

Academic Self-Efficacy and Academic Procrastination: The Mediating Role of Academic Motivation

Isna Asyri Syahrina¹, Mita Fani Tri Mutya²

¹Master of Psychology, Universitas Ahmad Dahlan, Yogyakarta, Indonesia

²Fakultas Psikologi, Universitas Putra Indonesia YPTK, Padang, Indonesia

*2108044027@webmail.uad.ac.id

ABSTRACT

The aim of this study was to determine the relationships between academic self-efficacy and academic procrastination and academic motivation as mediation. For the relationships, ninety-two students enrolled in the Faculty of Psychology, Universitas Putra Indonesia YPTK Padang were selected as samples by non-probability and incidental procedures. For data collection, the Academic Procrastination Scale was constructed from Ferrari et al. (1995), the Academic Self-Efficacy Scale from Bandura (1997) and the Academic Motivation Scale using the Academic Motivation Scales (AMS) from (Deci & Ryan, 2000). The data were analyzed by using the Hayes Regression technique. The findings supported the hypothesis that academic motivation fully mediates the relationships between academic efficacy and academic procrastination among college students. Therefore, the impact of self-efficacy on academic procrastination will be higher through academic motivation among students.

Keywords: academic motivation, academic procrastination, academic self-efficacy

Introduction

Students are individuals who are carrying out education at the tertiary level. Students have assignments that must be completed and this is part of the lecture process but the fact shows that many students procrastinate in doing their assignments for various reasons. According to Nizar (2018), the tendency to procrastinate is called academic procrastination.

Regarding academic procrastination, several opinions about academic procrastination include the interpretation of academic procrastination as a maladaptive behavior that hinders the experience of success in academics (Park & Sperling, 2012); tendency to procrastinate of doing and finishing activities related to academic assignments (McCloskey, 2011); Syapira et al., (2022); and inefficient behavior in using time and procrastinating an obligation (Paramithasari et al., 2022). Academic procrastination behavior can have negative impact on students, so this behavior must be avoided (Fitriya & Lukmawati, 2017).

Ferrari et al. (1995) explained that there are 4 aspects of academic procrastination, namely: 1) Procrastination behavior, in this case the the students try to start and complete their tasks. The tasks that have been started are postponed and delayed till it finished; 2) Procrastination in doing assignments. The students spend a lot of time due to excessive preparation or wasting time without considering the time constraints; 3) Time gap between intention and behavior. The students has determined their own plan to start the task but when the time comes they do not do it according to the plan; and 4) Doing leisure activities.

Studies related to academic procrastination are still important to be conducted because it still occurs a lot in undergraduate and postgraduate students (Klassen et al., 2010). Previous



studies proved that there is a problem of academic procrastination among students. 46% students procrastinate in doing assignments (Solomon & Rothblum, 1984), 60% students do procrastination and it is considered as a habit in students' life (Bruno, 1998), 70-95% students are involved in procrastination, 75% of them admit themselves as procrastinators (Steel, 2007). Other results proved that 74% students procrastinate their study before they take the exams and in finishing academic assignments (Fatmahendra & Nugraha, 2018), 75% students procrastinate, 50% students confirm that they do procrastination continuously, and 50% think that procrastination is a problem (Burka & Yuen, 2008). In Indonesia, Suhadianto and Ananta (2020) in their research found that there were 83% students with moderate to high academic procrastination from 326 students. At the Faculty of Psychology UPI YPTK Padang, indicators of academic procrastination in teaching and learning activities include: being late in submitting assignments and some even do not finish their assignments, being lazy in reading the material given by lecturers, and continuing and repeating procrastination behavior.

The high level of academic procrastination in students needs to get more serious attention from all parties considering the serious impact of this problem. Previous researchers found that academic procrastination has negative impacts, such as unfinished tasks, or completed but not optimal results (Solomon & Rothblum, 1984), causing stress and influence students' psychological dysfunction (Tice & Baumeister, 1997), time wasted without creating something useful (Ferrari & Morales, 2007). Another negative impact is the low grades obtained in the academic field and causing poor health on average (Tjundjing, 2006), as well as negative emotions such as anxiety, guilt, panic tension, self-condemnation, feeling that you have cheated, and low self-esteem (Binder, 2000).

