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Comparing Academic Procrastination Between Two Parallel Senior High School Classes

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Abstract: Academic procrastination lowers academic achievement and is among the guidance needs most frequently reported in senior high school. At SMA Santa Familia Sikumana Kupang, the school counsellor and subject teachers judged grade X-1 students to hand in assignments late more often than grade X-2 students. This study examined whether that judgement is reflected in students' self-reported scores. A quantitative comparative design with total sampling was applied to all students of classes X-1 and X-2. Data from 58 students were collected with an Academic Procrastination Scale adapted from the Pure Procrastination Scale, which showed good internal consistency in this sample (α = .89), and analysed with an independent samples t-test. No significant difference emerged between the two classes, t(56) = −0.35, p = .730, Cohen's d = −0.09, with mean scores of 27.79 for X-1 and 28.59 for X-2. Most students fell into the low and moderate categories, and only four of 58 students fell into the high category. Scale scores therefore do not support the teachers' impression. For guidance and counselling services, these data provide no basis for weighting prevention differently across the two classes, while the late submissions teachers report need to be traced through assignment records.

Keywords: academic procrastination; senior high school students; guidance and counselling; self-report; teacher report

Abstrak: Prokrastinasi akademik menurunkan capaian belajar dan menjadi salah satu kebutuhan layanan yang sering muncul di jenjang SMA. Guru BK dan guru mata pelajaran di SMA Santa Familia Sikumana Kupang menilai siswa kelas X-1 lebih sering terlambat mengumpulkan tugas dibandingkan siswa kelas X-2. Penelitian ini menguji apakah penilaian tersebut tercermin pada skor laporan diri siswa. Pendekatan yang digunakan kuantitatif komparatif dengan teknik sampling jenuh pada seluruh siswa kelas X-1 dan X-2. Data dari 58 siswa dikumpulkan dengan Skala Prokrastinasi Akademik adaptasi dari Pure Procrastination Scale, yang menunjukkan konsistensi internal baik pada data ini (α = 0,89), lalu dianalisis dengan Independent Sample t-test. Hasilnya tidak menunjukkan perbedaan signifikan antara kedua kelas, t(56) = −0,35; p = 0,730; Cohen's d = −0,09, dengan rata-rata 27,79 pada X-1 dan 28,59 pada X-2. Sebagian besar siswa berada pada kategori rendah dan sedang, dan hanya empat dari 58 siswa masuk kategori tinggi. Skor skala karena itu tidak mendukung kesan guru. Bagi layanan bimbingan dan konseling, data ini belum memberi dasar untuk membedakan bobot layanan pencegahan antara kedua kelas, sementara keterlambatan tugas yang dikeluhkan guru perlu ditelusuri lewat catatan pengumpulan tugas.

Kata kunci: prokrastinasi akademik; siswa SMA; bimbingan dan konseling; laporan diri; laporan guru

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Introduction

Academic procrastination is the repeated postponement of academic work that students carry out even though they are aware of the harm it does, both when starting a task and when finishing it (Steel & Klingsieck, 2016). Delay of this kind cannot be treated as a simple matter of time management, because it involves decision making, task implementation, and timeliness of completion (Steel, 2010). The meta-analytic review by Steel (2007) places procrastination as a failure of self-regulation, and Klingsieck (2013) stresses that the delay is voluntary even though the person knows that a loss will follow. Sirois and Pychyl (2013) explain the mechanism in terms of mood repair: students relieve today's discomfort by putting the task off, and in doing so load the burden onto themselves later.

The consequences show up in academic attainment. The meta-analysis by Kim and Seo (2015) found a consistent negative relationship between academic procrastination and academic achievement. In Indonesia, Anisa and Ernawati (2018) found a direct effect of academic procrastination on biology learning outcomes among senior high school

students in Makassar, while Handoko and Mariyati (2023) reported broader effects on senior high school students in the form of declining marks across almost all subjects, assignments that were not completed properly, and emotional disturbance. The spread is not small either. Qomaruddin et al. (2024) found that 46.2% of grade XI students at a state senior high school in Semarang fell into the moderate category and 24.2% into the high category. If it is not addressed early through guidance and counselling services, the habit can carry over into later stages of education, and reviews of intervention research show that addressing it at school is in fact possible (Zacks & Hen, 2018; van Eerde & Klingsieck, 2018).

