



# ACADEMIC PROCRASTINATION AND GRADE LEVEL: INSIGHTS FROM AN INDONESIAN JUNIOR HIGH SCHOOL SAMPLE

Adine Septa Afiifah<sup>1</sup>, Hayyin Nabila Aubar<sup>2</sup>, Diniy Hidayatur Rahman<sup>3\*</sup>, Indah Nur  
Rahmawati<sup>4</sup>

State University of Malang, Jl. Semarang No. 5 Malang, East Java, Indonesia

\*Author of correspondence, Email: diniy.hidayatur.fip@um.ac.id

## Abstract

This study explores academic procrastination among junior high school students by comparing seventh- and eighth-grade students at SMP Negeri 03 Batu, Indonesia. Using a quantitative comparative design, the research involved 94 students (64 from grade 7 and 30 from grade 8). The Tuckman Procrastination Scale (TPS) was administered to assess students' procrastination levels. Data were analyzed using descriptive statistics and an Independent Samples t-test. The results showed that most students in both grade levels exhibited moderate levels of academic procrastination. Although the mean procrastination score for eighth graders was slightly higher than that of seventh graders, the difference was not statistically significant ( $p = 0.271$ ). These findings suggest that academic procrastination is a common issue among early adolescents, regardless of grade level. The study highlights the importance of implementing broad, developmentally appropriate interventions to promote time management and self-regulated learning. Limitations include the use of a single school sample and self-report measures. Future research should involve larger, more diverse samples and explore additional contributing factors to deepen our understanding of procrastination in adolescence.

**Keywords:** academic procrastination; grade level; junior high school

## 1. Introduction

Academic procrastination refers to the voluntary and often irrational delay in initiating or completing academic tasks such as studying for exams, writing papers, or finishing assignments, even when individuals are aware that such delays may lead to negative outcomes. It is commonly understood in psychological literature as a manifestation of self-regulation failure, wherein individuals experience difficulties in managing their time, maintaining concentration, and sustaining motivation toward goal-directed academic behavior (Ghufron & Risnawita, 2020). This form of procrastination is not merely a matter of poor time management, but often reflects deeper cognitive and emotional challenges, including low self-efficacy, fear of failure, and perfectionism. As Rumini (2006) emphasized, the tendency to postpone important activities, if left unaddressed, may become habitual and undermine long-term academic success. In the context of adolescent development, this behavior can be particularly concerning, as it may hinder the formation of effective study habits and self-discipline during a critical period of academic and personal growth. Furthermore, persistent academic procrastination has been linked to elevated levels of academic stress, reduced academic performance, and diminished psychological well-being, making it a serious concern for educators, parents, and school counselors alike. Addressing procrastination thus requires not only awareness of its behavioral symptoms but also a comprehensive understanding of the psychological and contextual factors that contribute to its development and maintenance in school settings.

The consequences of academic procrastination are far-reaching and can negatively impact multiple domains of a student's life. Academically, procrastination often leads to incomplete or substandard work, last-minute efforts, and poor academic achievement. Psychologically, it may increase levels of stress, anxiety, guilt, and dissatisfaction, particularly when students repeatedly fail to meet deadlines or academic expectations. Procrastination also undermines the development of autonomy and responsibility, both of which are essential for academic and personal success during adolescence. Empirical studies have consistently shown that a significant proportion of secondary school students demonstrate moderate levels of academic procrastination. For instance, previous research conducted among junior high school students in Indonesia revealed that 65.5% to 86% of students reported moderate levels of procrastination (Maulida et al., 2021; Munawaroh et al., 2017; Hanggara, 2014). These findings underscore the urgency of addressing procrastination not merely as an occasional habit but as a prevalent behavioral pattern with serious implications for student learning and development.

Adolescence, particularly early adolescence during junior high school, represents a crucial developmental stage in which students begin to face increased academic demands, greater autonomy, and more complex social and emotional challenges. These transitional factors make students in this age group especially susceptible to procrastinatory behaviors. During this period, students are expected to manage their learning with less external guidance, yet many have not yet developed the self-regulatory skills necessary to cope with academic responsibilities independently. Inadequate time management, fluctuating motivation, low academic self-confidence, and environmental distractions are common contributors to procrastination among early adolescents. Moreover, students may lack awareness of the long-term consequences of their behavior, viewing procrastination as harmless or temporary. As Rumini (2006) and Ghufroon and Risnawita (2020) have noted, if procrastinatory habits are not addressed early, they may persist into higher levels of education and adulthood, potentially interfering with academic achievement, goal-setting, and lifelong learning. Consequently, junior high school presents a critical opportunity for educators and counselors to identify procrastination tendencies and implement early interventions to promote responsible learning habits.