Basically, there are many factors that can affect students' academic procrastination, including fear of failure, anxiety, having high standards, lack of self-confidence, considering assignments to be unpleasant (Solomon & Rothblum, 1984), self-control and self-efficacy (Paramithasari et al, 2022), as well as academic motivation (Malkoç & Mutlu, 2018). According to Ferrari et al. (1995) there are two factors that influence academic achievement, namely internal factors that come from within the individual (related to physical factors) such as fatigue and psychological factors of a person (personality type and motivation). The external factors come from outside the individual, such as the quantity of tasks that require immediate or simultaneous completion, control or supervision, and parenting patterns.

According to Fitriani and Djamhoer (2021), one of the factors that contributes to the occurrence of procrastination behavior is self-efficacy. Bandura (1997) defines self-efficacy as a belief in the student's self in his/her ability to organize and carry out a series of actions needed to complete a task. Meanwhile, students' belief in their own ability to carry out and complete academic tasks is called academic self-efficacy (Zajacova et al., 2005). Self-efficacy is proved and consistent in predicting grades and persistence in the higher education environment (Lindley & Borgen, 2002).

Bandura (1997) describes three dimensions of self-efficacy, namely magnitude, generality, and strength. The magnitude dimension relates to the difficulties in the task being done so that the students choose tasks based on the difficulty level of the task. The generality dimension is more related to the field of work or individual beliefs in carrying out their duties and the expectations to success in certain situations can be generalized in other situations. The strength dimension relates to the strength or weakness of the students' beliefs or refers to a certain assessment of how someone can be successful at a particular task.

Research conducted by Tuckman (2007); Paramithasari et al. (2022); Fitriani and Djamhoer (2021); Sawi (2015); proved that self-efficacy influenced student's academic procrastination. Trikusyanti (2022) found that there is a strong correlation between self-efficacy and academic

procrastination. The difference in results found in research conducted by Sari (2016), it revealed that academic self-efficacy is not a good predictor of academic procrastination.

Apart from self-efficacy, academic motivation is a significant and negative predictor of procrastination (Malkoç & Mutlu, 2018). Academic motivation means generating the energy needed for academic tasks (Bozanoglu, 2004). The National Association of School and Psychologists (2014) stated that positive academic motivation shows the characteristics; willing to learn, liking related learning activities and believing that education is important. The students who have high motivation will negatively affect procrastination, meaning that the higher the intrinsic motivation in an individual, the lower the tendency for procrastination behavior (Ferrari et al., 1995).

Deci and Ryan (2000) explained that there are 3 dimensions of academic motivation which include extrinsic motivation, intrinsic motivation and amotivation. The extrinsic motivation dimension is defined as a behavior that is based on certain consequences, for example: external rewards, social acceptance, running from punishment and achieving certain achievements. The dimension of intrinsic motivation is based on individual behavior that is carried out for self-satisfaction rather than separate consequences from the individual. The amotivation dimension is the absence of motivation in a person. Individuals who are amotivated do not have will to carry out any activity within them.

Research conducted by Stover et al., (2012); Malkoc and Mutlu (2018); proved the relationships between motivation and academic achievement. Lee's research (2014) showed that the dimensions of amotivation and intrinsic motivation show significant unique predictor of procrastination. The difference in research finding stated by Sirin (2011) is that the relationship between academic procrastination and academic motivation is not significant. Meanwhile, Reza's research (2015) found no relationship between academic motivation and academic procrastination.

Based on the problem and theoretical studies that have been described previously, this research is interesting to be conducted by proposing the title "Academic Self-efficacy and Academic Procrastination: The mediating role of Academic Motivation". The purpose of this study was to figure out the effect of Academic Self-efficacy on Academic Procrastination through Academic Motivation. The hypotheses proposed are: 1) Academic Self-Efficacy has a significant effect on Academic Motivation, 2) Academic Motivation has a significant effect on Academic Procrastination, 3) Academic Self-Efficacy has a significant effect on Academic Procrastination, and 4) Academic Motivation mediates the relationships between Academic Self-Efficacy and Academic Procrastination.

