

THE EFFECT OF SELF-EFFICACY AND SELF-REGULATED LEARNING ON ACADEMIC PROCRASTINATION AMONG STUDENTS AT STATE JUNIOR HIGH SCHOOL 6 IN MAKASSAR

^{*1}Karmila Suud, ²Abdul Saman, ³Abdullah Pandang

^{*1,2,3} Universitas Negeri Makassar

Email: ^{*1}karmilasuud08@gmail.com, ²abdulsaman@unm.ac.id, ³abdullah.pandang@unm.ac.id

Abstract

This study aims to analyze the influence of self-efficacy and self-regulated learning on students' academic procrastination at SMP Negeri 6 Makassar. The research employed a quantitative approach with an *ex post facto* design. The research population consisted of students from grades VII, VIII, and IX, with a total sample of 104 students selected using a saturated sampling technique. Data were collected through questionnaires, interviews, and documentation. Data analysis included classical assumption tests (normality, multicollinearity, and heteroscedasticity tests) and multiple regression analysis. The results indicate that students' self-efficacy levels were predominantly in the moderate (51.0%) and high (49.0%) categories, while self-regulated learning was mostly in the high category (60.6%). Academic procrastination was largely categorized as low (51.0%). Regression analysis revealed that self-efficacy had a negative and significant effect on academic procrastination ($p < 0.05$). Similarly, self-regulated learning also had a negative and significant effect on academic procrastination ($p < 0.05$). Simultaneously, self-efficacy and self-regulated learning showed a significant influence on students' academic procrastination. This study concludes that higher levels of self-efficacy and self-regulated learning are associated with lower levels of academic procrastination. These findings highlight the importance of strengthening students' self-beliefs and self-regulation skills through guidance and counseling services to reduce academic procrastination in schools.

Keywords: Self-Efficacy, Self-Regulated Learning, Academic Procrastination

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh self-efficacy dan self-regulated learning terhadap prokrastinasi akademik siswa SMP Negeri 6 Makassar. Penelitian menggunakan pendekatan kuantitatif dengan desain *ex post facto*. Populasi penelitian meliputi seluruh siswa kelas VII, VIII, dan IX, dengan jumlah sampel sebanyak 104 siswa yang ditentukan melalui teknik sampling jenuh. Pengumpulan data dilakukan menggunakan angket, wawancara, dan dokumentasi. Analisis data meliputi uji asumsi klasik (uji normalitas, multikolinearitas, dan heteroskedastisitas) serta analisis regresi berganda. Hasil penelitian menunjukkan bahwa tingkat self-efficacy siswa berada pada kategori sedang (51,0%) dan tinggi (49,0%), sedangkan self-regulated learning didominasi kategori tinggi (60,6%). Prokrastinasi akademik siswa sebagian besar berada pada kategori rendah (51,0%). Hasil uji regresi menunjukkan bahwa self-efficacy berpengaruh negatif dan signifikan terhadap prokrastinasi akademik ($p < 0,05$), demikian pula self-regulated learning yang juga berpengaruh negatif dan signifikan ($p <$

0,05). Secara simultan, *self-efficacy* dan *self-regulated learning* berpengaruh signifikan terhadap *prokrastinasi akademik* siswa. Penelitian ini menyimpulkan bahwa semakin tinggi *self-efficacy* dan kemampuan *self-regulated learning* siswa, maka semakin rendah kecenderungan *prokrastinasi akademik*. Temuan ini menegaskan pentingnya penguatan keyakinan diri dan regulasi diri dalam layanan bimbingan dan konseling untuk meminimalkan perilaku *prokrastinasi akademik* di sekolah.