Guidance and counselling services in senior high school are delivered class by class, so the practical question for school counsellors is whether every class needs the same amount of service. Comparative studies to date have generally set groups side by side that differ systematically. Novirson and Putri (2024) compared 150 students by sex and by school type, and found significant differences on both. Comparison between parallel classes within one school is rarely carried out, even though that is the level at which school counsellors plan their programmes. Parallel classes share a curriculum, a timetable, and most of their teachers, but they differ in student composition, homeroom teacher, and the study habits of the group, so a difference in the tendency to put work off remains possible. This is where the present study situates itself.

Initial indications at the research site came from two sources. The first was the Student Needs Questionnaire (Angket Kebutuhan Peserta Didik, AKPD), distributed and analysed by the first author (Author, 2026) in grades X-1 and X-2 of SMA Santa Familia Sikumana Kupang during the 2026/2027 academic year. On the item about the habit of putting off schoolwork or homework, 16 of 31 students in X-1 (51.6%) and 16 of 30 students in X-2 (53.3%) reported that they still did so often, and the service priority was high in both classes. The proportions were almost equal, but the pattern on related items differed. Students in X-2 more often reported difficulty in balancing study time and leisure (63.3%) than students in X-1 (51.6%), while students in X-1 more often reported reluctance to study and drowsiness while studying (45.2%) than students in X-2 (26.7%). The second source was the researcher's interview with the school counsellor together with complaints from several subject teachers (personal communication, 2026), who reported that students in X-1 missed assignment deadlines more often than students in X-2. The work was still handed in, but not on time.

These two sources do not point the same way. The AKPD data, which come from the students' own reports, show almost equal proportions in the two classes, while the teachers' reports single out one class. A gap of this kind is nothing new in the measurement of adolescent behaviour. Achenbach et al. (1987) found only moderate cross-informant correlations in ratings of children's behavioural and emotional problems, particularly when the informants observed the child in different settings. De Los Reyes et al. (2015) argue that discrepancies between informants carry information and are not merely measurement error, because each informant rates behaviour in a different context. Kuncel et al. (2005) likewise showed that the accuracy of student self-reports depends on what is being reported and on who is reporting it. Against that background, measuring both classes with a scale becomes a way of checking how far students' self-reported scores agree with what teachers observe.

On that basis, the present study was framed to answer the question: is there a difference in the level of academic procrastination between students in grades X-1 and X-2 of SMA Santa Familia Sikumana Kupang? The null hypothesis (H0) states that there is no difference in the level of academic procrastination between the two classes, while the alternative hypothesis (Ha) states that there is one. The hypothesis was framed without direction because the indication from the teachers' reports is not yet supported by measurable records of late submission, so the test was two-tailed. The aim of the study was to measure that difference and to supply school counsellors with initial data for deciding how much preventive service each of the two classes needs.

Method

Research Design and Setting

This study used a quantitative approach with a non-experimental comparative design, comparing the level of academic procrastination between two groups of students that were already formed (grades X-1 and X-2) without giving either group any treatment (Sugiyono, 2019).

Participants, Sample, or Data Sources

The population was all students in grades X-1 and X-2 of SMA Santa Familia Sikumana Kupang in the 2026/2027 academic year, consisting of 31 students in X-1 and 30 students in X-2 (61 students in total). Given that the population in each class was small, the study used saturated sampling, in which every member of the population is taken as the sample (Sugiyono, 2019). Data were collected on 2 October 2026 in X-2 and on 6 October 2026 in X-1. Three students (two from X-1 and one from X-2) were absent through illness at the time of administration, so 58 answer sheets were obtained, a response rate of 95.1%. The analysis was carried out on those 58 respondents, 29 from X-1 and 29 from X-2. The AKPD data cited in the Introduction come from an earlier

administration when all 61 students were present, which is why the denominators differ.

