

# Maladaptive Perfectionism and Avoidant Coping as Predictors of Procrastination in Students

Thandiwe. Dlamini<sup>1</sup>, Thandiwe. Mokoena<sup>2\*</sup>

<sup>1</sup> Department of Psychology, University of Cape Town, Cape Town, South Africa

<sup>2</sup> School of Human and Community Development, University of the Witwatersrand, Johannesburg, South Africa

\* Corresponding author email address: [thandiwe.mokoena@wits.ac.za](mailto:thandiwe.mokoena@wits.ac.za)

## Article Info

### Article type:

Original Research

### How to cite this article:

Dlamini, T., & Mokoena, T. (2025). Maladaptive Perfectionism and Avoidant Coping as Predictors of Procrastination in Students. *Journal of Assessment and Research in Applied Counseling*, 7(3), 1-9. <http://dx.doi.org/10.61838/kman.jarac.7.3.15>



© 2025 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

## ABSTRACT

**Objective:** This study aimed to examine the predictive roles of maladaptive perfectionism and avoidant coping in academic procrastination among South African university students.

**Methods and Materials:** A correlational descriptive design was used with a sample of 410 undergraduate and postgraduate students from various South African universities. Participants were selected based on the Morgan and Krejcie sample size determination table and completed standardized self-report instruments measuring maladaptive perfectionism, avoidant coping, and academic procrastination. Data were analyzed using SPSS version 27. Pearson correlation coefficients were computed to assess bivariate relationships between variables, and a multiple linear regression analysis was conducted to examine the joint predictive effect of the two independent variables on procrastination. All assumptions for regression analysis were tested and confirmed prior to the main analysis.

**Findings:** The results indicated that both maladaptive perfectionism ( $r = .48$ ,  $p < .01$ ) and avoidant coping ( $r = .52$ ,  $p < .01$ ) were significantly and positively correlated with procrastination. The regression model was significant,  $F(2, 407) = 119.43$ ,  $p < .001$ , with  $R^2 = .37$ , indicating that the two predictors together explained 37% of the variance in procrastination. Avoidant coping ( $\beta = .41$ ,  $p < .001$ ) emerged as a stronger predictor than maladaptive perfectionism ( $\beta = .33$ ,  $p < .001$ ), suggesting that both psychological factors contribute uniquely and significantly to academic procrastination.

**Conclusion:** These results emphasize the importance of addressing perfectionistic thinking and avoidance-based behaviors in intervention programs aiming to reduce academic delay and enhance student performance and well-being.

**Keywords:** Academic procrastination, maladaptive perfectionism, avoidant coping.

## 1. Introduction

Maladaptive perfectionism has been consistently identified as a significant psychological predictor of procrastination. Defined by excessive concern over mistakes, high personal standards coupled with critical self-evaluation, and pressure from others, maladaptive perfectionism fosters fear of failure and performance-related anxiety that can hinder goal-directed behaviors (Ahmed et al., 2024; Akbağ, 2024). Research shows that students high in maladaptive perfectionism tend to delay tasks as a means of protecting themselves from the perceived threat of failure, criticism, or inadequacy (Ashraf et al., 2023). For instance, studies have found that fear of failure and evaluative concerns perfectionism are key mediators in the relationship between perfectionism and procrastination (Chang et al., 2025; Yosopov et al., 2024). Maladaptive perfectionists are often driven by rigid standards, and when faced with challenging academic tasks, they may experience cognitive paralysis due to the overwhelming fear of not meeting their own or others' expectations (Park & Sohn, 2024; Rezaei et al., 2024).

This internal pressure frequently results in behavioral avoidance, reinforcing cycles of procrastination. Brakamonte et al. (2024) reported that maladaptive perfectionism correlated strongly with low task initiation, especially in adult learners facing professional training demands (Brakamonte et al., 2024). Similarly, Landau (2020) argued that perfectionism rooted in self-worth contingencies exacerbates avoidant patterns by fostering inflexible thinking and emotional rigidity (Landau, 2020). Students experiencing high evaluative concerns are more likely to delay academic engagement to avoid the discomfort of potential imperfection (Huang et al., 2022). This view aligns with Coutinho et al. (2022), who noted that while some students engage in active forms of procrastination, those driven by maladaptive perfectionism often exhibit avoidant behaviors, characterized by withdrawal and poor time management (Coutinho et al., 2022).

