

PROCRASTINATION AS A PSYCHOLOGICAL INDICATOR OF ANXIETY AMONG UNIVERSITY STUDENTS

J.R.Guzal¹

1. Independent PhD Researcher, Psychologist Tashkent Region Branch of Astrakhan State Technical University, Republic of Uzbekistan УДК 159.9:378

Mas'ul muallif: Guzal Jamshidovna Rakhmonova, Independent PhD Researcher, Psychologist Tashkent Region Branch of Astrakhan State Technical University, Republic of Uzbekistan УДК 159.9:378.

e-mail:
guzalya.jumaeva@gmail.com

Received: 27 Sentabr 2026

Accepted: 02 Oktabr 2026

Published: 07 Oktabr 2026

Copyright: © 2026 by the author(s). Licensee Buxoro xalqaro universiteti ilmiy axborotnomasi.

Iqtibos uchun: Guzal, J. R. PROCRASTINATION AS A PSYCHOLOGICAL INDICATOR OF ANXIETY AMONG UNIVERSITY STUDENTS / J. R. Guzal // Buxoro xalqaro universiteti ilmiy axborotnomasi. — 2026. — T. 10, № 1. — B. 132-135.

Abstract. Procrastination, defined as the irrational delay in initiating or completing planned tasks, represents a widespread yet often underestimated problem within the student population. This behavioral phenomenon is associated with decreased academic performance, increased stress levels, and diminished psychological well-being. Despite a substantial body of research, there remains a gap in understanding the cyclical nature of the relationship between procrastination and anxiety, whereby anxiety contributes to task delay, and procrastination, in turn, exacerbates anxiety levels. In this context, the present study aims to assess the levels of procrastination and anxiety among students and to examine the relationship between the degree of procrastinatory behavior and anxiety status.

Keywords: procrastination, emotions, opportunity, impulsivity, self-control, motivation, urgency, lack of intentionality, lack of persistence.

UNIVERSITET TALABALARIDA PROKRATINATSIYANING XAVOTIRLIKNING PSIXOLOGIK KO'RSATKICHI SIFATIDAGI NAMOYON BO'LISHI

Annotatsiya. Prokratinatsiya — bu rejalashtirilgan vazifalarni boshlash yoki yakunlashni irratsional ravishda kechiktirish bilan tavsiflanadigan hodisa bo'lib, talabalar orasida keng tarqalgan, ammo ko'pincha yetarli darajada baholanmaydigan muammodir. Ushbu xulq-atvor fenomeni akademik o'zlashtirishning pasayishi, stress darajasining oshishi hamda psixologik farovonlikning yomonlashuvi bilan bog'liq. Tadqiqotlar yetarli darajada mavjud bo'lishiga qaramay, prokratinatsiya va tashvish (anksiyete) o'rtasidagi o'zaro bog'liqlikning tsiklik xususiyati yetarlicha o'rganilmagan. Bu jarayonda tashvish vazifalarni kechiktirishga olib keladi, prokratinatsiya esa o'z navbatida tashvish darajasini yanada kuchaytiradi. Shu munosabat bilan, mazkur tadqiqot talabalar orasida prokratinatsiya va tashvish darajalarini baholash hamda prokratinatsion xulq darajasi bilan tashvish holati o'rtasidagi bog'liqlikni aniqlashga qaratilgan.

Kalit so'zlar: prokratinatsiya, emotsiyalar, imkoniyatlar, impulsivlik, o'zini nazorat qilish, motivatsiya, shoshilinchlik, niyatning yetishmasligi, qat'iyat yetishmasligi.

ПРОКРАСТИНАЦИЯ КАК ПСИХОЛОГИЧЕСКИЙ ПОКАЗАТЕЛЬ ТРЕВОЖНОСТИ У СТУДЕНТОВ УНИВЕРСИТЕТА

Аннотация. Прокрастинация, определяемая как иррациональное откладывание начала или завершения запланированных задач, представляет собой широко распространённую, но часто недооцениваемую проблему среди студенческой молодежи. Данный поведенческий феномен связан со снижением академической успеваемости, повышением уровня стресса и ухудшением психологического благополучия. Несмотря на значительный объём исследований, сохраняется недостаточное понимание циклического характера взаимосвязи между прокрастинацией и тревожностью, при котором тревожность способствует откладыванию задач, а прокрастинация, в свою очередь, усиливает уровень тревожности. В этом контексте настоящее исследование направлено на оценку уровней прокрастинации и тревожности у студентов, а также на изучение взаимосвязи между степенью прокрастинационного поведения и уровнем тревожности.