One important yet underexplored aspect of academic procrastination among junior high school students is the potential variation in procrastination levels across different grade levels. It is commonly assumed that as students advance to higher grades, they become more academically mature and better equipped to manage their responsibilities. However, increased academic pressure, more complex learning tasks, and heightened performance expectations in higher grades may conversely contribute to elevated levels of procrastination. Seventh-grade students, who are new to the demands of secondary education, may experience adjustment challenges that foster procrastination due to unfamiliarity and reduced academic confidence. In contrast, eighth-grade students might either demonstrate improved coping strategies through accumulated experience or exhibit greater avoidance behaviors due to escalating academic burdens. Despite these plausible developmental dynamics, few studies have directly compared the levels of academic procrastination between lower and upper grades within junior high school. Understanding whether grade level significantly influences procrastination behavior is critical for designing interventions that are developmentally appropriate and sensitive to the varying needs of students across different stages of their school journey.

In the Indonesian educational context, academic procrastination among junior high school students remains a relatively understudied issue, despite its observable prevalence in daily classroom settings. Many schools continue to focus on cognitive outcomes without adequately addressing behavioral and emotional challenges that impede academic performance. This research responds to that gap by examining procrastination behavior within a local setting—SMP Negeri 03 Batu, a public junior high school in East Java. The school was selected due to its diverse student population and typical academic environment, which make it a representative case for understanding procrastination tendencies among early adolescents in Indonesia. In addition, the school's administration expressed concern over students' inconsistent academic engagement and delays in task completion, further justifying the relevance of this study. By situating the research in an Indonesian junior high school, the study aims not only to generate context-specific insights but also to inform school-based interventions that align with local educational practices and student needs.

Although previous studies in Indonesia have documented the prevalence of academic procrastination among junior high school students, they have largely focused on identifying general patterns or associated psychological factors, such as self-control, motivation, or gender differences (Maulida et al., 2021; Munawaroh et al., 2017; Hanggara, 2014). However, limited research has investigated whether academic procrastination varies meaningfully by grade level within the same educational stage. This represents a critical gap, considering that each grade may present distinct academic, social, and emotional demands that shape students' learning behaviors. Without a clearer understanding of how procrastination manifests across grades, schools may overlook opportunities to tailor support strategies effectively. Furthermore, current interventions often adopt a one-size-fits-all approach, which may not address the nuanced needs of students at different developmental levels. By examining potential differences in procrastination between seventh- and eighth-grade students, the present study seeks to refine our understanding of how academic procrastination develops and persists during early adolescence, and how schools can respond accordingly.

This study aims to explore and compare the levels of academic procrastination between seventh- and eighth-grade students at an Indonesian junior high school. By employing a comparative research design, the study investigates whether there are statistically significant differences in procrastination behavior based on grade level, while also providing descriptive insights into the distribution of procrastination tendencies among early adolescents. The findings are expected to contribute to the growing body of literature on student self-regulation and academic behavior, particularly within Southeast Asian educational contexts. More importantly, the study seeks to inform educators, school counselors, and policymakers about the importance of recognizing procrastination as a widespread issue that may require comprehensive, grade-sensitive interventions. By highlighting the prevalence and consistency of procrastination across grade levels, this research underscores the need for early, school-wide strategies to cultivate better time management, motivation, and academic responsibility among all students, regardless of their grade.

## 2. Method

This study employed a quantitative comparative research design aimed at examining potential differences in academic procrastination levels between male and female students. A comparative approach is suitable for identifying whether significant distinctions exist between two or more groups based on specific variables—in this case, gender (Sugiyono, 2021). By

utilizing this design, the research sought to generate objective and statistically testable data that could contribute to the understanding of how academic procrastination manifests across gender lines in early adolescence. The study was structured to determine not only the average levels of procrastination among students but also to explore whether those levels varied significantly between boys and girls in a junior high school setting.