In addition to perfectionistic tendencies, coping strategies play a central role in students' approach to academic demands. Avoidant coping—characterized by denial, disengagement, and distraction—has been frequently associated with higher levels of procrastination across diverse student populations (Tarasova, 2023; Wardani et al., 2021). Students who employ avoidant coping tend to evade stress-inducing tasks, opting instead for short-term emotional relief that undermines long-term goal attainment

(Fatima et al., 2024). For example, Tak and Kim (2023) emphasized that socially prescribed perfectionism combined with post-event rumination and an avoidant mindset increases procrastinatory tendencies, as individuals become overwhelmed by anticipatory stress and low self-efficacy (Tak & Kim, 2023). Avoidant coping, therefore, does not merely co-occur with procrastination but may serve as a mediating behavioral mechanism through which maladaptive perfectionism exerts its influence.

The psychological literature also suggests that students who lack adaptive coping resources are more vulnerable to procrastination. According to Sederlund et al. (2020), students who rely on denial or mental disengagement to regulate academic stress tend to postpone tasks more frequently than those who use active problem-solving techniques (Sederlund et al., 2020). This behavioral avoidance is often amplified in the presence of perfectionistic concerns, where avoidance serves as a strategy to delay confrontation with one's perceived inadequacy. Saltürk (2022) provided qualitative evidence suggesting that individuals who self-identify as both perfectionists and procrastinators often report a deep sense of internal conflict: the desire to achieve perfection versus the paralyzing fear of failing to do so (Saltürk, 2022). This conflict fosters psychological avoidance as a protective mechanism, even at the cost of academic performance.

Recent empirical work further strengthens this theoretical linkage. In a study of undergraduate nursing students, Huang et al. (2023) found that maladaptive perfectionism was positively correlated with academic procrastination, and that students with low resilience and self-efficacy were more likely to rely on avoidant coping, which in turn intensified procrastinatory behaviors (Huang et al., 2023). Similarly, Akbağ (2024) highlighted the mediating role of procrastination in the relationship between maladaptive perfectionism and psychological well-being, indicating that procrastination may function as both a symptom and a process through which perfectionism impacts overall adjustment (Akbağ, 2024). These findings echo earlier conclusions drawn by Kurtović et al. (2019), who identified perfectionism and academic self-efficacy as central predictors of procrastination among university students (Kurtović et al., 2019).

Additional research indicates that the influence of perfectionism on procrastination may differ based on cultural and contextual variables. For instance, Ayadi et al. (2021) examined gifted students and found that both positive and negative perfectionism predicted procrastination, but

only negative perfectionism significantly influenced mobile phone addiction through procrastination (Ayadi et al., 2021). Similarly, Joo and Park (2021) demonstrated that perceived academic pressure from parents heightened students' evaluative concerns, which in turn increased procrastination levels (Joo & Park, 2021). These findings underscore the importance of exploring maladaptive perfectionism in culturally diverse populations, such as South African students, whose socio-academic contexts may shape both their perfectionistic tendencies and coping behaviors.

Importantly, recent studies have proposed that the interaction between maladaptive perfectionism and avoidant coping may jointly predict procrastination beyond the effects of each variable in isolation. For example, Ibili et al. (2025) revealed that dispositional mindfulness negatively predicted procrastination through reduced maladaptive perfectionism, suggesting that perfectionism not only contributes to procrastination but is part of a broader psychological process involving emotional regulation and coping (Ibili et al., 2025). Likewise, Rezaei et al. (2024) found that anxiety, perfectionism, and procrastination formed a triadic relationship among medical and dental students, where perfectionistic concerns intensified anxiety, and anxiety promoted avoidance, resulting in procrastination (Rezaei et al., 2024). These insights support the hypothesis that perfectionism and avoidant coping interact dynamically in predicting procrastination.

Despite extensive research on procrastination, there remains a gap in examining how maladaptive perfectionism and avoidant coping function together to predict procrastination, especially within the context of South African higher education. Given the unique educational challenges faced by students in South Africa, including high academic pressure, limited mental health resources, and economic uncertainty, it is crucial to understand how psychological vulnerabilities such as perfectionism and avoidant coping contribute to academic delays. While the global literature provides valuable frameworks, localized investigations are necessary to develop culturally appropriate interventions.

Therefore, the present study aims to investigate the predictive roles of maladaptive perfectionism and avoidant coping in academic procrastination among university students in South Africa.