Kata kunci: *self-efficacy*, *self-regulated learning*, *prokrastinasi akademik*

INTRODUCTION

Education plays a strategic role in optimally developing students' potential—cognitively, affectively, and psychomotorically. The learning process requires not only mastery of academic material but also students' ability to manage themselves, their time, and their learning responsibilities. However, in practice, many students face psychological and behavioral barriers that hinder the effectiveness of learning, one of which is academic procrastination. Academic procrastination is the deliberate and repeated behavior of delaying the start or completion of academic tasks, even though the individual is aware of the negative consequences of such delays. This behavior is commonly observed among high school students and can lead to poor academic performance, increased academic stress, and a decline in students' psychological well-being. If left unchecked, academic procrastination not only hinders the achievement of learning goals but also fosters maladaptive learning habits.

Various studies indicate that academic procrastination is influenced by both internal and external factors. Dominant internal factors include low self-confidence in academic abilities (*self-efficacy*) and weak self-regulation skills in learning (*self-regulated learning*). *Self-efficacy* refers to an individual's belief in their ability to organize and carry out the actions necessary to achieve specific outcomes. Students with low *self-efficacy* tend to doubt their abilities, avoid tasks they perceive as difficult, and ultimately delay completing academic assignments. In addition to *self-efficacy*, *self-regulated learning* also plays a crucial role in determining students' learning behaviors. *Self-regulated learning* is a student's ability to independently plan, monitor, and evaluate their learning process, including time management, the use of effective learning strategies, and the regulation of motivation and emotions. Students with good self-regulation are able to set learning goals, devise strategies, and persevere in the face of difficulties, and thus are less likely to engage in procrastination.

The phenomenon of academic procrastination was also observed among students at Makassar Public Junior High School No. 6. Based on initial interviews with guidance and counseling teachers, there are still students who delay completing assignments until close to the submission deadline. Common reasons cited include feeling unable to complete the assignment, difficulty understanding the material, fatigue, and preferring activities considered enjoyable, such as playing video games or using social media. This situation indicates issues related to students' *self-efficacy* and *self-regulated learning*. Previous research generally shows a negative relationship between *self-efficacy*, *self-regulated*

learning, and academic procrastination. However, empirical studies that simultaneously examine these two variables among junior high school students—particularly within the context of guidance and counseling services—remain relatively limited. Therefore, this study is important to provide an empirical understanding of the influence of *self-efficacy* and *self-regulated learning* on students' academic procrastination. The results of this study are expected to contribute theoretically to the development of educational psychology and guidance and counseling research, as well as provide practical insights for teachers and school counselors in designing appropriate interventions to enhance students' *self-efficacy* and *self-regulated learning* as a means of reducing academic procrastination.

METHOD

This study employs a quantitative approach with an *ex post facto* design, which aims to examine the causal relationship between variables without applying any treatment or manipulation to the research variables. This design was chosen because the variables of *self-efficacy*, *self-regulated learning*, and academic procrastination have naturally developed within the students. This study focuses on testing the influence of *self-efficacy* and *self-regulated learning* on academic procrastination among students at SMP Negeri 6 Makassar. The population in this study consists of all seventh-, eighth-, and ninth-grade students at SMP Negeri 6 Makassar. The sampling technique used was *saturation sampling*, in which all members of the population were included as the study sample. A total of 104 students participated in this study, so the data obtained are expected to comprehensively represent the population.

The variables in this study consist of two independent variables—*self-efficacy* and *self-regulated learning*—and one dependent variable—academic procrastination. *Self-efficacy* is defined as students' belief in their ability to complete academic tasks, while *self-regulated learning* refers to students' ability to independently plan, organize, monitor, and evaluate their learning process. Academic procrastination is defined as the intentional and repeated behavior of delaying the start or completion of academic tasks.

Data collection was conducted using a questionnaire as the primary research instrument, which was designed using a Likert scale with four response options. The questionnaire was used to measure students' levels of *self-efficacy*, *self-regulated learning*, and academic procrastination. In addition to the questionnaire, a limited number of interviews were conducted to obtain supporting data regarding academic procrastination behavior, and documentation was used to supplement information on school conditions and the number of respondents.

The research instruments were developed based on the indicators of each variable.

