrastination		--	-.19**
3. Mindfulness			--

** $p < .01$

The reported correlations indicated a negative association between general self-efficacy and academic procrastination ($r = -.29$, $p < .01$), a positive association between general self-efficacy and MAAS mindfulness ($r = .23$, $p < .01$), and a negative association between academic procrastination and MAAS mindfulness ($r = -.19$, $p < .01$).

Table IV: Independent Samples t-test Measuring Gender Differences

Variables	Male (n=20)		Female (n=20)		<i>t</i> (198)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
General Self-Efficacy	29.33	4.78	28.16	4.90	1.71	.87	.12
Academic Procrastination	-1.12	.90	-1.12	.901	-1.24	.10	.05
Mindfulness	1.46	1.58	1.46	1.58	.92	.86	.02

The thesis also reports an independent samples t-test comparing male and female participants. The reported differences were not statistically significant for GSE, AP, or MAAS. The exact values are reproduced in Table 4.

IV.DISCUSSION

The present study examined the relationships among academic procrastination, self-efficacy, and mindfulness in university students and considered gender differences in these variables. The reported correlations showed that academic procrastination was negatively related to general self-efficacy and mindfulness, while self-efficacy was positively related to mindfulness. The gender analysis reported no statistically significant differences across the three constructs. The negative association between self-efficacy and academic procrastination is consistent with the theoretical role of efficacy beliefs in self-regulated behavior. Bandura's Social Cognitive Theory proposes that efficacy beliefs influence effort, persistence, and behavioral choices. Students who believe that they can manage academic tasks may be more prepared to begin and continue those tasks, whereas lower confidence may be associated with avoidance or delay. The present finding is also consistent with previous research linking low self-efficacy with greater academic procrastination (Klassen et al., 2008, 2010; Weschler et al., 2014). The negative relationship between mindfulness and academic procrastination is also consistent with the view that present-moment awareness may support self-regulation. Mindful awareness may help students recognize distracting thoughts, uncomfortable emotions, and avoidance tendencies without automatically following them. Sirois and Tosti (2012) similarly examined mindfulness in relation to procrastination and well-being. Research on mindfulness has also emphasized attention and self-regulation as possible mechanisms through which mindfulness may be relevant to academic functioning (Tang et al., 2007; Shapiro et al., 2008).

The positive association between self-efficacy and mindfulness suggests that these psychological resources may coexist in university students. Students who perceive themselves as capable of handling demands may also report greater awareness of their present experiences. However, because the current research design was correlational and cross-sectional, the findings do not establish that mindfulness increases self-efficacy or that self-efficacy causes greater mindfulness. The observed association should therefore be interpreted as a relationship between the measured constructs. The reported gender comparisons did not show statistically significant differences in general self-efficacy, academic procrastination, or mindfulness. The absence of significant differences in this sample suggests that the observed psychological characteristics were not meaningfully different across the male and female groups as measured in the analysis. This finding can be considered alongside previous literature that has examined gender and self-efficacy in self-regulated learning (Pajares, 2002) and should not be generalized

beyond the study population. Overall, the findings support the relevance of self-efficacy and mindful awareness when considering academic procrastination. The results are compatible with a self-regulatory interpretation in which beliefs about capability and awareness of ongoing experiences are related to students' tendencies to delay academic work. The study therefore adds evidence from university students in Islamabad to the literature examining these constructs together.

Implications

The findings have potential implications for university-based academic support. Because lower self-efficacy was associated with greater academic procrastination, student-support activities may consider ways of strengthening realistic confidence in academic capabilities, task initiation, and persistence. The relationship between mindfulness and procrastination also provides a basis for considering present-moment attention and awareness within student well-being or study-skills programs. Such applications should be evaluated through appropriate intervention research rather than assumed from the correlational findings.

Limitations and Future Research

The study used convenience sampling and a cross-sectional correlational design. Consequently, the findings may not represent all university students and cannot establish causal relationships among the variables. Participants were university students from Islamabad and were predominantly undergraduate according to the reported demographic information. Future studies could include students from multiple cities, universities, academic disciplines, and educational levels to improve the breadth of the evidence. The study relied on self-report measures, which may be influenced by response tendencies or participants' perceptions of their own behavior. Future research may complement self-report data with behavioral indicators of task delay, academic records, or longitudinal assessments. Future research may also examine whether mindfulness or self-efficacy functions as a mediator or moderator in the relationship between academic stressors and procrastination. Longitudinal and intervention-based designs would be particularly useful for testing temporal and causal explanations.

V. CONCLUSION

The present study examined academic procrastination, self-efficacy, and mindfulness among university students in Islamabad. The reported findings showed that self-efficacy was negatively related to academic procrastination and positively related to mindfulness, while mindfulness was negatively related to academic procrastination. The reported gender comparisons were not statistically significant. Taken together, the findings emphasize the importance of self-regulatory psychological resources in understanding academic procrastination and provide a basis for further research on self-efficacy, mindfulness, and academic functioning among university students.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Funding

The author received no funding from any organizations.

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