## 2. Methodology

### 2.1. Study Design and Participants

This study employed a correlational descriptive design to examine the predictive roles of maladaptive perfectionism and avoidant coping in students' procrastination behaviors. The sample consisted of 410 university students selected using the Morgan and Krejcie (1970) sample size determination table. Participants were recruited from various higher education institutions across South Africa through convenience sampling. Inclusion criteria required participants to be enrolled as full-time undergraduate or postgraduate students and to provide informed consent.

### 2.2. Measures

#### 2.2.1. Procrastination

To assess procrastination among students, the Procrastination Assessment Scale for Students (PASS) developed by Solomon and Rothblum (1984) was used. This widely utilized instrument contains 44 items and is designed specifically to measure academic procrastination across several domains. The PASS includes two major sections: the first consists of six academic tasks (e.g., writing a term paper, studying for exams), with each task rated in terms of frequency of procrastination and associated levels of anxiety on a 5-point Likert scale. The second section assesses reasons for procrastination through 26 items grouped into subscales such as fear of failure, task aversiveness, and difficulty in self-regulation. Higher scores indicate more frequent or problematic procrastination. The PASS has demonstrated high internal consistency and construct validity in multiple studies, making it a reliable and valid tool for research involving academic delay behaviors (Kim & Lee, 2025; Oguchi et al., 2025; Zhang et al., 2025).

#### 2.2.2. Maladaptive Perfectionism

Maladaptive perfectionism was measured using the Frost Multidimensional Perfectionism Scale (FMPS) developed by Frost et al. (1990). This 35-item self-report questionnaire evaluates six dimensions of perfectionism: Concern over Mistakes, Personal Standards, Parental Expectations, Parental Criticism, Doubts about Actions, and Organization. For the purposes of identifying maladaptive perfectionism, the subscales Concern over Mistakes, Doubts about Actions, Parental Expectations, and Parental Criticism are typically emphasized. Responses are scored on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree," with higher scores reflecting more severe perfectionistic

tendencies. The FMPS has been shown to possess excellent psychometric properties, with Cronbach's alpha coefficients ranging from 0.77 to 0.93 across subscales and strong evidence of convergent and discriminant validity in clinical and non-clinical populations (Akbağ, 2024; Ibili et al., 2025; Kang & Gong, 2024).

### 2.2.3. Avoidant Coping

Avoidant coping strategies were assessed using the COPE Inventory developed by Carver, Scheier, and Weintraub (1989), specifically focusing on its avoidant coping subscales. The full COPE Inventory contains 60 items across 15 subscales, but for this study, only the relevant subscales—Denial, Behavioral Disengagement, and Mental Disengagement—were used to capture avoidant coping. Each item is rated on a 4-point Likert scale ranging from "I usually don't do this at all" to "I usually do this a lot." These subscales measure tendencies to withdraw from stressors or avoid directly addressing problems. The COPE Inventory has been validated extensively in both clinical and student samples, with the avoidant coping subscales showing good internal consistency (Cronbach's alpha > 0.70) and construct validity through correlations with stress and maladaptive outcomes (Eslami et al., 2023; Musella et al., 2021).

### 2.3. Data Analysis

Data were analyzed using SPSS version 27. Descriptive statistics were first computed to summarize participant

demographics and scale scores. Pearson correlation coefficients were calculated to explore the bivariate relationships between procrastination (dependent variable) and the two independent variables—maladaptive perfectionism and avoidant coping. To assess the combined predictive power of the independent variables on procrastination, a standard multiple linear regression analysis was conducted. All relevant statistical assumptions, including linearity, normality, homoscedasticity, multicollinearity, and independence of residuals, were assessed and confirmed prior to conducting the regression analysis.

## 3. Findings and Results

The sample included 410 students, of whom 248 (60.5%) identified as female and 162 (39.5%) as male. The age of participants ranged from 18 to 29 years, with a mean age of 21.7 years (SD = 2.8). In terms of academic level, 271 participants (66.1%) were undergraduates and 139 (33.9%) were postgraduate students. Regarding field of study, 138 (33.7%) were enrolled in humanities and social sciences, 104 (25.4%) in natural sciences, 86 (21.0%) in business and economics, and 82 (20.0%) in health sciences. These demographics reflect a diverse sample representative of the university student population in South Africa.