The *self-efficacy* instrument covers the dimensions of level, strength, and generalization. The *self-regulated learning* instrument covers the aspects of metacognition, motivation, and behavior, while the academic procrastination instrument includes indicators of delaying the start and completion of tasks, tardiness in completing assignments, the gap

between plans and actual performance, and the tendency to engage in more enjoyable activities. Before being used in the main study, the instruments were tested for validity and reliability. Validity was tested using the *Pearson Product Moment* correlation, while reliability was assessed using *Cronbach's Alpha*. The collected data were analyzed using statistical software. Data analysis began with tests of classical assumptions, including tests of normality, multicollinearity, and heteroscedasticity, to ensure the suitability of the regression model. Next, multiple regression analysis was used to determine the effects of *self-efficacy* and *self-regulated learning* on students' academic procrastination. Hypothesis testing was conducted through partial and simultaneous tests with a significance level of 0.05

RESULT AND DISCUSSION

The descriptive analysis revealed that the majority of students at SMP Negeri 6 Makassar demonstrated moderate (51.0%) and high (49.0%) levels of self-efficacy. These findings indicate that most students possess relatively strong confidence in their ability to successfully complete academic tasks and overcome learning challenges. Self-efficacy is recognized as one of the most influential psychological constructs affecting students' academic motivation, persistence, and performance. According to Bandura (1997), self-efficacy refers to individuals' beliefs about their capabilities to organize and execute the courses of action required to attain designated performances. Students who possess strong self-efficacy generally perceive academic challenges as opportunities for growth rather than threats to be avoided. Consequently, they are more likely to demonstrate perseverance, resilience, and sustained effort when encountering difficult learning situations.

The relatively high level of self-efficacy observed in this study may reflect students' previous mastery experiences, supportive interactions with teachers and peers, and successful adaptation to the academic environment. Bandura (1997) emphasizes that mastery experiences constitute the strongest source of self-efficacy because repeated success strengthens beliefs in one's capabilities, whereas repeated failure tends to weaken confidence. In addition, verbal encouragement from teachers and parents, observational learning through successful peers, and positive emotional states also contribute significantly to the development of self-efficacy.

These findings are consistent with previous empirical studies demonstrating that students with higher self-efficacy exhibit greater academic motivation, stronger persistence, and better learning outcomes. Schunk and DiBenedetto (2020) argued that self-efficacy influences students' willingness to initiate learning activities, sustain effort during challenging tasks, and recover from setbacks. Similarly, Usher and Pajares (2008) found that students with stronger efficacy beliefs are more likely to employ adaptive learning strategies and demonstrate greater confidence in solving academic problems.

The descriptive findings also indicate that 60.6% of students demonstrated high levels of self-regulated learning, suggesting that most participants were capable of independently

managing their learning processes. Self-regulated learning refers to learners' active participation in planning, monitoring, controlling, and evaluating their cognition, motivation, and behavior in order to achieve academic goals (Zimmerman, 2000). Students possessing effective self-regulated learning skills typically establish clear learning objectives, organize study schedules efficiently, monitor their academic progress continuously, and adjust learning strategies whenever necessary.

Zimmerman (2008) conceptualizes self-regulated learning as a cyclical process consisting of three interconnected phases: the forethought phase, the performance phase, and the self-reflection phase. During the forethought phase, students analyze learning tasks, establish academic goals, and develop strategic plans. In the performance phase, learners implement these strategies while continuously monitoring their concentration, motivation, and progress. Finally, during self-reflection, students evaluate learning outcomes, identify strengths and weaknesses, and make necessary adjustments for future learning activities.

The high proportion of students exhibiting strong self-regulated learning suggests that many students at SMP Negeri 6 Makassar have developed independent learning habits that enable them to manage academic responsibilities effectively. Such competencies are increasingly important within contemporary educational environments that emphasize student-centered learning, lifelong learning, and autonomous knowledge acquisition.

