

**RESEARCH PAPER****The Academic Triad: Procrastination, Self-Discipline and Anxiety in University Life****¹Shahrukh Salaam*, ²Sana Mustafa, ³Fatima**

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Corresponding Author Shahrukhsaleem33@gmail.com**ABSTRACT**

This study aims to examine the relationship between procrastination, self-discipline, and anxiety among university students and explore their impact on academic and mental health. Students' academic performance and mental health are highly influenced by my psychological factors including procrastination, self-discipline, and anxiety. In this quantitative study a correlational research design was employed with non-probability purposive sampling. Data were collected from (N=200) university students using the Procrastination Assessment Scale (PAS), Self-Control Scale (SCS), and State-Trait Anxiety Inventory (STAI). Procrastination showed a positive correlation with anxiety, while self-discipline exhibited a negative correlation with both procrastination and anxiety symptoms. Self-discipline was a significant negative predictor of anxiety. By Integrating qualitative methods alongside quantitative measures could provide deeper insights into the experiences and perceptions of university students regarding the study variables. Consequently by implementing targeted interventions to enhance self-discipline and reduce procrastination, universities can support students in managing anxiety symptoms and improving overall well-being

Keywords: Anxiety Symptoms, Mental Health, Procrastination, Self- Discipline, University Students**Introduction**

The research aims to explore the relationship among procrastination, self-discipline, and anxiety symptoms in university students, particularly in the context of escalating anxiety symptoms observed among Pakistani students. While the exact prevalence remains uncertain, various triggers contribute to anxiety, among which procrastination and self-control stand out as significant factors (Ferrari, 2009). By exploring the role of procrastination and self-discipline in anxiety symptoms, the study seeks to elucidate how these psychological constructs interact within the university environment. Notably, environmental stressors such as job pressure, familial expectations, and future uncertainties exacerbate anxiety levels, underscoring the pivotal role of individual self-control and procrastination in coping with such stressors. As procrastination is intentional delay despite anticipation of negative consequences, further contextualize the study's focus on these intertwined behavioral patterns (Steel, 2007)

Self-discipline, categorized as a feature of inhibitory control, assumes paramount importance in regulating emotions, thoughts, and behaviors amid temptations and impulses. As an executive function, self-discipline plays a pivotal role in guiding behavior towards achieving predetermined goals (Moffitt et al., 2011). Empirical evidence underscores the significance of self-control across various life domains, with studies linking early levels of self-control to later cognitive and regulatory competencies, as well as overall well-being (Unger et al., 2016). Moreover, strong correlations exist between self-control and

academic success, interpersonal relationships, and overall life satisfaction. Anchored in established literature, the research endeavors to unpack the intricate interplay between procrastination, self-control, and anxiety symptoms, offering valuable insights into psychological mechanisms underpinning student experiences and well-being (Rudd et al., 2012; Rozental & Carlbring, 2014; Sinha et al., 2021).

According to American Psychological Association anxiety symptoms is characterized by persistent and excessive worry about a number of different things. People with may anticipate disaster and may be overly concerned about money, health, family, work, or other issues. Individuals with GAD find it difficult to control their worry. They may worry more than seems warranted about actual events or may expect the worst even when there is no apparent reason for concern (Joseph et al.,2023).

Procrastination, often stemming from a lack of self-discipline, is a pervasive issue among university students, particularly when faced with challenging academic tasks or deadlines. According to Gendron(2011) procrastination is characterized by delaying tasks despite knowing the negative consequences, which can be exacerbated by a deficit in self-discipline, defined as the ability to regulate one's behavior to achieve long-term goals (Hooda & Devi, 2017). This lack of self-discipline can manifest in avoidance behaviors, leading to increased anxiety symptoms as deadlines loom closer. As identified by Klingsieck et al. (2013) anxiety symptoms such as worry, tension, and nervousness are often heightened in individuals who procrastinate, as they experience heightened stress from impending deadlines combined with feelings of guilt and inadequacy.

Literature Review

In exploring the relationship of procrastination, self-control, and anxiety symptoms among university students, it becomes evident that these psychological constructs interlink in significant ways within the academic context. Procrastination, characterized by the deliberate delay of tasks despite foreseeing negative consequences (Duckworth & Seligman, 2005), often correlates positively with anxiety symptoms, reflecting the heightened stress levels experienced by students (Glick et al.,2014). Concurrently, self-discipline emerges as an important regulatory mechanism, enabling individuals to manage impulses and emotions effectively (Tangney et al., 2004).

Notably, self-discipline acts as a potential moderator in the relationship between procrastination and anxiety symptoms, exerting a buffering effect by regulating maladaptive procrastination tendencies (Steel, 2007). By bolstering self-regulatory capacities, individuals with higher levels of self-control may mitigate the adverse impact of procrastination on anxiety, thereby fostering adaptive coping strategies (Moffitt et al., 2011). Understanding the nuanced interplay between these variables is essential for devising targeted interventions aimed at promoting well-being and academic success among university students.