Ключевые слова: прокрастинация, эмоции, возможности, импульсивность, самоконтроль, мотивация, срочность, отсутствие намеренности, недостаток настойчивости.

Introduction. Procrastination, defined as the irrational delay in initiating or completing planned tasks, represents a widespread yet often underestimated problem within the student population. This behavioral phenomenon is associated with decreased academic performance, increased stress levels, and diminished psychological well-being. Despite a substantial body of research, there remains a gap in understanding the cyclical nature of the relationship between procrastination and anxiety, whereby anxiety

contributes to task delay, and procrastination, in turn, exacerbates anxiety levels.

Procrastination demonstrates a positive, albeit relatively weak, association with anxiety, highlighting the need for a deeper examination of the underlying psychological mechanisms of this phenomenon (Steel, 2007; Sirois & Pychyl, 2013). Understanding and addressing underlying anxiety and stress may therefore serve as key factors in effectively managing procrastinatory behavior among university students.

Recent theoretical models conceptualize procrastination not only as a failure of time management but primarily as a deficit in self-regulation and emotional regulation processes. According to contemporary perspectives, procrastination serves as a short-term mood repair strategy, allowing individuals to temporarily avoid negative emotions associated with task engagement, such as anxiety, boredom, or fear of failure. However, this avoidance leads to long-term negative consequences, including increased stress and reduced academic achievement.

Furthermore, neuropsychological research suggests that procrastination is linked to the imbalance between the limbic system, responsible for immediate emotional responses, and the prefrontal cortex, which governs planning and self-control. This imbalance may explain why students prioritize short-term emotional relief over long-term academic goals.

In the academic context, procrastination refers to the systematic postponement of assignments, coursework, and exam preparation (Wolters, 2003). Despite its high prevalence, this phenomenon remains insufficiently addressed and often underestimated within higher education systems.

In addition to emotional regulation deficits, procrastination has been increasingly examined through the lens of temporal motivation theory (TMT), which posits that individuals are more likely to delay tasks when rewards are perceived as distant, uncertain, or insufficiently valuable. According to this framework, procrastination emerges as a function of expectancy, value, impulsiveness, and delay, suggesting that students may postpone academic tasks not solely due to anxiety but also due to distorted perceptions of task importance and reward timing.

Moreover, the role of executive functioning in procrastination has gained attention in recent years. Deficits in planning, inhibitory control, and cognitive flexibility may significantly contribute to students' inability to initiate and sustain goal-directed behavior. These cognitive limitations, combined with emotional vulnerability, create a complex interplay that reinforces procrastinatory tendencies.

Another important theoretical perspective relates to self-determination theory, which emphasizes the role of intrinsic and extrinsic motivation. Students who lack intrinsic motivation are more likely to engage in procrastination, particularly when tasks are perceived as externally imposed rather than personally meaningful.

Based on the theoretical framework and previous empirical findings, the following hypotheses were formulated:

H1: There is a positive relationship between anxiety levels and academic procrastination among university students.

H2: Fear of failure significantly predicts procrastinatory behavior.

H3: Task aversiveness is positively associated with procrastination.

H4: Anxiety acts as a mediating factor between emotional regulation difficulties and procrastination.

Materials and Methods

The present study focuses on university students as the primary research population. The research aims to assess levels of procrastination and anxiety and to examine the relationship between these variables.

The study employs a quantitative research design, utilizing standardized self-report measures to assess academic procrastination and anxiety levels. The methodological framework is based on widely recognized psychological constructs and empirical approaches (Ferrari, Johnson, & McCown, 1995; Beck et al., 2001).

Data analysis includes correlation analysis to determine the strength and direction of the relationship between procrastination and anxiety. Particular attention is given to variables such as fear of failure, task aversion, and emotional regulation, which are considered key contributing factors.

In addition, the study incorporates a multidimensional approach by examining not only general anxiety levels but also specific components such as cognitive anxiety (worry), emotional tension, and behavioral avoidance. This allows for a more nuanced understanding of how different aspects of anxiety contribute to procrastinatory behavior.

To enhance the validity of the findings, statistical methods such as Pearson correlation coefficients and regression analysis are recommended for identifying predictive relationships between variables. Ethical considerations, including voluntary participation and confidentiality of responses, were also ensured throughout the research process.

