Analysis of Self-Efficacy Anxiety on Academic Procrastination Behavior in Students

Intan Yudha Prastika[1]

[1]**Community Education Study Program, Faculty of Education, State University of Medan**

CORRESPONDING AUTHOR
Intan Yudha Prastika
Email:
intanyudhaprastika2005@gmail.com
Post Address: Community Education Study Program, Faculty of Educational Sciences, State University of Medan

ABSTRACT

Academic procrastination is a problem that many students experience and has an impact on declining learning quality, increased stress, and low academic achievement. One of the internal factors that is strongly suspected to influence this behavior is self-efficacy anxiety, which is a condition when students doubt their ability to complete assignments, thus encouraging procrastination behavior. This study aims to analyze the effect of self-efficacy anxiety on academic procrastination behavior in students. The research method uses a quantitative approach with a survey design of 34 students selected through purposive sampling techniques. Data were collected using two Likert scales, namely the Anxiety Scale for Self-Disability and the Academic Procrastination Scale, and then analyzed through normality, correlation, and regression tests. The results showed that the data were normally distributed and there was a strong relationship between the two variables (R = 0.746). In addition, a significance value of 0.000 and a calculated t value greater than the t table showed that self-efficacy anxiety had a significant effect on academic procrastination behavior. This means that the higher the student's anxiety about their abilities, the higher their tendency to postpone academic assignments. This study concludes that anxiety about self-incompetence is an important psychological factor that needs to be considered in efforts to develop intervention programs to reduce academic procrastination in students.

1. INTRODUCTION

Academic procrastination has increasingly become a major concern in the field of educational psychology because it is directly related to learning quality, academic achievement, and students' psychological well-being. In the context of higher education, students are expected to manage time effectively, complete academic assignments punctually, think critically, and maintain a balance between academic and personal demands. These expectations are embedded in academic regulations and learning outcomes that emphasize student autonomy, responsibility, and self-directed learning. However, in reality, many students struggle to meet these expectations, particularly when faced with demanding coursework, tight deadlines, and evaluative academic environments. Academic procrastination, defined as the conscious delay of academic tasks despite awareness of their negative consequences, is increasingly prevalent in university environments (Steel et al., 2022). The consequences of this behavior extend beyond declining assignment quality and delayed graduation, encompassing increased academic stress, emotional exhaustion, and heightened vulnerability to psychological well-being disorders. Recent longitudinal findings further indicate that persistent academic procrastination is associated with psychological distress, reduced academic engagement, and symptoms of academic burnout among university students (Jochmann et al., 2024; Ziegler & Opdenakker, 2018). These findings confirm that academic procrastination is not merely a behavioral issue related to poor time management, but rather a multidimensional academic and psychological problem that reflects deeper difficulties in students' self-regulation, motivation, and emotional functioning. Consequently, understanding the underlying psychological mechanisms of academic procrastination has become a critical issue in contemporary educational psychology research.

One internal psychological factor considered to have a strong influence on procrastination tendencies is self-efficacy anxiety. This concept refers to a psychological condition in which individuals doubt their ability to successfully complete tasks, leading to heightened anxiety that inhibits productive academic behavior (Bandura, 2023). Self-efficacy beliefs play a central role in determining how students perceive academic challenges, regulate effort, and persist when encountering difficulties. Previous studies have shown that higher levels of self-confidence are associated with lower tendencies toward academic procrastination (Odaci, 2011). Conversely, when self-confidence weakens, students become more susceptible to fear of failure, negative evaluation, and feelings of unpreparedness when facing academic demands (Hasty et al., 2023). These emotional responses often trigger avoidance-oriented coping strategies, with procrastination functioning as a temporary means of reducing anxiety and emotional discomfort. Recent empirical evidence supports this mechanism, demonstrating that anxiety related to academic self-efficacy significantly predicts task delay and avoidance behavior among university students (Cheng et al., 2022; Zhang et al., 2024). Hen and Goroshit (2024) further emphasized that academic anxiety mediates the relationship between self-efficacy beliefs and procrastination, indicating that anxiety transforms cognitive doubt into behavioral delay. This suggests that procrastination is not simply a result of laziness or lack of discipline, but rather a psychologically driven response to perceived academic incompetence. Thus, anxiety rooted in low self-efficacy plays a critical role in reinforcing procrastination behavior, especially in academic environments characterized by high performance pressure, frequent evaluation, and competitive achievement standards.

