

# The Influence of Self-Management Training on Decreasing Academic Procrastination Among Students Working on Thesis

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**Abstract.** Some students who are working on their thesis experience academic procrastination that causes them not to finish their thesis on time. One way to reduce academic procrastination is through self-management training. The purpose of this study was to determine the effect of self-management training on reducing academic procrastination in students who are working on their thesis. The hypotheses in the study are: 1) there are differences in academic procrastination among the experimental group and the control group after the intervention of self-management training; 2) there are differences in academic procrastination before and after the intervention of self-management training in the experimental group. The subjects of this study were 14 students working on a thesis for more than one semester with high and very high levels of academic procrastination. The length of the study is 10 days of training. Subjects were divided into an experimental group and a control group with 7 subjects each. Research data collection used the Academic Procrastination Scale. The module used is a modification of the self-management training module. The analytical methods used are independent sample t-tests and paired t-test analyses. The results of the analysis showed that 1) there is a significant difference in academic procrastination between the experimental group and the control group after being given self-management training ( $t = -4.193$  with  $p = 0.001$ ). The average score of the academic procrastination of the experimental group (mean = 70.71) was lower than the average score of the control group (mean = 91.29). 2) There is a significant difference between academic procrastination in the experimental group before attending self-management training and after attending self-management training ( $t = 3.853$ ,  $p = 0.008$ ). The experimental group pretest mean is 90.14 and the posttest mean is 70.71. The research also found that there is a significant difference in academic procrastination post-test (mean = 70.71) and follow-up (mean = 61.00) in the experimental group ( $t = 0.740$  with  $p = 0.010$ ).

**Keywords:** Academic Procrastination, Self-Management Training, Students, Experiment.

## 1 Introduction

One of the responsibilities of a student is to carry out and complete a thesis in the form of scientific research as a mandatory requirement for students to obtain a bachelor's degree (1). Wahyuni and Setyowati (2) explained that students should be able to complete their thesis and studies within a predetermined time frame. The demand to finish the final task can arise from

parents who want to see their children immediately get an academic degree, as well as academic standards that limit the study time and allow them to complete their thesis and studies. Darmono and Hasan in Aini and Mahardayani (3) found that although students commonly have one semester to complete their thesis, in fact many students need longer time to finish the thesis, and they were unable to fulfill the deadline.

Etika and Hasibuan (4) examined the problem of students completing a thesis and found that some students needed more time to work on the thesis due to a lack of motivation and attention to the thesis. This condition resulted from procrastinating behavior when working on revisions from the supervisor. In addition, Munawaroh et al. (5) stated that academic procrastination is caused by the behavior of delaying academic assignments that should be completed on time.

According to Green (in Ghufron and Risnawita, (6)), academic procrastination has been sorted and grouped from other delaying behaviors and specified into academic activities. In line with Green, Schouwenburg (in Kurniawan, (7)) explains that academic procrastination refers to the act of postponing assignments or study tasks for exams and substituting them with unnecessary activities. In addition, Solomon and Rothblum (in Ghufron and Risnawita, (6)) argued that academic procrastination involves the deliberate act of students postponing various academic tasks, such as writing, exam preparation, reading, administrative work, attending meetings, and completing overall academic assignments.

Ferrari (in Ghufron & Risnawita, (6)) stipulated that as a procrastination behavior, academic procrastination can be manifested in certain indicators that can be measured and observed through certain characteristics, such as delays in starting or completing assignments, delays in completing assignments, time gaps between plans and actual performance, as well as doing other activities that are more enjoyable. In addition, academic procrastination is influenced by internal and external factors. Internal factors come from physical and psychological conditions. While external factors come from parenting styles and environmental conditions (Ferrari in Ghufron & Risnawita, (6)),

Some previous research indicated that academic procrastination occurs among students who are working on their thesis. Zusya and Akmal (8) found that among 210 students in Jakarta who are in the process of working on their thesis, there is academic procrastination with a low level of 8.09%, medium 57.14%, and high 34.77%. Meanwhile, Supriyantini and Nufus (9) showed that of the 307 students at the University of North Sumatra who were in the process of working on their thesis, there was academic procrastination in the low category (24%), medium (44%), and high (32%). Then another study conducted by Nurhaliza (10) found that out of 202 students at a private university in Indonesia who were in the process of working on a thesis, 18.5% were in the very low category, 23.9% were low, 19.3% were moderate, 18.9% were high, and 20% were very high.