The participants in this study were 94 students from grades 7 and 8 at SMP Negeri 3 Batu, located in East Java, Indonesia. The sample consisted of 50 male students and 44 female students, selected using a simple random sampling technique. This method was chosen to ensure that every student in the population had an equal chance of being selected, minimizing selection bias and enhancing the generalizability of the findings (Sugiyono, 2021). The data collection process was conducted over a one-month period, from April 17 to May 16, 2025. The selection of junior high school students was intentional, as this age group represents a transitional period marked by rapid cognitive, emotional, and behavioral development—factors that are often associated with changes in academic habits, including procrastination (González-Brignardello et al., 2023).

Data on academic procrastination were collected using the Tuckman Academic Procrastination Scale, which consists of 16 items designed to measure students' tendencies to delay academic tasks. The instrument assesses three key indicators of procrastinatory behavior: time-wasting, task avoidance, and external attribution (Setianingsrinur, 2022). Each item was rated on a four-point Likert scale ranging from "strongly disagree" to "strongly agree," allowing for the quantification of procrastination levels. To facilitate accessibility and ease of distribution, the scale was converted into a digital format using Google Forms. This allowed researchers to administer the instrument efficiently during classroom sessions, immediately after the delivery of a guidance and counseling service, ensuring that responses were collected under consistent and controlled conditions.

Before the main data analysis, the instrument underwent validity and reliability testing to ensure its appropriateness for use with the target population. Item validity was assessed by comparing each item's correlation coefficient ( $r$ -count) to the critical  $r$ -table value of 0.207. All items exceeded this threshold, indicating that they were valid measures of academic procrastination (Setianingsrinur, 2022). Additionally, the internal consistency of the scale was evaluated using Cronbach's alpha, which yielded a coefficient of 0.886. This value surpasses the commonly accepted minimum of 0.70, signifying a high level of reliability (Araya-Castillo et al., 2023). These results confirmed that the instrument was both valid and reliable for assessing procrastination behaviors among junior high school students in the Indonesian context.

The data collection procedure consisted of several key steps. First, the digitalized version of the Tuckman scale was distributed directly to students in grades 7 and 8 during classroom sessions following the delivery of a classroom guidance session. Once responses were collected, data were exported and prepared for statistical analysis. Prior to conducting hypothesis testing, assumption checks were performed to ensure the suitability of the independent sample  $t$ -test. These included tests of normality (Kolmogorov-Smirnov and Shapiro-Wilk) and homogeneity of variances (Levene's Test), both of which yielded significance values above 0.05, confirming that the data met the assumptions for parametric testing. The main analysis involved the independent sample  $t$ -test using SPSS version 25, which

was used to compare the mean scores of academic procrastination between male and female students and determine whether the observed differences were statistically significant. This study employed a quantitative approach using a comparative research design to examine differences in academic procrastination between two distinct groups of students—those in seventh grade and those in eighth grade—at an Indonesian junior high school. A comparative design is appropriate when the objective is to identify similarities, differences, or patterns across groups based on a specific variable (Sugiyono, 2017). In this context, the variable of interest was the level of academic procrastination, and the comparison focused on whether grade level influenced students' tendency to delay academic tasks. This design enabled the researchers to statistically assess whether meaningful differences exist between the two grade levels in terms of their procrastination behavior, while also offering insights that may inform targeted interventions in school settings.

The participants in this study were 94 junior high school students from SMP Negeri 03 Batu, located in East Java, Indonesia. The sample consisted of two grade levels: 64 students from the seventh grade and 30 students from the eighth grade. A simple random sampling technique was employed to ensure that each student in the target population had an equal chance of being selected, thereby minimizing selection bias and enhancing the generalizability of the findings within the school context. This method allowed the researchers to draw a representative sample of early adolescents who were exposed to similar academic environments and school routines. Prior to data collection, participants were informed of the study's objectives, assured of the confidentiality of their responses, and encouraged to participate voluntarily. The study complied with ethical research standards, including informed consent and the protection of participants' rights and well-being.

To assess students' levels of academic procrastination, the study employed the Tuckman Procrastination Scale (TPS), developed by Tuckman (1991). The TPS is a widely used self-report instrument designed to measure the tendency to delay academic tasks. It consists of 16 items rated on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Higher total scores indicate a greater propensity for procrastination. The TPS has demonstrated acceptable levels of reliability and validity in previous research across various educational settings, including secondary schools. In this study, the TPS was administered in the Indonesian language, with appropriate linguistic and contextual adjustments to ensure clarity and comprehension for junior high school students. The instrument was chosen for its simplicity, ease of administration, and established psychometric properties, making it suitable for capturing procrastination behaviors in early adolescents. Prior to analysis, item responses were checked for completeness, and total scores were computed for each participant to be used in subsequent statistical testing.