In addition to self-efficacy anxiety, recent studies emphasize the role of social, emotional, and motivational factors in shaping procrastination behavior. Netzer & Pollak (2023) explained that procrastination often occurs when students perceive tasks as unimportant or overly

demanding and simultaneously exhibit high levels of impulsivity. Rad et al. (2025) further demonstrated that difficulties in emotion regulation strengthen the relationship between low self-efficacy and increased procrastination, suggesting that students who struggle to manage negative emotions are more vulnerable to anxiety-driven task avoidance. Supporting this view, Kara (2025) found that emotion regulation difficulties significantly predict academic procrastination, particularly when mediated by maladaptive coping behaviors such as excessive social media use. These findings indicate that procrastination may serve as a short-term strategy to regulate negative emotions rather than as a deliberate academic choice. From a social perspective, Chen et al. (2025) revealed that social support reduces academic procrastination through the serial mediating effects of intrinsic learning motivation and academic self-efficacy. Their findings indicate that students who receive adequate academic and emotional support are more likely to develop stronger confidence in their abilities, thereby reducing anxiety-driven procrastination. Similarly, Nada et al. (2024) confirmed that social support and self-efficacy jointly function as protective factors that reduce academic procrastination among college students. Collectively, these studies demonstrate that academic procrastination emerges from complex interactions between internal psychological processes and external social conditions, highlighting the importance of examining internal anxiety-related mechanisms within broader contextual frameworks.

Empirical evidence from higher education contexts consistently highlights the central role of self-efficacy in predicting procrastination behaviour. Pratama et al. (2025) found a significant negative correlation between academic self-efficacy and procrastination, indicating that students with stronger confidence tend to initiate and complete tasks more effectively. Purnomo et al. (2024) also reported that self-efficacy significantly influences students' persistence, effort regulation, and academic engagement. Furthermore, Soner (2019) demonstrated that learning awareness and self-management skills contribute to reducing procrastination; however, these skills become less effective when students experience persistent anxiety regarding their academic competence. Tamara and Dewanto (2024) similarly found that learning motivation alone is insufficient to prevent procrastination if self-efficacy is low, highlighting the importance of confidence as a psychological foundation for effective academic behavior. From a theoretical standpoint, Temporal Motivation Theory (TMT) provides a robust framework for understanding the interaction between anxiety and procrastination. According to Steel et al. (2018), motivation to complete tasks is determined by expectancy, task value, delay, and impulsivity. Recent extensions of TMT emphasize that expectancy-related anxiety significantly reduces motivation and increases delay behaviour, particularly when individuals perceive a low probability of success (Steel et al., 2018). When anxiety is high, procrastination often functions as an avoidance-oriented emotion regulation strategy rather than a rational decision-making process aimed at optimizing academic outcomes (Phadke, 2024). This theoretical perspective further supports the argument that anxiety plays a pivotal role in transforming motivational deficits into observable procrastination behaviour.

Although academic procrastination has been widely studied internationally, research that explicitly examines self-efficacy anxiety as a central psychological predictor remains limited in the Indonesian higher education context. Most previous studies have focused on external factors such as time management, academic workload, or general learning motivation, while internal anxiety rooted in low self-confidence has received comparatively less empirical attention. This limitation is critical, given accumulating evidence that anxiety-based procrastination contributes to long-term negative outcomes, including reduced academic engagement, academic burnout, and psychological distress (Jochmann et al., 2024; Ziegler & Opdenakker, 2018). Without a clear understanding of how self-efficacy anxiety directly

influences procrastination behavior, intervention programs may fail to address the core psychological mechanisms underlying students' task avoidance. Based on this gap, the present study employs a quantitative approach to examine the effect of self-efficacy anxiety on academic procrastination behaviour among university students. By focusing on anxiety as a core psychological mechanism, this study seeks to provide empirical evidence that can enrich educational psychology literature and serve as a foundation for developing intervention programs aimed at strengthening self-efficacy, improving emotion regulation, and reducing anxiety-driven avoidance in academic settings (Sirois et al., 2017).

