



Development of Academic Procrastination Scale for Students of SMP Muhammadiyah 5 Yogyakarta

Rahmah Wardah^(✉) and Suwarjo Suwarjo

Guidance and Counseling Student, Universitas Negeri Yogyakarta, Yogyakarta, Indonesia
rahmahwardah.2021@student.uny.ac.id, suwarjo@uny.ac.id

Abstract. Academic procrastination is a tendency to procrastinate behavior by students to avoid unpleasant conditions. To be able to help students who do academic procrastination, initial data is needed regarding the description of students' academic procrastination, so a measuring instrument is needed to measure the academic procrastination of junior high school students. This study aims to develop a scale of academic procrastination for junior high school students. The research method used in this research is research and development with a development model by Saifudin Azwar. The results showed that: 1) item content validity, 2) instrument reliability test using Cronbach's Alpha formula, obtained a score of 0.984. The developed academic procrastination scale is declared valid and reliable so that it can be used to measure academic procrastination.

Keywords: scale · academic procrastination · junior high school students

1 Introduction

Academic procrastination is a procrastinating behavior carried out by students in academic activities. McCloskey & Scielzo define academic procrastination as a tendency to postpone school-related activities without a clear goal [1]. Solomon & Rothblum state that something is called an act of procrastination if someone delays an important task and is done intentionally [2]. Important tasks include writing papers, reading and completing assignments, preparing for exams, administering assignments, completing academic assignments, and class attendance. Then comes the feeling of discomfort and other problems. For example, a student who delays doing an assignment until the specified deadline then hails to submit his assignment and it affects his grades. In line with Solomon & Rothblum, Park and Sperling define procrastination as an inconsistency between the intention and the behavior displayed, meaning that individuals who procrastinate have the desire to do the task, but they do not do it and do the task in minutes. Last minute of collection [3].

Academic procrastination behavior is related to task avoidance, students prefer to do other more fun things such as playing with friends. Watch television, travel, and do other things that are not related to academic activities. Burka Yuen reveals the impact

of academic procrastination on students' academic achievement and will interfere with students' mental health, because academic procrastination can trigger students to become anxious, worried, etc. [4].

Academic procrastination is a problem in the world of education that is expected not to occur, because it will hinder the development of education in Indonesia. To determine the appropriate intervention, preliminary data related to the level of academic procrastination are needed. To obtain data related to the level of academic procrastination, an instrument is needed that can measure the level of academic procrastination. The academic procrastination scale that has been developed previously focuses on students and high school students, it is still difficult to find an academic procrastination scale that is intended to measure the academic procrastination of junior high school students. As research conducted by Alfarabi developed an academic procrastination scale for high school students in the city of Kediri [5]. Then the research by Faradila is the development of an academic procrastination inventory aimed at students [6].

Based on the explanation above, the researcher is interested in developing an academic procrastination scale for junior high school students. By knowing the condition of students' academic procrastination, the BK teacher can immediately handle it and can immediately help students, not academic procrastination. If the problems experienced by students can be identified early, the impact can be minimized so that the school can truly carry out its role as a forum to help students develop their potential.

2 Method

2.1 Development Style

The method used in this research is the Research and Development (R&D) method. Sugiyono (2018) states that R&D is used to produce a product and test the product so that later it can be used and benefited the wider community [6]. The development model used in this study is the development model by Azwar [7]. The development model was chosen because this study focuses on developing instruments related to psychological scales. A psychological scale was created to measure non-cognitive attributes [7]. The scale model used in this study is a Likert scale because it serves to measure attitudes or opinions, and perceptions about social phenomena.

The development model procedure according to Azwar consists of nine stages which include: 1) identification of measurement objectives, 2) limitation of measurement domains, 3) operational aspects, 4) item writing, 5) language testing, 6) field testing, 7) selection of items, 8) construct validation and 9) final preparation. However, the process of this research will not be completely similar to that procedure because it adapts to the needs of developing academic procrastination scale instruments for junior high school students in the city of Yogyakarta. In stages 6 and 7, namely field tests and item selection, the researcher will combine them in the field trial stage. Then the researcher changed the construct validation stage to the content validation stage which involved expert judges in the item review process. Content validation is carried out at the same time as the writing stage of the questions [8].

2.2 Research Sample

This study involved 35 students of class VIII SMP Muhammadiyah 5 which included students of class VIII A and VIII B.