Previous research strongly supports the present findings. Panadero (2017) concluded that self-regulated learning significantly enhances students' academic achievement by improving planning, self-monitoring, and metacognitive awareness. Likewise, Dent and Koenka (2016) demonstrated through a meta-analysis that self-regulated learning consistently predicts academic performance across different educational levels and subject areas. Students who effectively regulate their learning generally experience greater academic success because they can allocate learning resources strategically and maintain motivation despite obstacles.

The descriptive analysis further revealed that 51.0% of students demonstrated low levels of academic procrastination, while 47.1% exhibited moderate levels, and only 1.9% showed high levels of procrastination. These findings indicate that although procrastination remains present among students, it has not yet reached an alarming level within the study population. Nevertheless, the existence of moderate and high procrastination behaviors suggests that delaying academic tasks continues to represent an important educational concern requiring preventive intervention.

Academic procrastination refers to the intentional delay of academic tasks despite awareness that such delays will likely produce negative consequences (Steel, 2007). Students frequently postpone completing assignments, preparing for examinations, writing reports, or engaging in other academic responsibilities even when they recognize the importance of completing these tasks on time. Such behaviors often result in increased

stress, reduced academic performance, diminished psychological well-being, and lower overall academic satisfaction.

According to Steel (2007), procrastination originates from the interaction between motivational deficits, impulsivity, low expectancy for success, and delayed rewards. Students frequently delay academic tasks because immediate leisure activities provide stronger short-term gratification than long-term academic achievements. Consequently, inadequate self-control and ineffective emotion regulation often become primary antecedents of procrastination behavior.

Similarly, Ferrari, Johnson, and McCown (1995) argue that procrastination should not merely be interpreted as poor time management but rather as a complex self-regulation failure involving cognitive, emotional, motivational, and behavioral components. Students who procrastinate often experience anxiety, fear of failure, perfectionism, and low confidence, which subsequently reinforce avoidance behaviors and create a cycle of delayed task completion.

The relatively low prevalence of severe procrastination in the present study may indicate that many students have already developed adaptive learning behaviors through supportive educational environments and effective instructional practices. Teachers who provide structured learning experiences, regular feedback, and consistent monitoring may contribute substantially to reducing procrastination tendencies. Likewise, parental supervision and positive peer influence may encourage students to maintain responsible academic habits.

From a developmental perspective, adolescence represents a critical period during which executive functioning, self-control, and autonomous learning skills continue to mature. Consequently, interventions targeting self-regulation and self-efficacy during junior secondary education are particularly important because they establish psychological competencies that influence future academic and professional success.

Collectively, these descriptive findings suggest that students at SMP Negeri 6 Makassar generally possess favorable psychological characteristics associated with adaptive learning. The coexistence of relatively high self-efficacy, strong self-regulated learning, and relatively low academic procrastination provides an encouraging foundation for further strengthening students' academic resilience and independent learning competencies. Nevertheless, the presence of students demonstrating moderate and high procrastination emphasizes the need for comprehensive guidance and counseling programs that focus on enhancing students' confidence, self-management skills, and adaptive learning behaviors.

The descriptive results also provide an important foundation for interpreting the subsequent regression analyses. Because self-efficacy and self-regulated learning are already relatively well developed among the participants, it is theoretically reasonable that both variables emerged as significant predictors of academic procrastination. These findings support contemporary theories of academic motivation and self-regulation,

suggesting that students who believe in their capabilities and actively regulate their learning are considerably less likely to postpone academic responsibilities. Consequently, strengthening both psychological constructs should become a central objective of school counseling services aimed at preventing academic procrastination and promoting students' long-term academic success.

The Influence of Self-Efficacy on Academic Procrastination

The regression analysis demonstrated that self-efficacy has a significant negative effect on academic procrastination among students at SMP Negeri 6 Makassar. This finding indicates that students with stronger confidence in their academic abilities are substantially less likely to postpone completing assignments, studying for examinations, or fulfilling other academic responsibilities. Conversely, students with lower levels of self-efficacy tend to avoid challenging tasks because they doubt their capability to complete them successfully. Therefore, self-efficacy functions as an important protective psychological factor against procrastination behavior.