Academic procrastination results in a lot of time being wasted, assignments are neglected, and when finished, the results are not ideal (Ferrari in Munawaroh et al., (5)). Academic procrastination carried out by students tends to have an impact on low test scores, including in the final exam (Steel, Brothen, & Wambach, in Munawaroh et al., (5)). This is reinforced by the statement of Surijah and Tjundjing (11) that students who practice academic procrastination are prone to unsatisfactory academic performance, and they are even late in completing their thesis and graduating.

Based on previous research, there are several interventions that can be used to overcome or reduce the level of academic procrastination among students. Syaf (12) conducted research on self-efficacy training to reduce academic procrastination among student activists. The results show that self-efficacy training has a significant effect on reducing academic procrastination among student activists. Musslifah (13) conducted research on reducing academic procrastination through training in emotional regulation skills. The results of the study show that emotional regulation training has a significant effect on reducing academic procrastination. Research conducted by Putri et al. (14) regarding the effectiveness of self-regulation training on academic procrastination in students. The results show that self-regulation training can reduce academic procrastination.

Muliyadi et al. (15) examined the application of self-management techniques to reduce the academic procrastination habits of STKIP Muhammadiyah Enrekang students. The results show that self-management techniques can reduce academic procrastination. This research also uses self-management training as an effort to reduce the academic procrastination of students who are working on their theses. The self-management technique used in this study is different from that conducted by Muliyadi et al. (15). The self-management technique used in this study follows the model from Budiyani and Martaniah (16), which refers to the self-management principles of Latham and Frayne (17), Frayne and Geringer (18), and Kanfer and Goldstein (19), namely the self-management framework based on self-regulation proposed by Bandura. Based on some of these experts, Budiyani and Martaniah (16) divided self-management techniques into five stages: self-assessment, goal setting, self-monitoring, self-evaluation, self-reinforcement, making contracts, and assigning tasks.

Through self-assessment, the subject is taught to do self-assessment of the behavior to be changed. Subjects were asked to record when, why, where, and under what circumstances they procrastinated academically. This will help the subject know the pattern of behavior that has been occurring so that they can map it and determine which behavior will be changed.

In order for behavior change to be effective, individuals must first define and commit to big goals (Kanfer in Frayne and Geringer (18)). The accompanying stage is called goal setting. At this level, the subject is directed to set a target behavior that will be changed using the SMART principle, namely specific (a clear form of behavior and conditions to be changed), measurable, attainable (able to achieve), realistic, and timely (specified time). The target of academic procrastination behavior that will be changed will later be set forth in a behavior change contract or agreement.

After setting goals, the training proceeds with creating activities to ensure behavior change goals can be achieved properly, and in this case, they are related to self-monitoring. At the level of self-monitoring, subjects are taught to monitor their behavior in order to reduce academic procrastination based on predetermined goals. Individuals who monitor the new behavior that has been established will be aware of what is happening and have objective data about the things that are done and the conditions that accompany them, so they will always be aware of this behavior. According to Frayne and Geringer (18), in self-monitoring, individuals need to compare the information obtained from the results of self-observation with the target of behavior change or goal setting that will be achieved.

After self-monitoring, individuals need to carry out self-evaluations that will support successful behavior change (Simon in Frayne and Geringer (18)). At the self-evaluation stage, the subject

is taught and invited to evaluate behavior that supports the goal. Based on self-monitoring, the subject will be able to compare his or her academic procrastination behavior with the targets that have been set to change. If the behavior does not lead to the goal, then a solution will be formulated.

The final stage is self-reinforcement and contract-making. At this stage, the participants are taught or invited to make a commitment to carry out the behavior change contained in the change agreement, to give reinforcement or rewards to themselves if they succeed in achieving the set targets, and to provide punishment if they fail to reach the set targets. Reinforcements and punishments set forth in the form of change contracts can increase commitment to meeting targets to be achieved (Erez & Kanfer in Frayne and Geringer (18)). In addition, a change contract, according to Frayne and Geringer (20), can also assist in maintaining the behavior to be achieved and limiting the behavior to be reduced or eliminated. After understanding self-management techniques, the subject is then asked to apply these techniques.

Frayne and Geringer (18) explain that with self-management, individuals can manage environmental possibilities, generate cognitive support, and produce consequences for their actions. Furthermore, Frayne and Geringer (18) revealed that self-management training can also help individuals learn to function as their main agents for self-control. Low self-control, according to Green (in Ghufroon & Risnawita (6)), is one of the things that causes individuals to tend to be hesitant to do something or to procrastinate. This is in line with Steel (21), who explained that low self-control causes a person to procrastinate so that they are easily influenced and distracted from distractions while doing tasks.