Instruments and Measures

The instrument was an Academic Procrastination Scale adapted from the Pure Procrastination Scale (PPS) constructed by Steel (2010). The Indonesian adaptation for senior high school students has been tested for construct validity through confirmatory factor analysis on 250 students by Ansyah and Pratiwi (2024). That scale proved valid (loading factor ≥ 0.5) and reliable, with construct reliability of 0.864 on the decision aspect, 0.923 on the implementation aspect, and 0.891 on the timeliness aspect, so validity and reliability testing was not repeated before data collection. Because the response format in the present study uses frequency anchors while the original version uses agreement anchors, internal consistency and item discrimination were still computed on the present data and are reported in the Results.

The scale consists of 12 statements with a 1–5 rating format (1 = very rarely done, 5 = very often done). The higher the total score, the higher the student's level of academic procrastination. All items were used as they stand, with no change of wording from the adapted version of Ansyah and Pratiwi (2024). The items measure a general tendency to delay and do not mention schoolwork specifically, so the academic context was established through the instructions, which directed students towards their habits in doing schoolwork. Svartdal and Steel (2017) note that most of the procrastination scales in circulation measure a similar general tendency, which makes narrowing the context through the instructions important.

Procedure and Research Ethics

Data were collected after the researcher had obtained permission from the school principal and had coordinated with the school counsellor and the respective homeroom teachers. Students were given an explanation of the purpose of the study, were told that participation was voluntary and that their answers would not affect their marks in any subject, and then gave their consent before administration began. Answer sheets carried only a name or initials so that completeness could be checked, and all results are reported in aggregate form by class. The two supporting data sources cited in the Introduction and the Discussion, namely the Student Needs Questionnaire and the interviews with the school counsellor and subject teachers, were used to establish the background of the problem and were not entered into the statistical analysis.

Data Analysis

Data analysis proceeded in several stages. Normality was tested with Shapiro-Wilk, run separately for each class and chosen for its good power at small sample sizes. Homogeneity of variance was tested with Levene's test, computed with centring on the group means. Differences were tested with an independent samples t-test where the normality and homogeneity requirements were met, with the total score as the test variable and class as the grouping variable, together with Cohen's d (Cohen, 1988) and its 95% confidence interval. A Mann-Whitney U test was run as a robustness check. Categorisation of procrastination level (high, moderate, low) used hypothetical norms based on the hypothetical mean and standard deviation (Azwar, 2012). From a theoretical score range of 12 to 60, the hypothetical mean is 36 and the hypothetical standard deviation is 8, so the low category covers scores below 28, the moderate category 28 to 43, and the high category 44 and above. All computation was carried out in IBM SPSS Statistics version 27 at a two-tailed significance level of 0.05. Internal consistency of the scale on the present data was examined with the Alpha model together with corrected item-total correlations, and statistical power was computed for a two-tailed independent samples t-test at a significance level of 0.05.

Results and Discussion

Results

The questionnaire was distributed to all students in grade X-1 (31 students) and X-2 (30 students). Three students did not complete it because they were ill at the time, so the data analysed come from 58 students. All answers fell within the range 1 to 5 and no item was missed on the sheets collected. An inspection of response patterns before analysis found two sheets in X-1 whose pattern was identical across all 12 items, one sheet with a uniform answer of 1 on every item, and three pairs of sheets that differed on a single item only. The two sheets with identical patterns were checked again against the original questionnaires, and their contents did match each student's own answers, so the similarity was not the result of one sheet being entered twice. All sheets were retained for the main analysis, and their influence was examined through sensitivity analyses.