Method

Participants

The research participants consisted of 92 students from the Faculty of Psychology, Universitas Putra Indonesia YPTK Padang class of 2021. The data collection process was carried out by distributing the scale directly to students.

Procedure

The initial process of the research was carried out by preparing instruments to measure academic procrastination, academic self-efficacy, and academic motivation. The academic procrastination scale measurement instrument was constructed from Ferrari et al. (1995); the academic self-efficacy scales measurement instrument was constructed from Bandura (1997); and measurement of academic motivation scale constructed from Deci & Ryan (2000). Furthermore, the data collection process is carried out by distributing scales to students directly.

Measures

The measurement tools used in this research to measure each variable are the academic procrastination scale, the academic self-efficacy scale, and the academic motivation scale. The scale used for academic procrastination was constructed from Ferrari et al. (1995) consists of 4 aspects of academic procrastination with 24 items which include: 1) Procrastination behavior; 2) Procrastination in doing the assignments; 3) Time gap between intention and behavior; and 4) Doing leisure activities. The academic self-efficacy scale in this study was constructed from Bandura (1997), consists of three dimensions of academic self-efficacy including: 1) magnitude; 2) generality; and strength. Academic motivation scale used the Academic Motivation Scales (AMS) constructed from Deci & Ryan (2000), consists of three dimensions of academic motivation with 18 items including: 1) extrinsic motivation; 2) intrinsic motivation; and 3) amotivation.

The results of validity test of the academic procrastination scale which consists of 18 items showed the validity coefficient moves from 0.211 to 0.619. The validity coefficient of the academic self-efficacy scale ranges from 0.245 to 0.524. The validity coefficient of the academic motivation scale moves from 0.266 to 0.582. Reliability test used the formula from Cronbach's Alpha. Each measurement instrument showed that all of the instruments are reliable, because they have reliability coefficient above 0.700. The reliability coefficient on the academic procrastination scale is 0.821. The reliability coefficient on the academic self-efficacy scale is 0.762. Meanwhile, the reliability coefficient on the academic motivation scale is 0.856. The validity and reliability coefficients obtained from the three measurement instruments are the academic procrastination scale, the academic self-efficacy scale, and the academic motivation scale, showed that the three measurement instruments are valid and reliable. This means that all three measurement instruments can be used in this research.

Data Analysis

Descriptive analysis and mediation carried out in this study used IBM SPSS Statistics 23 and PROCESS V3.5 (Hayes, 2013).

Results

Table 1 shows the average score of respondents' answers on the three variables were sufficient. In academic self-efficacy, the average score achieved was 65.84 out of a maximum score of 72. On the academic motivation variable, the average score was 68.37 out of a maximum score of 72. On the academic procrastination variable, an average score of 80.03 was obtained from the maximum value is 94 and is the highest of the three variables.

Table 1.
Descriptive Analysis of Academic Self-Efficacy, Academic Motivation, and Academic Procrastination

	Academic Self-efficacy	Academic Motivation	Academic Procrastination
Mean	65.84	68.37	80.03
SD	4.61	2.95	7.50
Actual Range	54-72	53-72	68-94

The results of the study as shown in Table 2, figured out that path a, showed that academic self-efficacy influences academic procrastination positively and significantly ($\beta=.497$, $t(92)= 11.615$, $p<0.05$ [.000]) . Path b showed that academic motivation influences academic procrastination negatively and significantly ($\beta= -.832$, $t(92)=-2.077$, $p<0.05$ [.041]). Path c showed that academic self-efficacy affects academic procrastination negatively and significantly ($\beta= -.463$, $t(92)= -2.393$, $p<0.05$ [.019]). Finally, mediation analysis of path c', which represents the influence of academic

self-efficacy by the mediating role of academic motivation, showed that the direct effect is significant ($\beta = -.254$, $t(92) = -6.056$, $p < .05$ [.000]).