2. METHODOLOGY

This study uses a quantitative approach with a survey design, as explained by Creswell & Creswell (2022) that quantitative research aims to test the relationship between variables through numerical measurement and statistical analysis. The survey design was chosen because it was able to describe relationship patterns objectively and standardized (Johnson & Christensen, 2024). The research sample consisted of 34 active students. Data collection was carried out using an online questionnaire containing the Self-Efficacy Anxiety Scale and the Academic Procrastination Scale, both using the Likert-Scale model, according to the guidelines for the preparation of standardized instruments in quantitative research (Sekaran & Bougie, 2023). Data analysis was carried out using inferential statistical techniques to see the relationships and influences between variables in the research model, in line with modern quantitative research principles that emphasize object and measurable analysis (Neuman, 2022).

3. RESULTS AND DISCUSSION

In the initial testing stage which was carried out to determine the level and direction of the relationship between the variables of self-efficacy anxiety and academic procrastination behavior, a correlation coefficient value (R) of 0.746 was obtained. The value of the correlation coefficient shows that the degree of relationship between the two variables is in the strong category, considering that in general the value of R in the range of 0.60–0.79 is interpreted as a strong and significant relationship. These findings indicate that the relationship between the variables of self-efficacy anxiety and academic procrastination behavior is at a high level, so that every change that occurs in the variable of self-efficacy anxiety has a considerable and substantial influence on the changes that occur in the variable of academic procrastination behavior. Thus, these results show that the self-efficacy anxiety variable has a significant role or contribution in explaining variations and changes in the academic procrastination behavior variable, so that its influence in the context of this study can be said to be statistically and practically meaningful.

Table 1. ANOVA Results of the Regression Model

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1518.068	1	1518.068	40.118	.000
Residual	1210.873	32	37.840		
Total	2728.941	33			

The results of the ANOVA test showed that the regression model used in this study had a significance level of 0.000, which means that the value was far below the significance limit of 0.05. These findings indicate that the regression model as a whole is feasible to explain the relationship between the variables of self-efficacy anxiety and academic procrastination behavior. In other words, the combination of variables tested in this research model is able to explain the significant variation in students' academic procrastination behavior, so that the results of the analysis do not occur by chance. The significance of this regression model shows that self-efficacy anxiety plays a meaningful role as a meaningful predictor of academic procrastination behavior. This means that the level of student anxiety about their academic self-confidence is statistically proven to be influential in increasing the tendency to procrastinate on academic assignments. These findings reinforce the view that academic procrastination is not only influenced by technical factors such as time management, but also strongly influenced by students' internal psychological conditions, especially anxiety that arises from low confidence in one's own abilities. Theoretically, the results of this ANOVA test are in line with the framework of Temporal Motivation Theory, which states that low expectations of success due to weak self-confidence will decrease motivation and encourage task-avoidance behavior. In this context, self-efficacy-based anxiety serves as a major trigger that inhibits academic engagement and encourages students to delay completing assignments as a form of short-term emotion regulation. Therefore, the significance of the regression model has not only statistical significance, but also strong theoretical relevance in explaining the psychological dynamics of academic procrastination.

Furthermore, these findings also imply that efforts to handle academic procrastination in students cannot be separated from interventions that focus on strengthening self-efficacy and managing academic anxiety. When anxiety about self-ability can be suppressed and students' academic confidence is strengthened, the tendency to procrastinate on academic assignments has the potential to decrease significantly. Thus, the results of the ANOVA test confirm that self-efficacy anxiety is a crucial psychological factor and needs serious attention in the development of learning strategies and guidance services in higher education. Overall, the ANOVA results provide strong empirical evidence that the proposed research model has significant predictive capabilities in explaining students' academic procrastination behavior. These findings reinforce the position of self-efficacy anxiety as an important determinant in the study of academic procrastination and open up opportunities for further research to integrate other psychological variables to enrich the understanding of the complexity of task procrastination behaviors in the context of higher education.

Table 2. Regression Coefficients of Variable X on the Dependent Variable

Model	B	Std. Error	Beta	t	Sig.
(Constant)	8.536	4.183	—	2.041	.050
X	0.884	0.140	0.746	6.334	.000