The scale showed good internal consistency on the present data (Cronbach's alpha = 0.89; 0.90 in X-1 and 0.88 in X-2). The coefficients per aspect were adequate: 0.78 on the decision aspect, 0.75 on the implementation aspect, and 0.78 on the timeliness aspect. Corrected item-total correlations for every item were above 0.30, ranging from 0.36 to 0.80, so all 12 items were retained in the analysis (Table 4).

Total scores for X-1 students ranged from 12 to 44 with a mean of 27.79 (SD = 8.94), while scores for X-2 students ranged from 14 to 44 with a mean of 28.59 (SD = 8.50). The mean for X-1 falls just below the lower bound of the moderate category (28) and the

mean for X-2 just above it, a difference of less than one point (Table 1).

Table 1. Descriptive statistics and independent samples t-test results for academic procrastination scores

Class	n	M	SD	Min	Max	t	df	p	d [95% CI]
X-1	29	27.79	8.94	12	44	−0.35	56	0.730	−0.09 [−0.61, 0.42]
X-2	29	28.59	8.50	14	44				

(Source: processed by the researcher) Note. M = mean total score; d = Cohen's d with the pooled standard deviation as the divisor; CI = confidence interval. Theoretical score range 12–60. The t-test is read from the equal variances assumed row. The mean difference is −0.79 points with a 95% confidence interval of [−5.38, 3.80], computed from unrounded means.

Most students in both classes fell into the low and moderate categories (Table 2). In X-1, 15 students (51.7%) were in the low category, 13 students (44.8%) in the moderate category, and 1 student (3.4%) in the high category. In X-2, 12 students (41.4%) were in the low category, 14 students (48.3%) in the moderate category, and 3 students (10.3%) in the high category. All four students in the high category scored exactly 44, precisely at the lower bound of that category, and no student in either class scored above 44 out of a theoretical range of 12 to 60. The high category in this study therefore consists entirely of borderline cases (Figure 1).

Table 2. Distribution of academic procrastination categories

Category	Score range	X-1 (f)	X-1 (%)	X-2 (f)	X-2 (%)
High	≥ 44	1	3.4	3	10.3
Moderate	28–43	13	44.8	14	48.3
Low	< 28	15	51.7	12	41.4
Total		29	100.0	29	100.0

(Source: processed by the researcher)

Mean scores per item on each aspect were also close in the two classes (Table 3). The largest gap was on the decision aspect, 2.09 in X-1 and 2.29 in X-2. The standard deviations overlapped as well, so the spread of scores per aspect was similar in the two classes. The SD values in Table 3 are the between-student standard deviations of the per-item means for each aspect, not the standard deviations between items. This comparison across aspects is descriptive only and was not tested statistically.

Table 3. Mean score per item by aspect

Aspect	Items	X-1 M	X-1 SD	X-2 M	X-2 SD
Decision	3	2.09	0.86	2.29	0.82
Implementation	5	2.34	0.83	2.37	0.65
Timeliness	4	2.45	0.83	2.47	0.94

(Source: processed by the researcher) Note. Items = number of items making up the aspect.

Table 4. Corrected item-total correlations and internal consistency of the scale (n = 58)

Item	Aspect	M	SD	r item-total	α if item deleted
1	Decision	2.26	0.98	0.539	0.886
2	Decision	2.21	0.97	0.735	0.877
3	Decision	2.10	1.07	0.675	0.879
4	Implementation	1.98	1.00	0.570	0.885
5	Implementation	2.00	0.97	0.527	0.887
6	Implementation	2.66	1.13	0.361	0.896
7	Implementation	2.57	1.01	0.641	0.881
8	Implementation	2.57	1.11	0.795	0.872
9	Timeliness	2.52	1.22	0.543	0.887
10	Timeliness	2.40	0.99	0.682	0.879
11	Timeliness	2.38	1.07	0.564	0.885
12	Timeliness	2.55	1.23	0.629	0.882

(Source: processed by the researcher) Note. M and SD are computed on item scores of 1–5. The item-total correlation is the correlation of the item with the sum of the remaining items. Cronbach's alpha for the whole scale is 0.89; per aspect it is 0.78 (decision), 0.75 (implementation), and 0.78 (timeliness).