2.3 Research Instruments

The instrument developed in this study is an academic procrastination scale. As for the alternative answers on the academic procrastination scale instrument with the criteria of very appropriate, appropriate, in proper, date, and very inappropriate, each alternative answer has a score of 4, 2, and 1.

2.4 Metadata

The analysis technique in this study was carried out using coupling and reliability tests. The validity stage involves competent expert judgment in the field of Guidance and Counseling. The purpose of expert validation is to obtain information about the suitability of the instrument and the research objectives contained in the sub-aspects and indicators. Calculations were carried out using Ms. Excel with the Aiken formula as follows:

$$V = \sum s/[n(c-1)]$$

Information:

$s = r - lo$

lo = the lowest validity value (in this case it is 1)

c = the highest validity value (in this case it is 4)

r = number given the by rater

n = number of raters

After conducting the expert judgment test, the researcher conducted a reliability test to determine the level of instrument reliability so that it can be trusted to be used as a data collection tool because it can produce a small measurement errors [7]. The reliability test was carried out using the Cronbach Alpha formula, then the data was processed through a calculation tool, namely Microsoft Office Excel. The formula is used to calculate the reliability of the instrument whose score is closer to 1.00, the higher the reliability.

3 Research Results and Discussion

3.1 Research

The research results are described based on the steps that have been taken to obtain valid and reliable results. The results of the development of academic procrastination instruments can be described as follows:

3.2 Identification of Measurement Goals

The preparation of this scale begins with identifying the purpose of measurement, in this case choosing the definition and theory that underlies the construct. The theory that underlies the construct is taken from every kind of literature used which is then summarized into a comprehensive section that can provide information related to academic procrastination.

3.3 Measuring Domain

In this study, the limitations in question are to describe the theoretical constructs that are measured into several formulations of aspects that are clearer. The researcher describes the formulation of career maturity aspects based on the theory proposed by McCloskey & Scielzo and Solomon & Rothblum which specifically assesses procrastination on academic tasks such as time management, task aversion, and task avoidance [1, 2].

3.4 Operational Aspect

After the researcher knows the aspects to be explored, the next step is to operationalize the aspects into indicators. This aims to make it easier for researchers to determine the direction of the expected response on each statement item. Based on the theory of academic procrastination, four indicators of academic procrastination were obtained which include, 1) Delaying starting academic activities, 2) delaying completing academic activities, 3) disliking academic tasks, and 4) avoiding overcoming obstacles in academic activities. From these four indicators then produce 11 descriptors, namely: 1) delaying starting group assignments, 2) delaying starting individual assignments, 3) delaying starting studying to prepare for exams, 4) delaying completing group assignments, 5) delaying completing homework, 6) are reluctant to do tasks they don't like, 7) only do assignments when they have the desire to do them, 8) don't do assignments right away but do other activities that are more fun, 9) are reluctant to take lessons that they don't like, 10) avoid asking for help when difficulty understanding the subject matter, and 11) avoiding working on group assignments. Of these 11 descriptors then produce 14 favorable items. For each statement in this academic procrastination scale, students are given the following four alternative answers with scores consisting of Strongly Disagree = 1, Not Appropriate = 2, Appropriate, = 3 a, and Very Appropriate = 4.

3.5 Item Writing and Content Validation

The items in this academic procrastination scale are written based on the grid made at the operational stage of that aspect. Furthermore, in the content validation stage, 2 lecturers of the Faculty of Education, Yogyakarta State University, were involved to become expert judgments. Validates were carried out by two experts with four assessment options, then the item is declared valid if it has a value of 1. The validation results show that of the 23 statement items 6 of them are declared invalid, the items are items 4, 7, 11, 19, 20, and 23. The number of statement items that were declared valid was 17 items.

Table 1. Instrument Validity Results

Respondents	Validity Value	Information
1	0.878	Valid
2	0.235	Invalid
3	0.928	Valid
4	0.931	Valid
5	0.937	Valid
6	0.901	Valid
7	0.897	Valid
8	0.932	Valid
9	-0.916	Invalid
10	0.929	Valid
11	0.919	Valid
12	0.93	Valid
13	0.949	Valid
14	0.909	Valid
15	0.947	Valid
16	-0.689	Tidak Valid
17	0.898	Valid

3.6 Field Experiment

The field trial phase was carried out by researchers in class VIII A and VIII B SMP Muhammadiyah 5 Yogyakarta and tested on 35 students with the following results:

- 1) *Validity Test*: The academic procrastination scale instrument was tested on 35 students of SMP Muhammadiyah 5 Yogyakarta. The reliability test is calculated with the help of Microsoft Office Excel and the validity value is obtained as shown in Table 1.