Based on the results of the analysis in the Coefficients table, it is known that the self-efficacy anxiety variable has a significant effect on academic procrastination behavior. This is indicated by a significance value (Sig.) of 0.000, which is smaller than the significance limit used in quantitative research, which is 0.05. The significance value indicates that the influence that occurs between the free variable and the bound variable does not arise by chance, but rather is a real and statistically proven influence. In addition, hypothesis testing can also be seen through the calculated t-value obtained from the coefficient table, which is 6.334. To

determine the significance of these values, a comparison was made with the t-value of the table. The degrees of freedom is 32. Based on the value of the degree of freedom, with a confidence level of 95% ($\alpha = 0.05$) and two-tailed testing, a table t-value of 2.036 was obtained. The results of the comparison showed that the value of t calculated (6.334) was greater than that of the t table (2.036). Thus, it can be concluded that H_0 is rejected and H_1 is accepted. The rejection of this null hypothesis shows that there is a significant influence between self-efficacy anxiety and academic procrastination behavior. This means that the increase in the level of anxiety of students about their academic self-confidence actually contributes to the increasing tendency of academic procrastination behavior. These findings confirm that self-efficacy anxiety is a strong psychological predictor in explaining the procrastination behavior of students' academic assignments. Substantively, the results of this coefficient test strengthen the results of the ANOVA and Model Summary tests which previously showed that the regression model used had good predictive capabilities. Therefore, it can be concluded that self-efficacy anxiety is not only statistically influential, but also has practical relevance in the context of higher education. These results confirm the importance of academic and psychological interventions that focus on strengthening self-confidence and anxiety management to suppress academic procrastination behavior in students.

3.   CONCLUSION

This study aims to examine the effect of self-efficacy anxiety on academic procrastination behavior in students, as formulated in the introduction. Based on the results of data analysis and discussions that have been carried out, it can be concluded that the research objectives and expectations conveyed in the Introduction section have been achieved and answered empirically through the findings in the Results and Discussion sections. The results of the regression analysis showed that self-efficacy anxiety had a significant influence on students' academic procrastination behavior. Strong correlation coefficient values, supported by ANOVA test results and significant coefficient tests, indicate that anxiety stemming from low academic self-confidence plays an important role in increasing students' tendency to delay completing academic assignments. These findings are in line with previous theoretical and literary frameworks that place self-efficacy as a major determinant in students' academic behavior and self-regulation. Thus, this study confirms that academic procrastination is not solely caused by external factors such as task load or time management, but is also strongly influenced by internal psychological factors, especially anxiety related to academic self-confidence. The implications of these findings suggest that efforts to overcome academic procrastination need to be directed at strengthening student self-efficacy and managing academic anxiety through a more comprehensive psychological and pedagogical approach. Although the study provides strong empirical evidence, limitations remain, especially related to the number of samples and the scope of the variables studied. Therefore, further research is recommended to involve a larger number of respondents and integrate other psychological variables, such as emotion regulation, learning motivation, and social support, in order to gain a more comprehensive understanding of the factors that influence students' academic procrastination behavior.

REFERENCES

Bandura, A. (2023). Self-Efficacy: The Exercise of Control in Learning Contexts. *Psychological Review*.

Chen, X., Wu, M., Dong, G., Cui, L., Qu, B., & Zhu, Y. (2025). Social support and academic procrastination in health professions students: the serial mediating effect of intrinsic

learning motivation and academic self-efficacy. *Advances in Health Sciences Education*, *30*(4), 1143-1160. https://doi.org/10.1007/s10459-024-10394-4

Cheng, S. L., Xie, K., Collier, J., Hebert, W., & Haro, A. (2022). The Relations Between Motivational Beliefs, Academic Delay, and Academic Achievement in Online Learning Environments. In *Proceedings of the 16th International Conference of the Learning Sciences-ICLS 2022, pp. 945-948*. International Society of the Learning Sciences. https://dx.doi.org/10.22318/icls2022.945

Creswell, J. W., & Creswell, J. D. (2022). *Research Design: Quantitative, Qualitative, and Mixed Methods Approaches.*

Hasty, L. M., Malanchini, M., Shakeshaft, N., Schofield, K., Malanchini, M., & Wang, Z. (2021). When anxiety becomes my propeller: Mental toughness moderates the relation between academic anxiety and academic avoidance. *British Journal of Educational Psychology*, *91*(1), 368-390. https://doi.org/10.1111/bjep.12366

Jochmann, A., Gusy, B., Lesener, T., & Wolter, C. (2024). Procrastination, depression and anxiety symptoms in university students: a three-wave longitudinal study on the mediating role of perceived stress. *BMC psychology*, *12*(1), 276. https://doi.org/10.1186/s40359-024-01761-2

Johnson, R. B., & Christensen, L. B. (2024). *Educational research: Quantitative, qualitative, and mixed approaches*. Sage publications.