Table 2.
Regression Analysis of Mediation Model

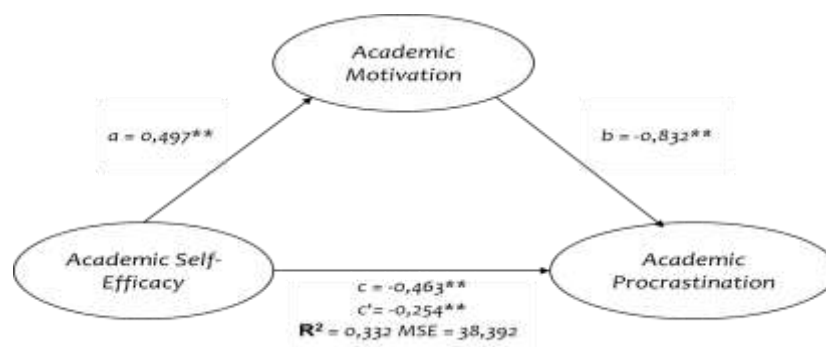
Path Notation	β	t	p
a	0,497	11,615	0,000
b	-0,832	-2,077	0,041
c	-0,463	-2,393	0,019
c'	-0,254	-6,056	0,000

Source: Hayes (2013).

The result proved that there is a relationship between academic self-efficacy and academic procrastination partially mediated by academic motivation, as can be seen in Figure 1. In the other words, academic motivation increases the effect of academic self-efficacy on students' academic procrastination. The magnitude of the influence of the two variables on academic procrastination was 33.2% ($R^2 = 0.332$).

Picture 1.

Academic Motivation as Mediating Factor



Discussion

The findings from the data analysis indicated that students' academic motivation partially mediates the role of academic self-efficacy and academic procrastination at the Faculty of Psychology, Universitas Putra Indonesia YPTK Padang. It means that, academic self-efficacy indirectly reduces students' procrastination behavior in academic tasks in learning activities. This indirect relationships is facilitated by strong academic motivation so that the tendency of student procrastination behavior is less.

Overall, academic procrastination has the consequence of reducing performance, quality of students' life, has negative influence (becomes a burden, easily depressed, lacks of confidence and anxiety), and decreases achievements (Zusya & Akmal, 2016). In this study, academic procrastination behavior can be reduced through self-efficacy and academic motivation. This finding is consistent with previous research by Kandemir (2014) who found that self-efficacy is one of the highest predictors of procrastination. Students who have efficacy in their ability to do academic assignments tend not to do academic procrastination because they can do it (Sawi, 2015). Students who have strong self-efficacy will face academic assignments well and will not procrastinate their academic assignments (Syapira et al., 2022). Research conducted by Schraw et

al., (2007) identified low self-efficacy as an antecedent of procrastination. Procrastination allows a person to not have efficacy in their abilities, fear of failure in carrying out tasks successfully. Students who procrastinate tend to blame the possibility of failure due to lack of effort, not due to lack of ability, as well as the relationships between anxiety related to the task being postponed.

In addition, academic motivation can be increased to reduce academic procrastination in students (Malkoç & Mutlu, 2018). This is in line with Cavusoglu & Karatas (2015) who showed that academic motivation is negatively correlated with procrastination. Students who have a low level of academic motivation make them postpone their academic assignments. It means that, when the level of motivation decreases, the tendency to procrastinate increases (Vij & Lomash, 2014). In this study, the direct effect of self-efficacy on academic procrastination is smaller than the indirect effect, which is only 28.9%. Therefore, self-efficacy can no longer directly influence academic procrastination when academic motivation is added as a mediator. This means that the self-efficacy effect is explained better by the presence of academic motivation, where the effect size increases from 28.9% to 33.2%.

Finally, the findings of this study also showed the dissimilarity with the results of Sari's research (2016) which explains that academic self-efficacy is not a good predictor of academic procrastination. Furthermore, research conducted by Reza (2015) explained that there is no relationship between academic motivation and academic procrastination.

Conclusion

Academic motivation partially mediates the relationships between self-efficacy and academic procrastination of students at the Faculty of Psychology, Universitas Putra Indonesia YPTK Padang. The finding concludes that self-efficacy cannot directly reduce student academic procrastination without the role of academic motivation. The implication of this research is that it is important for students to increase their academic self-efficacy in order to have confidence that they are capable to carry out certain tasks successfully. Then, students are expected to be able to increase their own academic motivation in order to be able to reduce academic procrastination.

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