These findings strongly support Bandura's Social Cognitive Theory, which posits that self-efficacy is one of the primary determinants of human behavior because it influences individuals' cognitive processes, motivation, emotional responses, and behavioral choices (Bandura, 1997). Individuals possessing high self-efficacy believe they can successfully accomplish difficult tasks despite obstacles, whereas those with low efficacy beliefs tend to perceive identical challenges as overwhelming or threatening. Consequently, students with stronger efficacy beliefs approach academic demands with confidence and persistence rather than avoidance.

Bandura (1997) further explains that self-efficacy influences behavior through several psychological mechanisms. First, efficacy beliefs affect cognitive processes by shaping how individuals perceive and evaluate challenges. Students with high self-efficacy interpret difficult assignments as opportunities to develop competence rather than as indications of possible failure. Second, self-efficacy enhances motivational processes, enabling students to establish ambitious academic goals and remain committed despite setbacks. Third, efficacy beliefs regulate emotional reactions, reducing anxiety, fear of failure, and academic stress. Finally, self-efficacy determines behavioral choices, encouraging students to engage actively in learning activities rather than avoiding demanding academic tasks.

The present findings also support the Temporal Motivation Theory (TMT) proposed by Steel (2007), which identifies low expectancy for success as one of the strongest predictors of procrastination. According to TMT, procrastination increases when individuals perceive a low probability of successfully completing a task. Students who lack confidence in their abilities often postpone assignments because delaying temporarily reduces feelings of anxiety and anticipated failure. Although procrastination may provide short-term emotional relief, it ultimately increases academic stress and

reduces performance. Therefore, strengthening students' confidence can substantially reduce procrastination tendencies by increasing expectancy for success.

Similarly, Ferrari et al. (1995) argue that procrastination should be understood as a form of self-defeating behavior rather than simple laziness or poor time management. Students frequently procrastinate because they fear negative evaluation, perfectionistic expectations, or possible failure. Individuals with high self-efficacy generally experience lower levels of such anxiety because they trust their capability to overcome difficulties through sustained effort. Consequently, they demonstrate greater willingness to initiate academic tasks immediately instead of postponing them.

The findings are also consistent with numerous international empirical studies. Klassen et al. (2008) reported that self-efficacy significantly predicts lower academic procrastination among secondary school students because confident learners exhibit stronger persistence and academic responsibility. Likewise, Honicke and Broadbent (2016) concluded through a meta-analysis that academic self-efficacy consistently predicts higher academic achievement and lower avoidance behavior across diverse educational contexts.

Recent research continues to reinforce these relationships. Fong et al. (2023) found that students with stronger efficacy beliefs demonstrated greater academic resilience and significantly lower procrastination during online learning environments. Similarly, Grunschel et al. (2022) reported that self-efficacy enhances students' willingness to regulate learning activities proactively, thereby minimizing task delays and improving academic adjustment.

From an educational perspective, these findings imply that strengthening students' self-efficacy should become a major objective of school counseling programs. Guidance and counseling services may enhance self-efficacy through mastery experiences, peer modeling, constructive verbal encouragement, reflective learning activities, and emotional regulation training. Bandura (1997) identified these four sources—mastery experiences, vicarious experiences, verbal persuasion, and physiological regulation—as the principal mechanisms through which efficacy beliefs develop. Consequently, counselors and teachers should intentionally design learning environments that provide repeated opportunities for students to experience success, observe competent peers, receive positive feedback, and manage academic stress effectively.

The Influence of Self-Regulated Learning on Academic Procrastination

The regression analysis further revealed that self-regulated learning has a significant negative effect on academic procrastination. Students possessing stronger self-regulation skills demonstrated considerably lower tendencies to postpone academic tasks. This finding indicates that the ability to independently manage learning activities constitutes another essential psychological resource for preventing procrastination.