An instrument that was tested on 35 students with an error rate of 5% will be declared valid if the validity value is > 0.334 . This shows that the academic procrastination scale instrument developed is appropriate to measure the academic procrastination of the students of SMP Muhammadiyah 5 Yogyakarta. Of the 17 items tested, there are 3 items whose r value is < 0.334 , so the 3 items are declared invalid.

- 2) *Reliability Test*: The reliability test was calculated with the help of Microsoft Office Excel and obtained an alpha value of 0.984. An instrument is said to be reliable or consistent if the value Cronbach's Alpha > 0.70 . This shows that the academic procrastination

scale instrument that was developed serves to measure the academic procrastination of the students of SMP Muhammadiyah 5 Yogyakarta.

Referring to the results of the calculations above, it can be said that the instrument can be used to measure the academic achievement of the students of SMP Muhammadiyah 5 Yogyakarta because the items can represent the aspects that have been determined.

3) *Discussion*: The results showed that the developed academic procrastination scale instrument can be used to measure the academic procrastination of students of SMP Muhammadiyah 5 Yogyakarta because it has been proven to be valid and reliable. Before conducting the field test, an expert judgment was conducted involving 2 lecturers of the Faculty of Education, Yogyakarta State University. The item is declared eligible for use if it has a score of 1, the number of initial items is 23 and after expert judgment is declared only 17 items are valid. Then a field test was conducted on 35 students of SMP Muhammadiyah 5 Yogyakarta, an item was declared valid if > 0.334 that from the initial 17 items only 14 items were declared valid. Finally, a reliability test was carried out which obtained a reliability value of 0.984 where this value is greater than 0.70 then the item is declared reliable.

Another study conducted by Suwidagdhho & Purwanta also used the stages of development according to Saifuddin Azwar [9]. This study aims to develop a career exploration instrument based on Anne Roe's classification to help junior high school students explore their career options. The difference is, in the study of Suwidagdhho & Purwanta used the CFA formula while in the research conducted researcher sign dinged the Aiken V formula.

4 Conclusion

The scale instrument developed by the researcher can reveal the academic procrastination experienced by students of SMuhammadiyah with 5 with a reliability of 0.984 and content validation by experts of 1. The academic procrastination scale is declared feasible to use, but has drawbacks, namely the number of respondents is small but this scale can still be used because it has been tested for validity and reliability.

References

1. McCloskey, J., & Scielzo, S. A. (2015). *Finally !: The Development and Validation of the Academic Procrastination Scale*
2. Solomon, L. J., & Rothblum, E. D. (1984). Academic Procrastination: Frequency and Cognitive Behavioral Correlates. *Journal of Counseling Psychology*, 31(4), 503–509.
3. Dzakiah, S., Psikologi, F., Indonesia, U., Barat, D., Widyasari, P., Psikologi, F., Indonesia, U., & Barat, D. (2021). Regulasi diri sebagai mediator interaksi mindfulness dan prokrastinasi akademik. *Persona : Jurnal Psikologi Indonesia*, 10(1), 48–62. <https://doi.org/10.30996/persona.v10i1.4129>
4. Asri, D. N. (2018). *Prokrastinasi Akademik: Teori dan Riset dalam Perspektif Pembelajaran Berbasis Proyek dan Self Regulated Learning*. UNIPMA PRESS.
5. Alfarabi. (2022). Pengembangan Skala Prokrastinasi Akademik Untuk Siswa Sekolah Menengah Atas Kota Kediri. Undergraduate Thesis, Universitas Nusantara PGRI Kediri.

6. Faradila et al., (2020). Pengembangan Inventori Prokrastinasi Akademik Bagi Mahasiswa. *Biblio Couns: Jurnal Kajian Konseling dan Pendidikan*, 3(1), 23–30.
7. Azwar, S. (2015). Penyusunan skala psikologi. Pustaka Pelajar
8. Sugiyono. (2018). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Alfabeta.
9. Suwidagdo, D., & Purwanta, E. (2022). Development of Instrumen Eksplorasi Karier Anne Roe (IEKAR) for Junior High School Students. *Jurnal Kajian Bimbingan dan Konseling*, 36–44.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