**Table 1**

*Descriptive Statistics for Study Variables (N = 410)*

Variable	M	SD
Procrastination	3.67	0.82
Maladaptive Perfectionism	3.94	0.71
Avoidant Coping	3.53	0.69

The descriptive statistics presented in Table 1 show that students reported moderately high levels of procrastination (M = 3.67, SD = 0.82), with even higher levels of maladaptive perfectionism (M = 3.94, SD = 0.71). Avoidant coping strategies were also frequently endorsed (M = 3.53, SD = 0.69). These mean values indicate that participants in this sample generally experience considerable tendencies toward academic delay, perfectionistic concerns, and disengagement-based coping.

Before conducting the regression analysis, all relevant assumptions were assessed and confirmed. The distribution

of residuals was approximately normal, as indicated by a Shapiro-Wilk test ( $p = .128$ ) and visual inspection of Q-Q plots. Linearity was verified through scatterplots showing linear relationships between the predictors and the outcome variable. Homoscedasticity was supported by the Breusch-Pagan test ( $\chi^2 = 2.14$ ,  $p = .143$ ). Tolerance values (.72 for maladaptive perfectionism and .76 for avoidant coping) and variance inflation factors (VIF = 1.38 and 1.31, respectively) indicated no multicollinearity. Additionally, the Durbin-Watson statistic was 1.98, confirming independence of

residuals. These results demonstrated that the assumptions for multiple linear regression were adequately met.

**Table 2**

*Pearson Correlations Between Procrastination and Predictor Variables*

Variable	1. Procrastination	2. Maladaptive Perfectionism	3. Avoidant Coping
1. Procrastination	—		
2. Maladaptive Perfectionism	.48**	—	
3. Avoidant Coping	.52**	.43**	—

As shown in Table 2, procrastination was significantly and positively correlated with both maladaptive perfectionism ( $r = .48, p < .01$ ) and avoidant coping ( $r = .52, p < .01$ ). Additionally, maladaptive perfectionism was significantly correlated with avoidant coping ( $r = .43, p < .01$ ), indicating a moderate association between the two predictors. These results support the hypotheses that both independent variables are individually associated with higher levels of procrastination.

**Table 3**

*Summary of ANOVA for Regression Model Predicting Procrastination*

Source	Sum of Squares	df	Mean Square	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	p
Regression	84.91	2	42.46	.61	.37	.36	119.43	<.001
Residual	143.74	407	0.35					
Total	228.65	409						

The ANOVA summary in Table 3 demonstrates that the regression model significantly predicts procrastination,  $F(2, 407) = 119.43, p < .001$ , with  $R^2 = .37$ , indicating that 37% of the variance in procrastination scores was explained by

maladaptive perfectionism and avoidant coping. The adjusted  $R^2$  (.36) suggests a good fit with minimal inflation due to sample size.

**Table 4**

*Multiple Regression Results Predicting Procrastination*

Predictor	B	SE	$\beta$	t	p
Constant	1.27	0.21	—	6.05	<.001
Maladaptive Perfectionism	0.31	0.06	.33	5.41	<.001
Avoidant Coping	0.38	0.05	.41	6.98	<.001

Table 4 presents the regression coefficients for the model predicting procrastination. Avoidant coping emerged as the stronger predictor ( $\beta = .41, p < .001$ ), followed by maladaptive perfectionism ( $\beta = .33, p < .001$ ). The unstandardized coefficients show that for each one-unit increase in avoidant coping, procrastination increased by 0.38 units, whereas a one-unit increase in maladaptive perfectionism led to a 0.31-unit increase in procrastination. Both predictors contributed significantly to the model.

#### 4. Discussion and Conclusion

The aim of this study was to explore the predictive roles of maladaptive perfectionism and avoidant coping on academic procrastination in a sample of South African university students. The results of Pearson correlation analyses indicated that both maladaptive perfectionism and avoidant coping were significantly and positively correlated with procrastination. Furthermore, linear regression analysis revealed that maladaptive perfectionism and avoidant coping jointly predicted a significant proportion of the variance in procrastination scores. These findings reinforce



the idea that procrastination among students is not merely a matter of poor time management, but is deeply rooted in psychological vulnerabilities and maladaptive coping patterns.