Several studies in educational settings have suggested that procrastination is associated with general anxiety (Cassady and Johnson 2002; Fritzsche et al. 2003; Klassen et al. 2009). Schraw et al. (2007)'s theoretical model indicates that one maladaptive aspect of academic procrastination is fear of failure, which is a clear cognitive symptom of anxiety (Zeidner 1998). Therefore, an association between anxiety and procrastination has been both theoretically and empirically supported. Considering the association between procrastination and anxiety discussed previously, it appears interesting to ask whether anxiety might mediate any relationship between PSU and academic procrastination.

Self-regulation has been described as 'those processes, internal and/or transactional, that enable an individual to guide his/her goal-directed activities over time and across changing circumstances (contexts)' (Karoly 1993, p. 25). Billieux et al.'s (2015a)

pathway model suggests that impulsivity, which appears to represent the failure of self-regulation, can lead to problematic mobile phone use. Several studies have suggested that low levels of self-regulation predict greater Internet/mobile phone use, as well as negative consequences such as anxiety (LaRose and Eastin 2004; LaRose et al. 2003; Soror et al. 2012). Low self-regulation has been found to negatively predict problematic smartphone use in European samples (Gökçearsan et al. 2016; VanDeursen et al. 2015). However,

Procrastination, a prevalent issue among students (Steel, 2007), often stems from difficulties in self-regulation and self-control (Baumeister et al., 2007), leading to adverse outcomes such as heightened anxiety (Sirois & Pychyl, 2013). Understanding how procrastination, self-control, and anxiety symptoms intersect is important for developing effective intervention strategies tailored to the unique challenges faced by university students. While previous research has investigated these constructs individually, limited attention has been given to their combined influence in the academic setting. By addressing this gap, the study seeks to provide insights into the mechanisms underlying student procrastination and its implications for mental health and academic performance. Through empirical investigation, this research aims to contribute to the development of targeted interventions aimed at promoting adaptive self-regulatory strategies and reducing anxiety symptoms among university students.

Hypotheses

- There would likely to have positive relationship between procrastination and anxiety symptoms among University students.
- Self-control would like to have negative relationship with procrastination among university students.
- Self-control would likely to moderate between Procrastination and anxiety symptoms among University students
- There would likely to have a significant Gender differences in the level of procrastination self-control and anxiety symptoms in university students.

Material and Methods

The study was based on a cross-sectional Correlation Research design, aiming to investigate the relationship between procrastination, self-control, and anxiety symptoms among university students. Non-probability purposive sampling was utilized to collect data from (N=200) university students aged between 20 to 35 years. Informed written consent was obtained from all participants, with (n=117) male students and (n=83) female students included in the study. Inclusion criteria stipulated that participants must have fallen within the specified age range of 20 to 35 years, while exclusion criteria dictated the exclusion of individuals with physical illnesses, psychological issues, or disabilities. This approach ensured that the study captured a diverse range of university students while minimizing confounding factors that could influence the outcomes. Through these methods, the study aimed to provide valuable insights into the complex relationship between procrastination, self-control, and anxiety symptoms in the university setting, thereby contributing to the development of targeted interventions to support student well-being and academic success.

Results and Discussion

Table 1
Descriptive statistics and Cronbach's alpha, reliability of Procrastination, Self-discipline and Anxiety Symptoms (N=200)

Variables	K	M	SD	α	Range	
					Actual	Potential
Procrastination	20	45.14	15.19	.78	02-80	0-60

Self-discipline	33	102.02	19.18	.84	62-154	5-165
Anxiety Symptoms	20	67.41	20.32	.72	22-118	20-140

Note. *K*= number of items, *M*= mean, *S.D*, Standard deviation, α =alpha

The table 1 presents descriptive statistics and reliability for Procrastination, Self-control, and Anxiety Symptoms in a sample of 200 participants, including mean (*M*), standard deviation (*SD*), and Cronbach's alpha (α). Procrastination's mean score is 45.14 (*SD* = 15.19), α = .78. Self-control's mean is 102.02 (*SD* = 19.18), with a higher α of .84. Anxiety Symptoms' mean is 67.41 (*SD* = 20.32), α = .72. Ranges vary: Procrastination 2-80 (actual) and 0-60 (potential), Self-control 62-154, Anxiety Symptoms 22-118 (actual) and 20-140 (potential), offering insights into internal consistency and distribution of the constructs.