In the social cognitive theory of self-regulation, Bandura (22) explains that there are other mechanisms in which individuals exercise self-control to achieve goals with a strong impact on thoughts, feelings, motivations, and actions. The mechanism, according to Bandura (22), is self-efficacy, which plays an important role for individuals in achieving goals. Bandura (in Frayne & Geringer (20)) states that self-efficacy is a significant influence of ability on individual belief in one's ability to carry out the effort or activity needed to achieve certain targets. Low self-efficacy will make a person have questions about self-capacity and be easily convinced by obstacles or disappointments. Ferrari (in Ghufroon & Risnawita (6)), through the concept of behavioral procrastination, explained that individuals who feel difficult and unhappy with their duties will engage in procrastination behavior as a way of avoiding those tasks. According to Ferrari et al. (23), individuals who often practice academic procrastination describe beliefs about low self-efficacy for their abilities.

Frayne and Geringer (20) stated that through self-management training, individuals can also increase self-efficacy for a relatively long time. Moreover, Bandura and Cervone (in Bandura (22)) explain that self-efficacy is very important for a person because it will help him to believe in his ability to motivate himself when he fails to achieve what he is looking for and survive until he succeeds in achieving the target he wants to achieve. According to Wahyuningsih et al. (24), high self-efficacy can help individuals do academic tasks well through positive behaviors because of their confidence in their abilities and can reduce academic procrastination.

Based on the description above, the hypotheses are: 1) there are differences in academic procrastination among the experimental group and the control group after the intervention of self-management training; 2) there are differences in academic procrastination before and after the intervention of self-management training in the experimental group. This research may make

at least two contributions. Firstly, this research offers theoretical benefits that are expected to contribute to the repertoire of knowledge in psychology. Secondly, this research provides a model of self-management training that can be recommended as an alternative way to reduce academic procrastination in students working on a thesis.

## **2 Literature Review**

### **2.1 Academic Procrastination**

Green (in Ghufron & Risnawati, (6)) argued that academic procrastination is a delaying behavior that has been sorted and grouped from other procrastination behaviors into academic activities. However, Schouwenburg (in Kurniawan, (7)) stated that academic procrastination is the behavior of delaying doing assignments or learning activities for exams and being replaced with other unnecessary activities. Whereas Solomon and Rothblum (in Ghufron & Risnawati, (6)) explained that academic procrastination is the behavior of delaying assignments carried out intentionally by students in academic areas, namely composing (writing papers or reports), studying for exams, reading, administrative work, attending meetings, and overall academic assignments. Based on those definitions, it can be concluded that academic procrastination mostly occurs among final-year students who are working on a thesis.

There are four characteristics of academic procrastination, according to Ferrari (Ghufron & Risnawati, (6)). The first is delays in starting or completing tasks; that is, individuals realize that the tasks they face must be completed immediately and will be useful for themselves but choose to delay starting to complete them. or procrastinating to finish until it's finished if he's already started working on it before. The second characteristic of academic procrastination is slowness in completing assignments, namely that individuals who carry out academic procrastination need more time than the time needed as a whole to complete a task. The third characteristic of academic procrastination is the time gap between plan and actual performance; that is, a person who procrastinates has problems getting the job done according to a predetermined time limit. A procrastinator often experiences delays in fulfilling unspecified time limits, both by other people and by plans he has made himself. Someone may intend to start completing assignments at a time that has been determined by himself. However, when there is an opportunity, he or she does not do the job according to what has been arranged, causing delays or an inability to complete academic assignments. The final characteristic of academic procrastination is doing other activities that are more fun. The individuals may deliberately delay completing their academic assignments and like to take advantage of the time they need to do various activities that are considered more fun and provide entertainment, such as reading, watching, talking, walking, listening to music, etc. As a result, the time to complete the work is wasted.

### **2.2 Self-Management Training**

Training is an attempt to teach knowledge, skills, and attitudes to carry out a job related to a particular task (Troelove in Kholidah & Alsa, (25)). Sikula (in Munandar (26)) defined training as a short-term educational process to provide knowledge and skills to trainees for specific purposes using systematic and organized procedures.