Self-regulated learning represents a comprehensive process in which learners actively control their cognition, motivation, emotions, and behaviors to achieve academic objectives (Zimmerman, 2000). Unlike passive learners, self-regulated students continuously monitor their learning progress, evaluate strategy effectiveness, and modify behaviors whenever necessary. Such adaptive learning behaviors naturally reduce opportunities for procrastination because students consistently maintain focus on long-term academic goals.

Zimmerman (2008) conceptualizes self-regulated learning as consisting of forethought, performance, and self-reflection phases. During the forethought phase, students establish realistic learning goals and strategic plans before beginning academic tasks. In the performance phase, they monitor concentration, motivation, and progress while implementing appropriate learning strategies. Finally, during self-reflection, they evaluate outcomes and identify improvements for future learning. Students who successfully complete these cyclical processes rarely procrastinate because they continuously regulate their learning activities before problems become overwhelming.

The present findings are also consistent with Pintrich's (2004) model of self-regulated learning, which emphasizes that effective learners actively regulate four domains: cognition, motivation, behavior, and learning context. Students possessing strong self-regulation not only understand academic material more effectively but also maintain consistent motivation despite distractions, thereby minimizing procrastination.

Recent empirical evidence strongly supports these conclusions. Panadero (2017) reviewed decades of research and concluded that self-regulated learning significantly improves academic performance while reducing maladaptive learning behaviors, including procrastination. Similarly, Dent and Koenka (2016) demonstrated through meta-analysis that self-regulated learning consistently predicts academic success because students become more organized, disciplined, and autonomous learners.

Furthermore, Wolters and Won (2017) argued that procrastination fundamentally represents a failure of self-regulation. Students delay academic work primarily because they struggle to regulate motivation, emotions, attention, and behavior over time. Consequently, interventions focusing on strengthening self-regulated learning directly address one of the principal psychological mechanisms underlying procrastination.

Recent studies continue to support this theoretical perspective. Ran et al. (2022) reported that self-regulated learning significantly reduces academic procrastination among adolescents by enhancing planning ability, self-monitoring, and persistence. Likewise, Ziegler and Opdenakker (2021) found that students demonstrating higher self-regulation skills showed greater academic engagement, stronger intrinsic motivation, and lower procrastination tendencies.

Within the context of junior secondary education, self-regulated learning becomes increasingly important because adolescents gradually transition from teacher-directed instruction toward greater learning autonomy. Students who fail to develop effective self-

regulation skills often experience difficulties managing academic demands independently, increasing their vulnerability to procrastination and declining academic performance.

The findings therefore suggest that school counselors should integrate self-regulated learning interventions into comprehensive guidance programs. Such interventions may include goal-setting workshops, time-management training, metacognitive strategy instruction, self-monitoring techniques, reflective journals, and digital learning planners. These approaches enable students to develop adaptive learning habits that not only reduce procrastination but also enhance lifelong learning competencies.

Overall, the results indicate that self-efficacy and self-regulated learning function as complementary psychological resources. Self-efficacy provides the confidence necessary to initiate academic activities, whereas self-regulated learning supplies the behavioral and cognitive strategies required to sustain task completion. Together, these constructs establish a robust psychological foundation that enables students to confront academic challenges proactively rather than avoiding them through procrastination. This complementary relationship provides the theoretical basis for the subsequent discussion concerning the simultaneous contribution of both variables to academic procrastination and their implications for comprehensive school guidance and counseling programs.

CONCLUSION

Based on the research findings, it can be concluded that *self-efficacy* and *self-regulated learning* have a significant influence on academic procrastination among students at Makassar Public Junior High School No. 6. Students' levels of *self-efficacy* and *self-regulated learning* generally fall into the moderate-to-high range, while academic procrastination falls into the low-to-moderate range. The analysis results show that *self-efficacy* has a significant negative effect on academic procrastination, as does *self-regulated learning*, which also demonstrates a significant negative effect. Collectively, these two variables contribute to reducing students' tendency toward academic procrastination. These findings confirm that enhancing self-efficacy and self-regulated learning abilities are crucial factors in minimizing academic procrastination and supporting students' academic success.

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