Kara, F. İ. (2025). Difficulties in Emotion Regulation and Academic Procrastination Experienced by Pre-Service Teachers: Investigating the Mediation of Social Media Addiction. *Participatory Educational Research*, *15*(6), 74-87. https://doi.org/10.17275/per.25.79.12.6

Nada, V., Sujadi, E., & Putra, B. (2024). Academic Procrastination among College Students: Do Self-Efficacy and Social Support Matter?. *EduLine: Journal of Education and Learning Innovation*, *4*(4), 485-495. https://doi.org/10.35877/454RI.eduline2916

Netzer Turgeman, R., & Pollak, Y. (2023). Using the temporal motivation theory to explain the relation between ADHD and procrastination. *Australian Psychologist*, *58*(6), 448-456. https://doi.org/10.1080/00050067.2023.2218540

Neuman, W. L. (2022). *Social Research Methods: Qualitative and Quantitative Approaches*.

Odaci, H. (2011). Academic self-efficacy and academic procrastination as predictors of problematic internet use in university students. *Computers & Education*, *57*(1), 1109-1113. https://doi.org/10.1016/j.compedu.2011.01.005

Phadke, S. S. (2024). Procrastination, perceived stress and emotional intelligence in young adults. *International Journal of Interdisciplinary Approaches in Psychology*, *2*(8), 507-598. https://www.psychopediajournals.com/index.php/ijiap/article/download/524/411

Pratama, D. N., Zulaikhah, S., & Irawan, R. (2025). Academic Procrastination: How Does it Correlate with Students' Self-Efficacy in Higher Education?. *Journal of Innovation and Research in Primary Education*, *4*(4), 3769-3779. https://doi.org/10.56916/jirpe.v4i4.2534

Purnomo, R. A. A., Susanto, A. R. A., & Oktavianisa, N. A. (2024). The Role of Self Efficacy on Academic Procrastination among University Student. *Jurnal Psikologi Teori dan Terapan*. 15(01), 74–86. https://doi.org/10.26740/jptt.v15n01.p74-86

Rad, H. F., Bordbar, S., Bahmaei, J., Vejdani, M., & Yusefi, A. R. (2025). Predicting academic procrastination of students based on academic self-efficacy and emotional regulation difficulties. *Scientific Reports*, *15*(1), 3003. https://doi.org/10.1038/s41598-025-87664-7

Saling, L. L., Weatherhead, S., & Cohen, D. B. (2025). Exploratory tendencies explain task delay in procrastination. *New Ideas in Psychology*, *79*, 101190. https://doi.org/10.1016/j.newideapsych.2025.101190

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. john wiley & sons.

Sirois, F. M., Molnar, D. S., & Hirsch, J. K. (2017). A meta–analytic and conceptual update on the associations between procrastination and multidimensional perfectionism. *European Journal of Personality*, *31*(2), 137-159. https://doi.org/10.1002/per.209

Soner, A. R. I. K. (2019). The relations among university students' academic self-efficacy, academic motivation, and self-control and self-management levels. *International Journal of Education and Literacy Studies*, *7*(4), 23-34. http://dx.doi.org/10.7575/aiac.ijels.v.7n.4p.23

Steel, P., Svartdal, F., Thundiyil, T., & Brothen, T. (2018). Examining procrastination across multiple goal stages: a longitudinal study of temporal motivation theory. *Frontiers in psychology*, *9*, 327. https://doi.org/10.3389/fpsyg.2018.00327

Steel, P., Taras, D., Ponak, A., & Kammeyer-Mueller, J. (2022). Self-regulation of slippery deadlines: the role of procrastination in work performance. *Frontiers in psychology*, *12*, 783789. https://doi.org/10.3389/fpsyg.2021.783789

Tamara, S., & Dewanto, D. (2024). The Influence of Learning Motivation and Self-Efficacy on Academic Procrastination of Pertamina University Students Batch 2020–2023. *Journal of Management and Energy Business*. *4*(1).

Ziegler, N., & Opdenakker, M. C. (2018). The development of academic procrastination in first-year secondary education students: The link with metacognitive self-regulation, self-efficacy, and effort regulation. *Learning and Individual Differences*, *64*, 71-82. https://doi.org/10.1016/j.lindif.2018.04.009