Prijosaksono and Sembel (27) defined self-management as a person's ability to see and monitor himself with every component that is in him when going through various circumstances that hinder him from achieving the goals that have been set. According to Frayne and Geringer (20), self-management is a person's attempt to control himself over certain aspects of his behavior. Meanwhile, self-management training, according to Sanders and Glynn (28), is an educational system given to participants to teach goal selection, self-monitoring, and planning or managing their own stimulus environment. It specifically focuses on the behavior of participants to be changed.

Based on the explanation above, it can be concluded that self-management training is short-term education to teach knowledge, skills, and attitudes in a systematic way to be able to identify and analyze, manage, control, and self-evaluate certain aspects of their behavior.

The stages of self-management follow Budiyani and Martaniah (16), which refer to the principles of self-management from Latham and Frayne (17), Frayne and Geringer (18), and Kanfer (29). Kanfer (29) suggests that to understand the self-management framework, it is necessary to pay attention to the several psychological processes that occur in self-regulation. The steps of self-regulation are (a) observing one's behavior, its causes, and consequences (self-observation), (b) assessing or comparing one's behavior with a standard or self-assessment (self-evaluation), and (c) giving self-reaction or self-reinforcement. Latham and Frayne (17) and Frayne and Geringer (18) conducted research on self-management training based on self-regulation stages. Based on the stages of self-regulation, a self-management technique involves three stages of self-regulation.

Based on the arguments above, this study proposes some stages of management techniques. The first is self-assessment, that is, individuals observe and record their own behavior or systematically collect data about their own behavior. The second is goal-setting, which determines the behavior to be changed. The third is the contract in which a goal is embodied in an agreement to undergo a behavior change program made by individuals and professionals (health workers, therapists, etc.). The fourth is self-monitoring, namely asking individuals to observe and record their own behavior, including when, where, and how long certain behaviors occur or do not occur. The fifth is self-evaluation, that is, individuals compare what they have done with predetermined goals or compare performance with a criterion or standard. The sixth is self-reinforcement, namely giving rewards or punishments systematically to oneself associated with decreasing or increasing the behavior that is the target of change. The final one is carrying out activities at home as part of the overall intervention program.

### **2.3 Self-management training and academic procrastination**

Bandura (in Latham & Frayne, (17)) proposed one theory that explains the effectiveness of self-management training: social learning theory. In addition, Bandura (in Hergenhahn & Olson, (30)) said that cognition, behavior, and the environment are interrelated with one another (reciprocal determinism). It was further conveyed that actions are not only determined by rewards and external punishments but are more determined or self-regulated. Individuals employ a combination of responsive and anticipatory approaches to self-control, wherein they responsively strive to narrow the disparity between established objectives and accomplishments while also proactively establishing novel and loftier objectives. Humans have the capacity to manipulate external factors that influence future behavior, but humans also have the ability to

regulate internal factors by monitoring their behavior and evaluating it in relation to personal goals.

Based on the explanation of the stages of self-management above, it can be illustrated how self-management affects academic procrastination. According to Kanfer (29), when individuals carry out self-assessments, they will learn to distinguish the behavior to be changed and record and map the behavior to be changed so that the individual will know the behavior patterns that have been occurring so far. Based on this, individuals who experience academic procrastination will recognize the activities that are carried out every day and find many activities carried out that do not lead to thesis work so that they will be able to change behavior that is not related to thesis work.

Sheridan and Radmacher (31) revealed that setting goals can increase motivation to make lifestyle changes. Based on this opinion, someone who experiences academic procrastination when able to set goals will increase motivation to make changes related to procrastination behavior to work on their thesis.

### **3 Method**

#### **3.1 Participants**

The subjects of this study were 14 students from 5 higher education institutions in Yogyakarta Province who were working on a thesis for more than one semester with high (79.75 to 94.25) and very high (more than 94.25) levels of academic procrastination. Subjects were divided into an experimental group and a control group with 7 subjects each. The placement of the subject was done randomly using votes.

#### **3.2 Data collection tools**

The data collection method uses the Academic Procrastination Scale, compiled by Rahayu (32). The scale refers to the characteristics of academic procrastination according to Ferrari (in Ghufron and Risnawati (6)), namely: 1) delays in starting or completing work on the task at hand; 2) slowness in completing tasks; 3) time gap between plan and actual performance; and 4) doing other activities that are more fun than completing the tasks that must be done. The reliability coefficient was 0.878, and the validity of the item results (29 statement items) ranged from 0.354 to 0.596 (32).

#### **3.3 The Procedure of the Research**

The researchers did screening for subjects by administering the Academic Procrastination Scale using Google Form to 20 people and found that 14 people met the criteria. The scores obtained are then used as pretest data. Then research subjects were asked to fill out an informed consent sheet.