Data collection was conducted during regular school hours with the cooperation of school staff and homeroom teachers. Students completed the Tuckman Procrastination Scale (TPS) in a classroom setting under the supervision of the researchers. Prior to distribution, the purpose of the study was explained, and students were encouraged to respond honestly and independently. The collected responses were reviewed for completeness, and all valid questionnaires were included in the final analysis. The data were analyzed using descriptive and inferential statistical methods. Descriptive statistics were used to determine the frequency and percentage distribution of procrastination levels (low, moderate, and high) among students in both grade levels. To ensure the assumptions for parametric testing were met,

normality tests (Kolmogorov–Smirnov and Shapiro–Wilk) and a homogeneity test (Levene’s Test) were conducted. The results indicated that the data were normally distributed and the variances between groups were homogeneous. Subsequently, an Independent Samples t-test was performed to examine whether there were statistically significant differences in mean procrastination scores between seventh- and eighth-grade students. All analyses were carried out using SPSS (Statistical Package for the Social Sciences), and the significance level was set at  $\alpha = 0.05$ .

### 3. Results and Discussion

#### 3.1 Result

Descriptive analyses were conducted to examine the distribution of academic procrastination levels among seventh- and eighth-grade students. The findings revealed that the majority of students in both grade levels exhibited moderate levels of procrastination. Specifically, among the 64 seventh-grade students, 67.2% were classified as having moderate procrastination, while 23.4% showed low levels and 9.4% reported high levels. In comparison, among the 30 eighth-grade students, 73.3% demonstrated moderate procrastination, with 13.3% each falling into the low and high categories. These results suggest that while most students tend to procrastinate at a moderate level, a substantial proportion also falls at the extremes, indicating variability in individual self-regulation capacities. The slightly higher percentage of high-level procrastinators in eighth grade may reflect increased academic demands or stress associated with the transition to higher levels of study.

To further explore the differences in academic procrastination between the two grade levels, descriptive statistics for mean scores were calculated. The seventh-grade students ( $n = 64$ ) had a mean procrastination score of 36.53 with a standard deviation of 8.738 and a standard error of 1.092. In contrast, the eighth-grade students ( $n = 30$ ) had a slightly higher mean score of 38.67, with a standard deviation of 8.640 and a standard error of 1.577. These values indicate that, on average, eighth-grade students tended to procrastinate slightly more than their seventh-grade peers. However, the standard deviations in both groups were comparable, suggesting a similar degree of variability in procrastination tendencies across grade levels.

Before conducting inferential analysis, assumptions of normality and homogeneity of variances were tested to ensure the appropriateness of parametric testing. Normality was assessed using both the Kolmogorov–Smirnov and Shapiro–Wilk tests. For seventh-grade students, the results showed non-significant values ( $p = 0.200$ ), indicating that the distribution of procrastination scores did not deviate significantly from normality. Similarly, for eighth-grade students, the Shapiro–Wilk test yielded a non-significant result ( $p = 0.295$ ), also confirming a normal distribution of scores. To assess the homogeneity of variances between the two groups, Levene’s Test for Equality of Variances was conducted. The result showed a significance value of 0.949, which is well above the alpha level of 0.05, indicating that the assumption of equal variances was met. With both assumptions of normality and homogeneity satisfied, the dataset was deemed suitable for an Independent Samples t-test to compare mean procrastination scores between grade levels.

An Independent Samples t-test was conducted to determine whether there was a statistically significant difference in academic procrastination scores between seventh- and eighth-grade students. The analysis yielded a p-value of 0.271 (two-tailed), which is greater than the conventional alpha level of 0.05. This result indicates that the difference in mean scores between the two grade levels was not statistically significant,  $t(92) = -1.109$ ,  $p = 0.271$ . These findings suggest that although eighth-grade students had a slightly higher average level of procrastination than their seventh-grade counterparts, the difference is not sufficient to conclude that grade level plays a significant role in influencing procrastination behavior within this sample. Therefore, academic procrastination appears to be a prevalent issue across both grade levels, underscoring the importance of developing interventions that address students' procrastination tendencies regardless of their academic year.