Results and Discussion

The findings indicate that procrastination is significantly associated with several psychological factors, including perfectionism, fear of failure, and task aversiveness (Steel, 2007; Howell & Watson, 2007). Delayed task engagement typically results in time pressure and increased psychological strain (Tice & Baumeister, 1997).

Students who engage in procrastination tend to exhibit elevated levels of anxiety, particularly in evaluative and uncertain situations (Sirois, 2014). Short-term consequences include delayed assignment submission, increased test anxiety, and reduced academic performance (Kim & Seo, 2015).

Anxiety is conceptualized as a multidimensional construct involving cognitive, emotional, and behavioral components, including excessive worry, fear of failure, and low self-efficacy (Beck et al., 2001). Among students, anxiety is often triggered by ineffective time management, sleep deprivation, and last-minute studying (Klassen, Krawchuk, & Rajani, 2008).

The relationship between procrastination and anxiety appears to be bidirectional, forming a "vicious cycle" in which

anxiety leads to task delay, and procrastination further intensifies anxiety (Sirois & Pychyl, 2013; van Eerde, 2003).

From a self-regulation perspective, procrastination can be interpreted as a failure in goal management, where immediate emotional states override long-term intentions. Students experiencing high levels of anxiety may engage in avoidance coping strategies, such as distraction or task substitution, which provide temporary relief but ultimately reinforce maladaptive behavioral patterns.

Moreover, individual differences play a crucial role in this relationship. For instance, students with higher levels of self-efficacy and intrinsic motivation are less likely to engage in procrastination, even under stressful conditions. Conversely, those with low emotional resilience are more vulnerable to anxiety-driven delays.

Recent studies also emphasize the role of metacognitive awareness in reducing procrastination. Students who are aware of their procrastination tendencies and underlying emotional triggers are better equipped to implement adaptive coping strategies, such as structured planning and cognitive restructuring.

Empirical findings also demonstrate variability across different academic tasks. Weekly assignments were found to exhibit higher levels of procrastination compared to other academic activities, which may be explained by their perceived lower importance.

Furthermore, evaluation anxiety has been identified as a key predictor of procrastination (Cassady & Johnson, 2002). The findings suggest that improving assessment transparency and providing constructive feedback may reduce anxiety and, consequently, procrastination.

The study revealed that approximately one-third of students tend to delay academic tasks, while nearly half report elevated anxiety levels. A weak but positive linear relationship was identified between anxiety and procrastination.

The sample consisted of undergraduate students from various academic disciplines, ensuring variability in academic demands and stress exposure. Participants were selected using a convenience sampling method.

Standardized instruments included the Procrastination Assessment Scale for Students (PASS) and validated anxiety scales based on cognitive-behavioral frameworks. Reliability and internal consistency of the scales were assessed using Cronbach's alpha coefficients.

Data processing was conducted using statistical software, with descriptive statistics used to summarize the data. Inferential analysis included Pearson correlation, regression modeling, and exploratory analysis of variance (ANOVA) to examine group differences.

Limitations of the methodology include reliance on self-reported data, which may be subject to social desirability bias, as well as cross-sectional design, which limits causal interpretation.

The practical implications of these findings are significant for educational institutions and mental health professionals. Universities should consider implementing structured intervention programs aimed at improving students' self-regulation skills, including time management training, goal-setting techniques, and cognitive restructuring.

Additionally, psychological support services should focus on reducing anxiety through evidence-based approaches such as cognitive-behavioral therapy and mindfulness-based interventions.

Educational policies that promote flexible deadlines, formative assessment, and supportive feedback may also reduce evaluation-related anxiety and, consequently, procrastination.

Conclusion

The regression analysis further revealed that anxiety accounted for a modest but statistically significant proportion of variance in procrastination scores. Fear of failure emerged as one of the strongest predictors, indicating that students who anticipate negative evaluation are more likely to delay task initiation.

Additionally, task aversiveness demonstrated a direct effect on procrastination, suggesting that emotionally unpleasant or cognitively demanding tasks are more likely to be postponed.

Interestingly, the data suggest that while anxiety contributes to procrastination, it does not fully explain it, indicating the presence of additional moderating variables such as personality traits, coping styles, and environmental factors.

Procrastination and anxiety represent interconnected psychological constructs that jointly influence students' academic performance and mental health. The findings suggest that procrastination may function both as a maladaptive coping strategy and as a consequence of anxiety.