The intervention used was self-management training using a modified self-management training module compiled by Budiyaning and Martaniah (16). The self-management module refers to the principles of self-management from Lathan and Frayne (17), Frayne and Geringer (18), and Kanfer (29), namely: 1) self-assessment; 2) goal setting; 3) self-monitoring; 4) self-evaluation; and 5) self-reinforcement and contracting. The implementation of management training is

explained in the table below. The posttest scale was given right after the research subjects had completed self-management training. Follow-up was carried out 1 week after the posttest.

**Table 1.** Intervention Schedule (Self-Management Training)

Day/Date	Time	Activities
Day 1	08.15 – 08.30	Preparation
	08.30 – 08.45	Opening and introductions
	08.45 – 09.15	Providing motivation to change
	09.15 – 09.45	Explanation of self-management
	09.45 – 09.55	Explanation of self-assessment
	09.55 – 10.15	Conducting self-assessment
	10.15 – 10.45	Explanation of goal setting
	10.45 – 11.00	Explanation of self-monitoring
	11.00 – 11.45	Identifying self-rewards and self-punishments
	11.45 – 12.30	Explanation and creation of change contract
Day 2 to 4	-	Practice executing a 3 day change contract
Day 5	18.15 – 18.30	Preparation
	18.30 – 19.30	Discussion of the results of executing the contract
	19.30 – 19.45	Explanation of self-evaluation
	19.45 – 20.30	Explanation of strategies for dealing with obstacles
	20.30 – 21.00	Creation of new contracts
Day 6 to 9	-	Practice running the new change contract for 4 days
Day 10	08.45 – 09.00	Preparation
	09.00 – 10.30	Discussion of the results of contract implementation
	10.30 – 11.00	Closing

### 3.4 Data Analysis

The experimental design used in this study is Pretest-Posttest Control Group Design. Methods of data analysis using parametric data analysis techniques namely independent sample t-test and paired t-test

## 4 Result

The assumption tests carried out are the normality test and the homogeneity test. Normality test applied the Kolmogorov-Smirnov Test of Normality. The results of the normality test calculations are presented in table below. The results show (Table 2) that all data follows a normal data distribution.

**Table 2.** Test of Normality

	Kolmogorov-Smirnov <sup>a</sup>		
	Statistic	df	Sig
KE_Pretest	<b>,299</b>	7	<b>,059</b>
KE_Posttest	<b>,200</b>	7	<b>,200*</b>
KK_Pretest	<b>,178</b>	7	<b>,200*</b>
KK_Posttest	<b>,214</b>	7	<b>,200*</b>

\*. This is a lower bound of the true significance.



a Lilliefors Significance Correction

Homogeneity test using Levene's Test for Equality of Variances. The results of the homogeneity test analysis can be seen in the **Table 3**. The results show that the data meets the homogeneity requirements.

**Table 3.** Homogeneity Test (Pre-Post test)

Equal variances assumed	Levene's Test for Equality of Variances	
	F	Sig.
Pre-Test	,022	<b>,884</b>
Post-test	,905	<b>,360</b>

Independent sample t-test analysis was carried out to see the differences in academic procrastination in the control group and the experimental group after self-management training intervention. The results can be seen in the **Table 4**. The results show that there were differences in academic procrastination in the control group and the experimental group after participating in self-management training.

**Table 4.** Independent Samples Test (Posttest)

	T-test for Equality of Means						
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Equal variances assumed	<b>-4,193</b>	12	<b>,001</b>	-20,571	4,906	-31,261	-9,882
Equal variances not assumed	-4,193	11,005	,002	-20,571	4,906	-31,369	-9,774

The Paired t-test analysis was used to determine whether there was a difference in academic procrastination between pretest scores and posttest scores in the experimental group. The results of the Paired t-test analysis can be seen in the **Table 5**. The results show that there is a significant difference between academic procrastination in the experimental group before self-management training and after self-management training intervention.

**Table 5.** Paired Samples Test

	Paired Differences							
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pretest KE – Posttest KE	19,429	13,340	5,042	7,091	31,766	<b>3,853</b>	6	<b>,008</b>

The research also found out that there is a significance difference of academic procrastination of post-test (mean = 70.71) and follow-up (mean = 61.00) in the experimental group ( $t = 0.740$  with  $p = 0.010$ ). The result of the analysis can be seen in **Table 6**.