The positive relationship between maladaptive perfectionism and procrastination found in this study aligns with a robust body of research indicating that perfectionistic tendencies—particularly those involving concern over mistakes, fear of failure, and excessive self-criticism—can contribute to academic delay behaviors. Maladaptive perfectionism leads students to set unrealistically high standards and fear evaluation, which can paralyze motivation and contribute to avoidance (Akbağ, 2024; Ashraf et al., 2023). In this study, students exhibiting greater levels of maladaptive perfectionism were more likely to procrastinate, supporting the theoretical framework that perfectionism often generates internal conflict: a desire to succeed perfectly juxtaposed with a fear of imperfection or failure. As suggested by Chang et al. (2025), fear of failure and self-handicapping behaviors frequently mediate this link, as perfectionistic students delay academic engagement to avoid the emotional cost of potential failure (Chang et al., 2025).

The findings are further supported by the research of Rezaei et al. (2024), who observed that perfectionism, especially when coupled with academic anxiety, significantly predicted procrastination in medical and dental students (Rezaei et al., 2024). Similarly, Park and Sohn (2024) emphasized that evaluative concerns perfectionism fosters rumination, which subsequently increases academic procrastination (Park & Sohn, 2024). This cumulative evidence highlights that perfectionism is not a standalone trait but part of a larger psychological mechanism involving self-regulation difficulties and emotional avoidance, both of which play a central role in procrastinatory behavior.

The role of avoidant coping in predicting procrastination was also confirmed in this study. Students who tended to use strategies such as denial, distraction, and behavioral disengagement as a means of managing academic stress were significantly more likely to procrastinate. This finding is consistent with previous research indicating that avoidant coping is a maladaptive response to academic pressure that leads to disengagement from tasks and delays in performance (Sederlund et al., 2020; Wardani et al., 2021). Tak and Kim (2023) found that university students who scored high on socially prescribed perfectionism were more likely to engage in post-event rumination and avoidance, which subsequently increased procrastination (Tak & Kim,

2023). Similarly, Tarasova (2023) reported that adolescents under high academic load who relied on avoidant coping strategies were more vulnerable to psychological risks, including disengagement and poor academic follow-through (Tarasova, 2023).

Importantly, the combined predictive power of maladaptive perfectionism and avoidant coping in the current regression model highlights the interrelated nature of these constructs. Perfectionism may create a psychological climate marked by fear of mistakes and rigid self-expectations, which in turn triggers avoidance as a self-protective mechanism. As demonstrated by Ibili et al. (2025), maladaptive perfectionism may explain the inverse association between dispositional mindfulness and procrastination, suggesting that perfectionistic individuals may be more prone to emotional avoidance and disengagement when faced with academic stressors (Ibili et al., 2025). Likewise, Brakamonte et al. (2024) emphasized that in adult learners, perfectionism and procrastination are often co-expressed as part of a broader cognitive-emotional response to achievement demands (Brakamonte et al., 2024).

This pattern is echoed in the findings of Coutinho et al. (2022), who showed that even among students who engage in "active procrastination" (delaying by choice but still achieving goals), the presence of maladaptive perfectionism tends to predict a more harmful, avoidant form of procrastination (Coutinho et al., 2022). Huang et al. (2023) also noted that among nursing students, low resilience and self-efficacy acted as facilitators of avoidant coping in the context of perfectionism, thereby exacerbating procrastination (Huang et al., 2023). These findings help explain why students in the present study who exhibited both maladaptive perfectionism and avoidant coping reported significantly higher levels of procrastination.

Another important consideration is the role of contextual and cultural variables. As noted by Ayadi et al. (2021), the relationship between perfectionism and procrastination may be influenced by contextual factors such as academic pressure, expectations from family, and self-identity concerns—factors which are relevant in the South African university environment, where students often face financial and familial pressures (Ayadi et al., 2021). Joo and Park (2021) found that middle school students' procrastination increased when they perceived high academic expectations from their parents, particularly when combined with evaluative concerns perfectionism (Joo & Park, 2021). These findings align with our sample, where students likely

experience multiple intersecting stressors that may amplify maladaptive traits and promote avoidant coping.

Furthermore, the findings contribute to the theoretical understanding of procrastination as a dynamic interplay between personality traits and coping processes. While perfectionism has long been recognized as a personality correlate of procrastination, this study underscores the importance of examining how perfectionistic traits translate into specific behaviors through the lens of coping strategies. As Lipińska-Grobely and Bednarek (2021) asserted, the combination of low self-esteem and maladaptive perfectionism significantly increases the likelihood of procrastination, especially when students lack adaptive mechanisms to regulate academic stress (Lipińska-Grobely & Bednarek, 2021). This integrative framework highlights the necessity of targeting both cognitive appraisals (perfectionism) and behavioral tendencies (avoidant coping) in efforts to reduce academic delay.