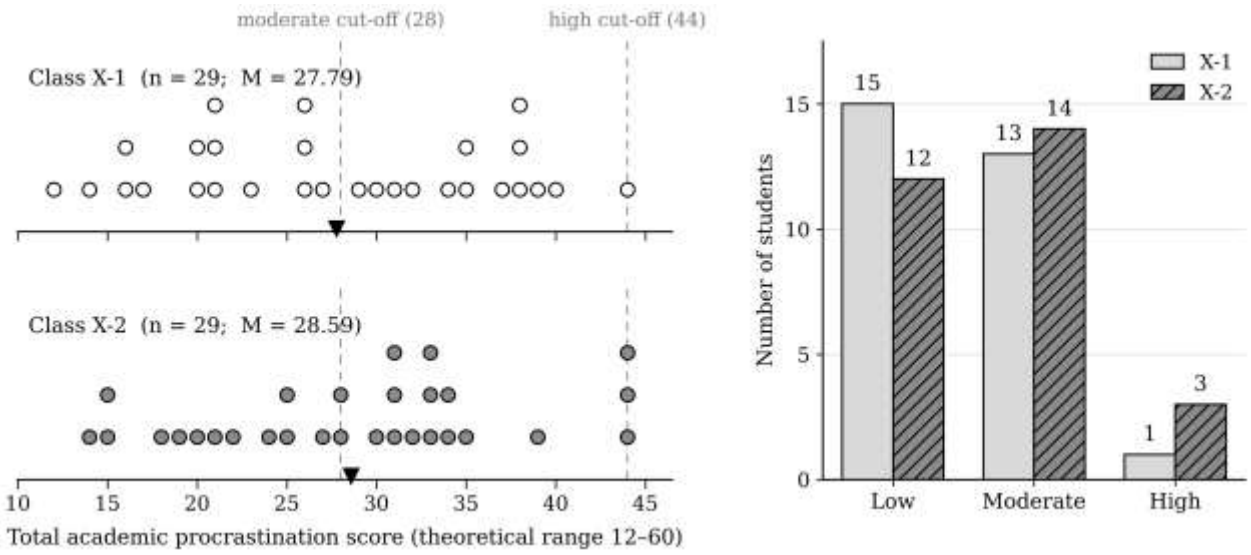


Figure 1. Distribution of individual total scores (left) and category distribution (right) in classes X-1 and X-2. Each dot represents one student; dashed lines mark the category boundaries under the hypothetical norms; triangles mark the class means.

(Source: processed by the researcher)

The Shapiro-Wilk test showed that the data in both classes were normally distributed (X-1: W = 0.959, df = 29, p = 0.311; X-2: W = 0.960, df = 29, p = 0.330). Levene's test showed that the variances of the two classes were homogeneous, F(1, 56) = 0.44, p = 0.511. Since both requirements were met, the difference was analysed with an independent samples t-test and read from the equal variances assumed row.

The result showed no significant difference in the level of academic procrastination between students in X-1 and X-2, t(56) = −0.35, p = 0.730, so H0 was not rejected (Table 1). The mean difference was −0.79 points with a standard error of 2.29 and a 95% confidence interval of [−5.38, 3.80]. The effect size was very small, Cohen's d = −0.09 with a 95% confidence interval of [−0.61, 0.42], and Hedges' correction gives g = −0.09 with a 95% confidence interval of [−0.60, 0.42]. A Mann-Whitney U test run as a comparison led to the same conclusion (U = 407; Wilcoxon W = 842; Z = −0.21; asymptotic two-tailed significance = 0.834; exact two-tailed significance = 0.841).