**Table 6.** Paired Samples Test Posttest-Followup

	Paired Differences						t	df	Sig. (2-tailed)
			95% Confidence Interval of the Difference						
	Mean	Std. Deviation	Std. Error	Lower	Upper				
Posttest_KE - FollowUp_KE	9,714	6,873	2,598	3,358	16,071	<b>3,740</b>	6	<b>,010</b>	

## 5 Discussion

The analysis results of the paired sample t-test show a value of  $t = 3.853$  with  $p = 0.008$  (mean pretest = 90.14 and mean posttest = 70.71). Analysis results: independent sample t-test shows a value of  $t = -4.193$  with  $p = 0.001$  (mean posttest experimental group = 70.71 and mean posttest control group = 91.29).

These results indicate that the hypothesis is accepted. Firstly, there is a difference in the level of academic procrastination in the experimental group of students who are working on their thesis before and after being given self-management training, where academic procrastination in the experimental group of students who are working on their thesis after being given self-management training is lower than before being given self-management training. Secondly, there is a difference in the level of academic procrastination in students who are working on their thesis between the experimental group (the group given self-management training) and the control group (the group that was not given self-management training) after self-management training. After self-management training, the academic procrastination in the group experiment was lower than in the control group.

The results of this study support the results of previous studies (15,33), namely that there is an effect of self-management training on academic procrastination in students. Iskandar (34) argued that self-management training has several advantages for its participants, such as being able to make them more motivated to achieve goals, more able to control themselves, reducing dependence on other people or the environment, and being practical, more efficient, inexpensive, and easy to implement. Terry (in Mariyati, (35)) revealed that self-management training will provide benefits for individuals because it can help to plan, organize, and monitor oneself in a more positive, active, and productive manner. Kanfer (29) further stated that in self-management training, there are tasks and practices that must be done. This can teach someone how to respond to changes in behavior. By being given a task, it can make individuals more confident that behavior change can be carried out and offer an opportunity to practice skills in dealing with obstacles that occur. Frayne and Geringer (18) revealed that self-management training can make individuals learn to function as the main agent for self-control. It was further

explained that with self-management, individuals can manage environmental possibilities, produce cognitive support, and produce consequences for their actions.

At the end of the self-management training, the research subjects stated that they felt more confident that they would be successful with the process of working on their thesis compared to before attending the self-management training. The feeling of being sure of success on the subject shows an increase in self-efficacy after participating in self-management training. This also supports the statement of Frayne and Geringer (20) that through self-management training, individuals can also increase self-efficacy for a relatively long time.

Bandura and Cervone (in Bandura, (22)) explain that self-efficacy is very important for a person because it will help him to believe in his ability to motivate himself when he fails to achieve what he is looking for and survive until he succeeds in achieving the target he wants to achieve. Wahyuningsih et al. (24) stated that individuals who have high self-efficacy can do academic tasks well through positive behaviors because they have confidence in their abilities, so they can reduce academic procrastination behavior. In addition, Tuaputimain (36) proved that the higher the level of self-efficacy in students, the lower the level of academic procrastination in completing a thesis.

One week after the posttest, a follow-up stage was conducted to find out whether the effect of the treatment still persists in the experimental group subjects. The analysis results of paired t-test experimental groups for posttest obtained  $t = 3.740$  with  $p = 0.010$ . This means that there is a significant difference between academic procrastination in the experimental group at the time it was carried out posttest and the time it was done follow-up, where the current student academic procrastination score is lower than the current student academic procrastination posttest. Thus, the experimental group's academic procrastination score at the time of follow-up decreased compared to the experimental group's academic procrastination score at the time of the posttest.

During follow-up, subjects 1 and 6 revealed that their motivation to work on the thesis had increased by continuing to add time periods to work on the thesis every day even though the self-management training had been completed. These results indicate that the self-management training results in an increase in performance in working on the thesis and a decrease in the level of academic procrastination, even though they are no longer in a guided condition in self-management training. These findings support the results of research from Frayne and Geringer (2000) that the effect of self-management training on trainees is an increase in performance at a certain level that is gradual and sustainable over time and does not only occur when given self-management training treatment.

## **6 Conclusion**

Based on the results of the research described above, it can be concluded that 1) there are differences in academic procrastination among the experimental group and the control group after the intervention of self-management training. 2) There are differences in academic procrastination before and after the intervention of self-management training in the experimental group. (3) There is a significant difference in academic procrastination post-test and follow-up in the experimental group.

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