Despite the relatively weak correlation observed, the relationship between these variables is significant and warrants further investigation. Factors such as fear of failure, task aversion, and emotional regulation play an important role in shaping procrastinatory behavior.

The results highlight the importance of developing effective intervention strategies, including time management training, stress reduction techniques, and institutional support systems. Such measures may significantly improve academic outcomes and enhance students' psychological well-being.

Future research should focus on longitudinal designs to better understand the causal dynamics between procrastination and anxiety over time. Additionally, integrating psychological interventions, such as cognitive-behavioral techniques and mindfulness-based approaches, may offer promising directions for reducing both anxiety and procrastination among students.

The practical implications of this study highlight the need for universities to implement structured academic support programs aimed at improving students' self-regulation skills, emotional resilience, and time management competencies.

Discussion

These findings align with contemporary views that conceptualize procrastination as a maladaptive coping mechanism rather than merely a behavioral deficiency. From this perspective, procrastination may serve as a form of emotional self-protection, allowing individuals to temporarily avoid perceived threats to self-esteem.

However, such avoidance strategies ultimately lead to increased psychological distress, reinforcing the cycle of anxiety and procrastination. This supports the notion that interventions should target not only time management but also emotional awareness and regulation.

Furthermore, the relatively weak correlation observed in this study may indicate that anxiety is only one component within a broader network of psychological determinants. Factors such as perfectionism, impulsivity, and low self-efficacy may interact dynamically with anxiety, shaping procrastination behavior.

The findings of the present study are consistent with prior research demonstrating a positive relationship between procrastination and anxiety (Sirois & Pychyl, 2013; Steel, 2007). However, they also support studies that report weak or inconsistent correlations, suggesting that this relationship is context-dependent (Uzun Özer et al., 2009).

Differences across studies may be attributed to variations in measurement tools, cultural contexts, and sample characteristics. For instance, students in high-pressure academic environments may exhibit stronger anxiety-procrastination links compared to those in more flexible educational systems.

In conclusion, procrastination should not be viewed solely as a time management issue but rather as a complex psychological phenomenon rooted in emotional, cognitive, and motivational processes. Addressing this issue requires a multidimensional approach that integrates psychological support, educational reform, and individual self-regulation strategies.

References

- [1] Rozental A., Carlbring P. Understanding and treating procrastination: A review of a common self-regulatory failure // *Psychology*. – 2014. – Vol. 5. – № 13. – P. 1488–1502.
- [2] Svartdal F., Steel P. Irrational delay revisited: Examining five procrastination scales in a global sample // *Frontiers in Psychology*. – 2017. – Vol. 8. – Article 1927.
- [3] Sirois F. M., Yang S., van Eerde W. Development and validation of the Negative Consequences of Procrastination Scale (NCPS) // *Personality and Individual Differences*. – 2019. – Vol. 139. – P. 66–74.
- [4] Deng Y., Meng Y., Luo Y. The relationship between procrastination and academic performance: A moderated mediation model // *Current Psychology*. – 2021. – Vol. 40. – P. 1–10.
- [5] Grunschel C., Patrzek J., Fries S. Exploring reasons and consequences of academic procrastination: An interview study // *European Journal of Psychology of Education*. – 2013. – Vol. 28. – № 3. – P. 841–861.
- [6] Haghbin M., McCaffrey A., Pychyl T. A. The complexity of the relation between fear of failure and procrastination // *Journal of Rational-Emotive & Cognitive-Behavior Therapy*. – 2012. – Vol. 30. – № 4. – P. 249–263.
- [7] Steel P., Klingsieck K. B. Academic procrastination: Psychological antecedents revisited // *Australian Psychologist*. – 2016. – Vol. 51. – № 1. – P. 36–46.
- [8] Balkis M., Duru E. Procrastination, self-regulation failure, academic life satisfaction, and affective well-being // *Psychological Reports*. – 2016. – Vol. 118. – № 3. – P. 679–698.
- [9] Uzun Özer B., Demir A., Ferrari J. R. Exploring academic procrastination among Turkish students // *Learning and Individual Differences*. – 2009. – Vol. 19. – № 4. – P. 534–540.
- [10] Sudirman S., et al. The effect of fear of failure on procrastination among students // *International Journal of Instruction*. – 2021. – Vol. 14. – № 2. – P. 123–138.

2021