Notably, Saltürk (2022) provided qualitative insights into how perfectionists and procrastinators describe their internal experiences. Participants reported an ongoing conflict between their desire to produce excellent work and their fear of being judged or failing, which led to persistent avoidance and emotional fatigue (Saltürk, 2022). The current study's findings support this model by showing that both perfectionistic fears and avoidance-based coping independently contribute to the procrastination dynamic. Likewise, Landau (2020) argued for the importance of helping perfectionistic students develop cognitive flexibility and emotional tolerance to prevent avoidance-based responses (Landau, 2020).

The current study adds to the growing empirical evidence suggesting that targeting perfectionism and avoidance in tandem may be an effective strategy to reduce procrastination. As perfectionistic thinking drives fear-based avoidance, and avoidance reinforces delay, breaking this cycle requires psychological interventions that enhance self-compassion, emotional regulation, and flexible goal-setting. This integrated model is supported by research showing that interventions targeting self-efficacy and resilience can moderate the effects of perfectionism on procrastination (Huang et al., 2022). Additionally, findings by Ahmed et al. (2024) indicate that parental control and maladaptive perfectionism jointly mediate procrastination and social withdrawal, underscoring the value of multi-dimensional intervention approaches (Ahmed et al., 2024).

## 5. Limitations & Suggestions

Despite the valuable insights gained from this study, several limitations must be acknowledged. First, the correlational nature of the design precludes any conclusions regarding causality. While the relationships between variables are significant, it cannot be definitively stated that maladaptive perfectionism and avoidant coping cause procrastination. Second, the data relied exclusively on self-report instruments, which may be subject to social desirability bias or inaccurate self-assessment. Third, although the sample size was statistically adequate, participants were recruited from a limited number of universities in South Africa, potentially limiting the generalizability of the findings to broader or more diverse student populations. Cultural, socioeconomic, and institutional variables may influence how perfectionism and coping behaviors manifest, and these contextual nuances were not directly measured in the present study.

Future research should aim to address the limitations of the current study by adopting longitudinal or experimental designs that can better assess causality and temporal dynamics among the variables. For example, future studies could explore whether reductions in maladaptive perfectionism or avoidant coping through targeted interventions lead to measurable decreases in procrastination over time. Additionally, qualitative studies could provide more nuanced insights into the lived experiences of students who struggle with perfectionism and procrastination. Research should also consider moderating and mediating variables such as self-compassion, cultural background, academic discipline, or psychological flexibility to further refine our understanding of the perfectionism–coping–procrastination triad. Finally, including physiological or behavioral measures (e.g., task initiation, academic performance) could enrich future research beyond self-report data.

In practical terms, universities and mental health professionals working with student populations should consider integrating training programs that address maladaptive perfectionism and promote adaptive coping strategies. Workshops that teach students how to set realistic goals, tolerate mistakes, and develop self-compassion could help reduce the psychological rigidity associated with perfectionism. Counseling centers may incorporate cognitive-behavioral techniques and mindfulness-based practices to target avoidant coping patterns. Academic support services should also raise awareness of the link between perfectionism and procrastination, encouraging students to seek help early. Ultimately, a preventative

approach that fosters emotional resilience, flexible thinking, and healthy achievement motivation can play a crucial role in mitigating procrastination and promoting student success.

### Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

### Declaration of Interest

The authors of this article declared no conflict of interest.

### Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

### Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

### Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

### Authors' Contributions

All authors equally contributed in this article.