Three sensitivity analyses were run in response to the findings of the response-pattern inspection, and all three led to the same conclusion. With one of the two identically patterned sheets in X-1 removed, the result was t(55) = −0.24, p = 0.813, d = −0.06. With the sheet carrying uniform answers removed, the result was t(55) = −0.10, p = 0.920, d = −0.03. With both removed at once, the result was t(54) = 0.02, p = 0.985, d = 0.01. In every scenario the confidence interval for the mean difference still contained zero and the effect size remained far below 0.2. Because the two identically patterned sheets had already been confirmed against the original questionnaires, the main analysis retains all 58 sheets, and the results above are reported as a robustness check only.

Discussion

The results do not support the initial expectation that the level of academic procrastination differs between students in X-1 and X-2. Scale scores in the two classes sit at adjacent levels, around the boundary between the low and moderate categories. This picture of the distribution is not far from the finding of Qomaruddin et al. (2024) among senior high school students in Semarang, who also found the moderate category to be the largest group. The difference is that the proportion of students in the high category here is far smaller than in that study. The position of the present study is therefore to reinforce part of the earlier finding about the dominance of the moderate category, while also showing that the severity of procrastination can differ widely between schools.

Equivalent results in the two classes in fact make sense given the kind of groups being compared. Differences in procrastination between groups tend to appear when those groups differ systematically. Novirson and Putri (2024) found significant differences by sex and by school type, two distinctions that bring with them differences in parenting patterns, supervision, and systems of study. Classes X-1 and X-2 in the present study share a curriculum, a timetable, most of their teachers, and the same school environment, so a very small difference in means is not a surprising result. This finding does not reject the result of Novirson and Putri; it limits its reach. The distinctions that operate at the level of sex and school type appear not to operate at the level of parallel classes. For practice in schools, this finding places a limit on the commonly

circulated assumption that some classes are generally more inclined to put work off than others.

The part that needs more explaining is why the teachers' reports single out X-1 while the students' scores do not. The AKPD data, which also come from student reports, show the same pattern as the scale: the proportion of students who admit to still putting work off often is almost equal in the two classes. So what differs is not two instruments, but student reports and teacher observation. A pattern of this kind is widely documented in the measurement of child and adolescent behaviour. Achenbach et al. (1987) found that correlations between the ratings of informants who observe a child in different settings are only moderate, and De Los Reyes et al. (2015) stress that such discrepancies carry information about each informant's context of observation. Kuncel et al. (2005) showed that the accuracy of student self-reports depends on what they are asked to report. In the present study, students rated their own general tendency, while teachers rated one visible and recorded behaviour, namely the time at which work was handed in. The two need not produce the same figure, and self-assessment can also be affected by a wish to appear in a good light. This finding therefore supports the position of De Los Reyes et al. that discrepancies between informants deserve to be read as information rather than as error to be removed.

A second explanation lies in the definition of procrastination itself. Procrastination is deliberate delay despite awareness of its harmful consequences (Steel & Klingsieck, 2016; Klingsieck, 2013), whereas work handed in late can have other causes. The AKPD data show that most students in both classes admit to difficulty in understanding particular subjects. Difficulty of that kind can make work take longer without any intention to delay, and so would not register as procrastination on the scale. A third explanation operates at the level of the class rather than the individual. The volume of work, particular subjects, or submission habits in X-1 could produce more frequent lateness without making the mean score of its students any higher. None of these three explanations has been tested in the present study, and they remain open possibilities for further research.

For guidance and counselling services, these data do not yet provide a basis for weighting preventive programmes differently across the two classes. Classical services on managing work and organising time can be planned for X-1 and X-2 with equal weight, with the caveat that a small to moderate difference between the classes cannot be ruled out by these data. The four students in the high category deserve closer attention through group guidance or individual counselling, with the caveat that all four sit exactly at the category boundary, so screening should be supplemented with information from teachers and homeroom teachers. The review by van Eerde and Klingsieck (2018) of intervention research shows that programmes targeting procrastination can produce results, with cognitive-behavioural approaches the most widely studied, and Zacks and Hen (2018) note that interventions in academic settings generally work by strengthening students' self-regulation. The lateness that teachers complain about still needs addressing, but the handling of it would be better begun by tracing the submission records and their causes in that class, rather than from the assumption that the class as a whole has a stronger tendency to delay.