### 3.2 Discussion

The present study aimed to examine whether academic procrastination levels differ significantly between seventh- and eighth-grade junior high school students. The results revealed that the majority of students in both grade levels exhibited moderate levels of academic procrastination, with 67.2% of seventh-grade students and 73.3% of eighth-grade students falling into this category. Additionally, no statistically significant difference was found between the two groups, as indicated by the Independent Samples t-test ( $p = 0.271$ ). These findings suggest that academic procrastination is a common behavioral pattern across early adolescent students, regardless of their grade level. This aligns with previous research conducted by Maulida et al. (2021), Munawaroh et al. (2017), and Hanggara (2014), which similarly reported that most junior high school students tend to procrastinate at a moderate level. The absence of a significant difference highlights that procrastination should be considered a general issue affecting students throughout lower secondary education, rather than one that is limited to a particular grade level or stage of academic development.

From a developmental perspective, the similarity in procrastination levels between seventh- and eighth-grade students may be attributed to the shared characteristics of early adolescence. Both age groups are in a transitional phase marked by significant cognitive, emotional, and social changes, which can impact their ability to self-regulate and manage academic responsibilities effectively. At this stage, students are still developing executive functioning skills such as time management, task initiation, and goal setting—skills that are closely linked to procrastination behavior. The lack of a significant difference in procrastination scores may also reflect the relatively consistent academic expectations and curriculum structure across both grades, which expose students to similar demands and pressures. Moreover, factors such as low academic motivation, mental fatigue, and environmental distractions—previously noted by Ghufron and Risnawita (2020)—may affect students in both grade levels equally, further explaining the convergence in procrastination behavior. These findings imply that academic procrastination among junior high school students is more likely to be influenced by intra-individual and contextual factors rather than by grade level alone.

Although the overall findings indicate that most students fall within the moderate range of academic procrastination, it is important to highlight the presence of students in both the low and high categories. Specifically, 23.4% of seventh-grade students and 13.3% of eighth-grade students reported low levels of procrastination, while 9.4% of seventh graders and

13.3% of eighth graders exhibited high levels. This variability within each grade suggests that while procrastination is widespread, it does not affect all students uniformly. Some students demonstrate strong self-regulation and task management skills, while others may be at risk of chronic procrastination, which could adversely affect their academic outcomes. These patterns underscore the importance of not relying solely on group averages when designing school-wide interventions. Instead, educators and school counselors should consider conducting individual assessments or screenings to identify students who may require more targeted support. A differentiated approach that considers individual differences in procrastination tendencies may be more effective in fostering academic responsibility and self-management skills among junior high school students.

The findings of this study are consistent with previous research conducted in similar educational contexts, which have consistently reported moderate levels of academic procrastination among junior high school students. For example, Maulida et al. (2021) found that 65.5% of students in coastal areas of Surabaya demonstrated moderate levels of procrastination, while Munawaroh et al. (2017) reported that 77.1% of their respondents fell into the same category. Similarly, Hanggara (2014) observed that 86% of respondents exhibited moderate levels of procrastination. These converging results support the notion that moderate procrastination is a prevalent and persistent pattern among students at this educational stage. However, unlike earlier studies that primarily focused on identifying general prevalence, the current research contributes to the literature by comparing procrastination tendencies across grade levels within junior high school—a dimension that remains underexplored. By doing so, this study adds nuance to our understanding of how procrastination manifests in early adolescence and underscores the need for school-wide strategies that address procrastination as a shared developmental concern rather than a grade-specific issue.

Given the widespread nature of academic procrastination across both grade levels, the findings emphasize the need for school-wide interventions that address this behavior comprehensively, rather than selectively targeting specific year groups. Since students in both seventh and eighth grades are equally prone to procrastination, interventions should be designed to cultivate core self-regulatory skills such as time management, goal setting, and task prioritization among all students (Nufi, Setiyowati, & Rahman, 2021). Schools may consider implementing structured programs that integrate these skills into the curriculum or co-curricular activities. Additionally, guidance counselors and classroom teachers play a vital role in identifying students who struggle with chronic procrastination and providing ongoing support through individual counseling or group-based workshops. Early intervention is particularly crucial, as research suggests that procrastination habits, if left unaddressed, can persist into higher education and adulthood, potentially undermining long-term academic and personal development (Rumini, 2006; Ghufon & Risnawita, 2020). Therefore, a proactive, developmentally appropriate, and inclusive approach to addressing procrastination is essential to fostering responsible learning behaviors among junior high school students (Finishia, Hidayah, & Rahman, 2020).