### References

- Ahmed, T., Xing, Q., & Abdullah, M. (2024). The Mediating Effect of Parental Control on Social Withdrawal, Academic Procrastination, and Maladaptive Perfectionism in Young Adults and Adolescents. *Annals of Human and Social Sciences*, 5(1). [https://doi.org/10.35484/ahss.2024\(5-i\)28](https://doi.org/10.35484/ahss.2024(5-i)28)
- Akbağ, M. (2024). How Adaptive and Maladaptive Perfectionism Affect Psychological Well-Being Among University Students: the Mediating Role of Procrastination. *Research on Education and Psychology*, 8(1), 226-252. <https://doi.org/10.54535/rep.1478695>
- Ashraf, M. A., Sahar, N.-e., Kamran, M., & Alam, J. (2023). Impact of Self-Efficacy and Perfectionism on Academic Procrastination Among University Students in Pakistan. *Behavioral Sciences*, 13(7), 537. <https://doi.org/10.3390/bs13070537>
- Ayadi, N., Pireinaladin, S., Shokri, M., Dargahi, S., & Zarein, F. (2021). Investigating the Mediating Role of Procrastination in the Relationship Between Positive and Negative Perfectionism and Mobile Phone Addiction in Gifted Students. *Iranian Journal of Psychiatry*. <https://doi.org/10.18502/ijps.v16i1.5375>
- Brakamonte, N. M., Kitaeva, E., Brakamonte, D. M., & Chubun, I. (2024). Motivation for Success: Perfectionism and Procrastination in Adults Learning at Professional Training Programs Case (In English). *Vestnik of Saint Petersburg University Psychology*, 14(4), 731-742. <https://doi.org/10.21638/spbu16.2024.410>
- Chang, K. J., Seo, J., Kim, M.-J., Song, H.-Y., & Kim, M. S. (2025). Psychological Mechanism Contributing to Academic Burnout and Depression in College Students: Focus on Evaluation Concern Perfectionism, Academic Procrastination, Fear of Failure, and Self-Handicapping. *Korean Assoc Learner-Centered Curric Instr*, 25(2), 807-824. <https://doi.org/10.22251/jlcci.2025.25.2.807>
- Coutinho, M. V. C., Menon, A., Ahmed, R. H., & Fredricks-Lowman, I. (2022). The Association of Perfectionism and Active Procrastination in College Students. *Social Behavior and Personality an International Journal*, 50(3), 82-89. <https://doi.org/10.2224/sbp.10611>
- Eslami, A., Mirzahosseini, H., & Monirpour, N. (2023). Modeling the mediating role of thinking styles in the relationship between human agency and self-regulation of knowledge by choosing styles to cope with academic stress in male students. *Journal of Adolescent and Youth Psychological Studies (JAYPS)*, 4(1), 9-19. <https://doi.org/10.61838/kman.jayps.4.1.2>
- Fatima, R., Hassan, S. Q. U., Akram, A., & Raza, S. (2024). Supervisor Perfectionism and Student Performance, Creativity and Academic Procrastination. *JHRR*, 4(1), 266-274. <https://doi.org/10.61919/jhrr.v4i1.371>
- Huang, H., Ding, Y., Liang, Y., Wan, X., Peng, Q., Zhang, Y. Z., Kong, D., & Chen, C. (2023). The Association Between Perfectionism and Academic Procrastination Among Undergraduate Nursing Students: The Role of Self-efficacy and Resilience. *Nursing Open*, 10(10), 6758-6768. <https://doi.org/10.1002/nop2.1922>
- Huang, H., Ding, Y., Zhang, Y., Peng, Q., Liang, Y., Wan, X., & Chen, C. (2022). Resilience and Positive Coping Style Affect the Relationship Between Maladaptive Perfectionism and Academic Procrastination Among Chinese Undergraduate Nursing Students. *Frontiers in psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1014951>
- Ibili, G., Tree, J. J., & Gurluk, Y. O. (2025). Maladaptive Perfectionism Can Explain the Inverse Relationship Between Dispositional Mindfulness and Procrastination. *PLoS One*, 20(2), e0318845. <https://doi.org/10.1371/journal.pone.0318845>
- Joo, H., & Park, J. H. (2021). The Effect of Parental Academic Achievement Pressure Perceived by Middle School Students on Academic Procrastination: The Mediating Role of Evaluative Concerns Perfectionism. *Korean Journal of Child Studies*, 42(5), 537-551. <https://doi.org/10.5723/kjcs.2021.42.5.537>
- Kang, W., & Gong, C. (2024). Exploring Potential Mediating Mechanisms Between Maladaptive Perfectionism and Athlete Burnout Based on Multi-Theory Perspectives. *Frontiers in psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1416281>
- Kim, M. Y., & Lee, Y. (2025). Development and Effect of Program for Based on the Positive Psychological Overcoming Academic Procrastination of Elementary School Students in Upper Grade. *Korean Assoc Learner-Centered Curric Instr*, 25(3), 583-599. <https://doi.org/10.22251/jlcci.2025.25.3.583>
- Kurtović, A., Vrdoljak, G., & Anita, I. (2019). Predicting Procrastination: The Role of Academic Achievement, Self-Efficacy and Perfectionism. *International Journal of*