This study has a number of limitations that should be taken into account when reading its results. First, the number of respondents is small, 29 students per class, so at a significance level of 0.05 a difference is only detected with 80% power if the effect size is around 0.75 or larger. A small to moderate difference between classes may go undetected, and the confidence interval for the mean difference is fairly wide. Second, the data come from a single administration of a self-report scale, while the teachers' reports were obtained through interview without measurable records of late submission, so the agreement between the two cannot yet be computed statistically. Third, the scale items measure a general tendency to delay and do not mention schoolwork specifically, so the academic context was established only through the instructions. Fourth, data collection in the two classes took place on different dates four days apart, so the workload in progress at the time of administration was not entirely the same. Fifth, the study was carried out in two classes at one school, so its results are not intended to be generalised to other schools. Sixth, every student in the high category scored exactly at the lower bound of that category, so the grouping is sensitive to the choice of hypothetical norms and should not be read as a sharply separate group. Seventh, some sheets had response patterns very close to one another. Checking against the original questionnaires confirmed that the answers did come from each individual student, but similarity to that degree still leaves open the possibility that students saw one another's work while completing the scale, so part of the variation in scores may not fully reflect each student's own assessment.

Conclusion

There is no significant difference in the level of academic procrastination between students in grades X-1 and X-2 of SMA Santa Familia Sikumana Kupang, so the null hypothesis was not rejected. Both classes are dominated by students at low and moderate levels of procrastination, and only a small number of students fall into the high category. The initial expectation from the teachers' reports that

class X-1 has a higher level of procrastination is not supported by the scale scores. Because the teachers' reports in this study were obtained only through interview and not as measurable records of lateness, the agreement between student self-reports and teacher observation could not be tested, and that discrepancy remains open to several explanations.

For school counsellors, preventive services for procrastination are recommended to be planned as classical services in both classes with equal weight, since these data do not yet show a reason to differentiate them, together with particular attention to students in the high category through group guidance or individual counselling. Teachers' complaints about late submission in class X-1 would be better followed up by tracing submission records and their causes, including the difficulty in understanding material that also shows up in the AKPD data. For subsequent researchers, we recommend using a larger sample, involving more than one school, and setting students' self-report scores alongside teachers' records of lateness so that the agreement between the two can be tested statistically. Future data collection should also be arranged so that each student completes the scale independently, with no opportunity to see one another's answers.

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Conflict of Interest

The authors declare no conflict of interest.

Author Contributions

Author 1: conceptualization; methodology; investigation; data curation; formal analysis; writing – original draft. Author 2: supervision; methodology; writing – review and editing.

Generative AI Disclosure

The authors used an AI assistant to translate this manuscript from Indonesian into English, to format it according to the journal template, and to redraw Figure 1 with English labels. The study design, data collection, statistical analysis, and interpretation were carried out by the authors. The authors reviewed and verified the full text and take full responsibility for the accuracy, originality, integrity, and final content of the article.

References

Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin, 101*(2), 213–232. https://doi.org/10.1037/0033-2909.101.2.213

Anisa, A., & Ernawati, E. (2018). Pengaruh prokrastinasi akademik terhadap hasil belajar biologi siswa SMA Negeri di Kota Makassar [The effect of academic procrastination on biology learning outcomes of state senior high school students in Makassar]. *Jurnal Biotek, 6*(2), 88–95. https://doi.org/10.24252/jb.v6i2.6256

Ansyah, E. H., & Pratiwi, Y. N. (2024). Confirmatory factor analysis pada skala prokrastinasi akademik untuk siswa SMA [Confirmatory factor analysis of an academic procrastination scale for senior high school students]. *Teraputik: Jurnal Bimbingan dan Konseling, 8*(1), 1–10. https://doi.org/10.26539/teraputik.812813

Author. (2026). *Student Needs Questionnaire (AKPD) data for two parallel grade X classes, academic year 2026/2027* [Unpublished raw data].