Table 2
Pearson product moment correlation among Procrastination, Self-discipline and Anxiety Symptoms (N=200)

Variables	1	2	3
1.Procrastination	-	-	-
2.Self-discipline	-.30***	-	-
3.Anxiety Symptoms	.57***	-.26***	-

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

The table 2 displays Pearson product moment correlations among Procrastination, Self-control, and Anxiety Symptoms in a sample of 200 participants. Procrastination negatively correlates with Self-control ($r = -.30$, $p < .001$) and positively with Anxiety Symptoms ($r = .57$, $p < .001$). Self-control negatively correlates with Anxiety Symptoms ($r = -.26$, $p < .001$). These correlations provide insights into the relationships between the studied variables.

Table 3
Mean Comparison on gender basis in Procrastination, Self-discipline and Anxiety Symptoms among University Students (N=200)

Variable	Gender				95%CI		Cohen's d		
	Female		male		LL	UL			
	M	SD	M	SD				<i>T</i> (198)	<i>p</i>
Procrastination	43.20	16.20	46.61	13.74	4.52	.000	5.18	13.20	0.23
Self-discipline	103.38	21.64	100.94	17.30	-.57	.57	-6.87	3.80	0.12
Anxiety Symp	59.28	19.27	73.14	19.17	9.65	.000	18.21	27.58	0.72

Note. *** $p < .001$; *M*= Mean; *SD*= Standard Deviation; Anxiety Symp= Anxiety Symptoms

Table 4.6 revealed that there is significant differences on Anxiety Symptoms with $t(198) = 4.52$, $p < .001$. Findings show that male students exhibited more scores on Anxiety Symptoms compared to the female students. The value of Cohen's *d* was $0.72 > (0.50)$ which indicate large effect size. Findings revealed non-significant mean differences on Self-control $t(198) = -.57$, $p > .05$. The value of Cohen's *d* was $0.12 < (0.50)$ which indicate small effect size. Findings reveal significant mean differences on Procrastination $t(198) = 4.52$, $p < .05$. The value of Cohen's *d* was $0.23 < (0.50)$ which indicate small effect size.

Discussion

The present study investigated the relationships between Procrastination, Self-control, and Anxiety Symptoms in a sample of 200 participants. Descriptive statistics highlighted mean scores and internal consistency, with Procrastination displaying a mean score of 45.14 (*SD* = 15.19, α = .78), Self-control at 102.02 (*SD* = 19.18, α = .84), and Anxiety Symptoms at 67.41 (*SD* = 20.32, α = .72). These findings align with previous literature

indicating the prevalence of procrastination tendencies and variations in self-control and anxiety symptoms among university students (Steel, 2007; Tangney et al., 2004).

Correlation analyses revealed significant associations between the variables. Procrastination exhibited a negative correlation with Self-control ($r = -.30, p < .001$) and a positive correlation with Anxiety Symptoms ($r = .57, p < .001$), consistent with prior research indicating the detrimental impact of procrastination on self-regulation and psychological well-being (Sirois & Pychyl, 2013). Similarly, Self-control displayed a negative correlation with Anxiety Symptoms ($r = -.26, p < .001$), suggesting that individuals with higher levels of self-control may experience lower levels of anxiety (Tice & Bratslavsky, 2000).

Further analysis revealed gender differences in Anxiety Symptoms, with male students exhibiting significantly higher scores compared to females ($t(198) = 4.52, p < .001$, Cohen's $d = 0.72$), indicating a large effect size. This aligns with previous studies highlighting gender disparities in anxiety prevalence, with females typically reporting higher levels of anxiety symptoms compared to males (McLean et al., 2011). However, no significant gender differences were found in Self-discipline ($t, 198 = -0.57, p > .05$, Cohen's $d = 0.12$) or Procrastination ($t, 198 = 4.52, p < .05$, Cohen's $d = 0.23$), suggesting that these constructs may not be influenced by gender to the same extent as anxiety symptoms.

Limitations of the study on procrastination, self-discipline, and anxiety symptoms in university students may include the reliance on self-report measures, which could introduce response biases and inaccuracies (Van de Mortel, 2008). Additionally, the sample size and demographic homogeneity might limit the generalizability of findings across diverse student populations (Casteel & Bridier, 2021). Recommendations for future research involve employing mixed-method approaches to gain a more comprehensive understanding of the underlying mechanisms driving procrastination and its relationship with self-discipline and anxiety. Longitudinal studies could elucidate the temporal dynamics of these constructs and their impact on academic performance. Implications of the findings suggest the need for targeted interventions aimed at enhancing self-discipline and managing anxiety symptoms among university students, possibly through cognitive-behavioral therapy techniques or mindfulness-based interventions integrated into academic support programs. Such interventions could ultimately improve student well-being and academic success.

In conclusion, the findings of this study contribute to our understanding of the interaction among procrastination, self-control, and anxiety symptoms among university students. The results highlight the importance of addressing these factors in educational and psychological interventions aimed at promoting academic success and well-being among students. Future research could explore additional variables that may influence these relationships and examine longitudinal effects to elucidate causal pathways further.

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