- Educational Psychology*, 8(1), 1.  
<https://doi.org/10.17583/ijep.2019.2993>
- Landau, C. (2020). Transforming Malignant Perfectionism and Encouraging Flexibility. 171-184.  
<https://doi.org/10.1093/med-psych/9780190914301.003.0012>
- Lipińska-Grobelny, A., & Bednarek, K. J. (2021). Self-Esteem and Perfectionism Versus Procrastination. *Kwartalnik Naukowy Fides et Ratio*, 48(4), 484-495.  
<https://doi.org/10.34766/fetr.v48i4.949>
- Musella, K., DiFonte, M., & Flannery-Schroeder, E. (2021). 39.2 The Roles of Mindfulness and Sleep Disturbance on the Relationship Between Avoidant Coping and Mental Health Symptoms During COVID-19. *Journal of the American Academy of Child & Adolescent Psychiatry*, 60(10), S228.  
<https://doi.org/10.1016/j.jaac.2021.09.308>
- Oguchi, M., Furukawa, E., & Kumano, H. (2025). Effects of a Procrastination Intervention for Japanese University Students With Attention-Deficit/Hyperactivity Disorder Tendencies: An Interrupted Time Series Analysis. *Journal of Cognitive Psychotherapy*, JCP-2024-0028.R2021.  
<https://doi.org/10.1891/jcp-2024-0028>
- Park, J.-T., & Sohn, E.-J. (2024). The Effects of Evaluative Concerns Perfectionism on Academic Procrastination Through Rumination: The Moderated Mediating Effect of Self-Compassion. *The Association of Korea Counseling Psychology Education Welfare*, 11(2), 73-92.  
<https://doi.org/10.20496/cpew.2024.11.2.73>
- Rezaei, P., Ilaghi, M., & Masoumian, N. (2024). The Triangle of Anxiety, Perfectionism, and Academic Procrastination: Exploring the Correlates in Medical and Dental Students. *BMC Medical Education*, 24(1).  
<https://doi.org/10.1186/s12909-024-05145-3>
- Saltürk, A. (2022). A Qualitative Study Among Self-Identified Perfectionists and Procrastinators in Academic Tasks. *Participatory educational research*, 9(2), 1-24.  
<https://doi.org/10.17275/per.22.26.9.2>
- Sederlund, A. P., Burns, L. R., & Rogers, W. M. (2020). Multidimensional Models of Perfectionism and Procrastination: Seeking Determinants of Both. *International journal of environmental research and public health*, 17(14), 5099. <https://doi.org/10.3390/ijerph17145099>
- Tak, S., & Kim, Y. S. (2023). The Influence of Socially Prescribed Perfectionism on Academic Procrastination in University Students: The Moderated Mediation Effect of Failure-Is-Enhancing Mindset Through Post-Event Rumination. *Korean Association for Learner-Centered Curriculum and Instruction*, 23(9), 487-500.  
<https://doi.org/10.22251/jlcci.2023.23.9.487>
- Tarasova, S. Y. (2023). Psychological Risks of Adolescents Studying Under Conditions of Increased Academic Load. *Moscow University Psychology Bulletin*(1), 280-302.  
<https://doi.org/10.11621/vsp.2023.01.12>
- Wardani, R., Adelina, I., & Santoso, J. A. (2021). Predicting Academic Procrastination in Students: Perfectionism, General Self-Efficacy, and Sociodemographic Factors. *Indigenous Jurnal Ilmiah Psikologi*, 6(3), 49-59.  
<https://doi.org/10.23917/indigenous.v6i3.15558>
- Yosopov, L., Saklofske, D. H., Smith, M. M., Flett, G. L., & Hewitt, P. L. (2024). Failure Sensitivity in Perfectionism and Procrastination: Fear of Failure and Overgeneralization of Failure as Mediators of Traits and Cognitions. *Journal of Psychoeducational Assessment*, 42(6), 705-724.  
<https://doi.org/10.1177/07342829241249784>
- Zhang, Y., Rehman, S., Addas, A., Ahmad, M., & Khan, A. (2025). The Mediating Role of Cognitive Reappraisal on Bedtime Procrastination and Sleep Quality in Higher Educational Context: A Three-Wave Longitudinal Study. *Nature and science of sleep*, Volume 17, 129-142.  
<https://doi.org/10.2147/nss.s497183>