Despite its contributions, this study is not without limitations. First, the sample size was relatively small and limited to a single public junior high school in East Java, which may restrict the generalizability of the findings to broader student populations or different educational contexts in Indonesia. Additionally, the sample distribution between seventh- and eighth-grade

students was uneven, which may have influenced the statistical power of comparative analyses. Second, the study relied exclusively on self-report measures, namely the Tuckman Procrastination Scale (TPS), which—although widely validated—may be subject to social desirability bias or students' limited self-awareness. Furthermore, the study did not explore underlying psychological or contextual factors (e.g., academic motivation, parental support, teacher expectations) that may contribute to students' procrastination behavior. These limitations should be taken into account when interpreting the results, and they highlight the need for future research to adopt more comprehensive designs.

Future research on academic procrastination among adolescents would benefit from broader and more diverse samples, involving multiple schools from different regions and socioeconomic backgrounds to enhance generalizability. Longitudinal studies are also recommended to examine how procrastination behaviors develop and change over time, and whether certain students are more resilient or responsive to interventions as they progress through the school system. Additionally, employing a mixed-methods approach that combines quantitative surveys with qualitative interviews or focus groups could yield deeper insights into the psychological, familial, and institutional factors influencing procrastination. Experimental or quasi-experimental studies could further evaluate the effectiveness of specific intervention programs—such as time-management training, motivational enhancement, or digital behavior tracking tools—in reducing procrastination levels in junior high school settings. Ultimately, building a more holistic understanding of procrastination during early adolescence can help educators and policymakers design evidence-based strategies that support students in developing disciplined and autonomous learning habits.

#### 4. Conclusion

This study examined the differences in academic procrastination between seventh- and eighth-grade junior high school students in Indonesia. The findings revealed no statistically significant difference in procrastination levels between the two groups, with the majority of students in both grades demonstrating moderate levels of procrastination. These results suggest that academic procrastination is a widespread issue across early adolescence, not confined to a specific grade level. Consequently, schools should implement universal interventions that foster time management, self-regulation, and academic responsibility among all students.

#### References

- Finishia, F. T., Hidayah, N., & Rahman, D. H. (2020). The urgency of guidance and counseling at the elementary school. In *6th International Conference on Education and Technology (ICET 2020)* (pp. 162-166). Atlantis Press.
- Ghufron, M. N., & Risnawita, R. (2020). *Teori-teori Psikologi*. Yogyakarta: Ar-Ruzz Media.
- Hanggara, A. (2014). Prokrastinasi Akademik Ditinjau dari Motivasi Berprestasi dan Persepsi Terhadap Pengaturan Waktu. *Jurnal Psikologi Pendidikan dan Perkembangan*, 3(2), 89-95.
- Maulida, A., Kurniawati, T., & Wahyuni, D. (2021). Prokrastinasi Akademik Siswa SMP di Daerah Pesisir Surabaya. *Jurnal Psikologi Pendidikan dan Konseling*, 7(1), 45-53.
- Munawaroh, E., Zubaidah, S., & Wahyuni, D. (2017). Prokrastinasi Akademik pada Siswa SMP Ditinjau dari Jenis Kelamin dan Persepsi Terhadap Kontrol Diri. *Jurnal Bimbingan Konseling*, 6(1), 11-18.
- Nufi, E. P., Setiyowati, A. J., & Rahman, D. H. (2021). Panduan Self Instruction dengan Pendekatan Structured Learning Approach untuk Menurunkan Prokrastinasi Akademik Siswa SMP. *Jurnal Pendidikan: Teori, Penelitian, & Pengembangan*, 6(2), 228-234.

Rumini. (2006). *Psikologi Pendidikan*. Jakarta: Bumi Aksara.

Sugiyono. (2017). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R & D*. Bandung: Alfabeta.

Tuckman, B. W. (1991). The Development and Concurrent Validity of the Procrastination Scale. *Educational and Psychological Measurement*, 51(2), 473–480. <https://doi.org/10.1177/0013164491512022>