Azwar, S. (2012). *Penyusunan skala psikologi* [Constructing psychological scales] (2nd ed.). Pustaka Pelajar.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

De Los Reyes, A., Augenstein, T. M., Wang, M., Thomas, S. A., Drabick, D. A. G., Burgers, D. E., & Rabinowitz, J. (2015). The validity of the multi-informant approach to assessing child and adolescent mental health. *Psychological Bulletin, 141*(4), 858–900. https://doi.org/10.1037/a0038498

Handoko, P. E. W., & Mariyati, L. I. (2023). An overview of academic procrastination in high school students. *Indonesian Journal of Innovation Studies, 21*. https://doi.org/10.21070/ijins.v21i.805

Kim, K. R., & Seo, E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. *Personality and Individual Differences, 82*, 26–33. https://doi.org/10.1016/j.paid.2015.02.038

Klingsieck, K. B. (2013). Procrastination: When good things don't come to those who wait. *European Psychologist, 18*(1), 24–34. https://doi.org/10.1027/1016-9040/a000138

Kuncel, N. R., Credé, M., & Thomas, L. L. (2005). The validity of self-reported grade point averages, class ranks, and test scores: A meta-analysis and review of the literature. *Review of Educational Research, 75*(1), 63–82. https://doi.org/10.3102/00346543075001063

Novirson, R., & Putri, Y. E. (2024). Prokrastinasi akademik: Studi komparasi siswa ditinjau dari jenis kelamin dan jenis sekolah [Academic procrastination: A comparative study of students by sex and school type]. *Jurnal Konseling Komprehensif: Kajian Teori dan Praktik Bimbingan dan Konseling, 11*(2), 167–173. https://doi.org/10.36706/jkk.v11i2.196

Qomaruddin, M., Suhendri, S., & Dina, F. (2024). Gambaran prokrastinasi akademik pada peserta didik kelas XI SMA Negeri 10 Semarang [A description of academic procrastination among grade XI students of SMA Negeri 10 Semarang]. *Ristekdik: Jurnal Bimbingan dan Konseling, 9*(1), 6–10. https://doi.org/10.31604/ristekdik.2024.v9i1.6-10

Sirois, F., & Pychyl, T. (2013). Procrastination and the priority of short-term mood regulation: Consequences for future self. *Social and Personality Psychology*

Compass, 7(2), 115–127. https://doi.org/10.1111/spc3.12011

Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin, 133*(1), 65–94. https://doi.org/10.1037/0033-2909.133.1.65

Steel, P. (2010). Arousal, avoidant and decisional procrastinators: Do they exist? *Personality and Individual Differences, 48*(8), 926–934. https://doi.org/10.1016/j.paid.2010.02.025

Steel, P., & Klingsieck, K. B. (2016). Academic procrastination: Psychological antecedents revisited. *Australian Psychologist, 51*(1), 36–46. https://doi.org/10.1111/ap.12173

Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D* [Quantitative, qualitative, and R&D research methods]. Alfabeta.

Svartdal, F., & Steel, P. (2017). Irrational delay revisited: Examining five procrastination scales in a global sample. *Frontiers in Psychology, 8*, 1927. https://doi.org/10.3389/fpsyg.2017.01927

van Eerde, W., & Klingsieck, K. B. (2018). Overcoming procrastination? A meta-analysis of intervention studies. *Educational Research Review, 25*, 73–85. https://doi.org/10.1016/j.edurev.2018.09.002

Zacks, S., & Hen, M. (2018). Academic interventions for academic procrastination: A review of the literature. *Journal of Prevention & Intervention in the Community, 46*(2), 117–130. https://doi.org/10.1080/10852352.2016.1198154