# CBT Counseling with Cognitive Restructuring Techniques to Increase Self Efficacy in Students' Learning of Junior High School

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#### **Abstract**

This study aims to determine the effect of CBT counseling with cognitive restructuring techniques on increasing learning selfefficacy. The subjects used in this study were students of SMP Negeri 2 Silima Punggapungga as many as 75 students. The method used in this assessment is the Pre-Experimental design method with a one group pretest-posttest model. The hypothesis in this study states that there are differences in student learning selfefficacy before and after being given CBT Counseling with Cognitive Restructuring techniques. Self-efficacy learning in students will increase after being given CBT counseling with Cognitive Restructuring techniques. The results of data analysis using paired T test obtained the correlation value (r) between before and after conducting CBT counseling with cognitive restructuring techniques was 0. 507 with a significant 0.000 and T = -4.805 with a significant p = 0.000 < 0.05 which indicates that there is a difference between self learning efficacy before and after CBT counseling with cognitive restructuring techniques, which means the hypothesis can be accepted. The conclusion is that CBT counseling with cognitive restructuring techniques has an effect on increasing learning self-efficacy in students of SMP Negeri 2 Silima Punggapungga.

## Keywords

CBT counseling; cognitive restructuring techniques; learning self-efficacy



### I. Introduction

Human life is related to education. Education is something that is needed by every individual, which is obtained since he was born into the world. A child gets the first education from within the family through the upbringing of his parents. In addition, education can also be obtained from school, the environment around the place of residence and the environment of friendship. According to Piaget (in Syaiful, 2013), education is a liaison between two sides, on the one hand individuals who are growing and developing, and on the other hand social, intellectual, and moral values are the responsibility of educators to encourage these individuals. It is no less important to emphasize the process of developing the personality of students as a whole.

In the development of the world of education, especially after the rolling reforms, new phenomena have arisen in educational institutions, which are schools that use the term Integrated Islamic Schools (Titik, 2010: 42). The school is essentially aimed at helping parents teach good habits and add good character, also given education for life in society that is difficult given at home. Thus, education in schools is actually part of education in the

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family, which is also a continuation of education in the family (Daulay in Ayuningsih, W. et al. 2020).

Education is the foundation of a successful career, financial freedom, the ability to think and reason critically and to make informed decisions. Without education we will be limited to perform tasks and we will be ignorant to the things that are happening in and around our surrounding, and according to Martin Luther King, a people without knowledge is like a tree without roots. For education to be of great value, curriculums should be implemented. (Philips, S. 2020)

In the learning process, there is a transformation of knowledge and values. When the learning process takes place, there is an interaction between the teacher and the students which makes it possible for the teacher to be able to recognize the characteristics and potentials of the students. Vice versa, when learning students have the opportunity to develop their potential so that this potential can be optimized. Therefore, education is no longer a stimulus but an effort to develop its potential. Knowledge is not given, but is built by students (Sanjaya, 2016).

Crow and Crow (in Noviandari and Kawakib, 2016), state that learning is the acquisition of habits, knowledge, and attitudes, including one's efforts in overcoming obstacles or adjusting to new situations. When entering adolescence, various kinds of changes appear in the teenager itself. These various kinds of changes where adolescents experience an identity crisis or it can be said that they have not yet reached their optimal self-development and potential, it tends to make adolescents feel restless, confused, worried. As a result, many problems arise in the youth, one of which is the lack of confidence in adolescents in their own abilities to produce an achievement in a situation, as well as to encourage students to achieve optimal learning outcomes.

Based on the data on the percentage of self-efficacy interventions, student academics in terms of academic self-efficacy indicators increased by 25.85% (pre-cycle percentages were 40.62 and 66.45 in the first cycle). Student studies also increased by 6.5% (the average value of pre-cycle learning outcomes in the first cycle was 70.18 and 76.68). In the second cycle, the students' academic self-efficacy continued to increase, as evidenced by the increased academic self-efficacy indicators 17: 42%. The study of students in cycle II also increased by 8:14% and the percentage of completeness increased by 12.9% (the percentage of cycle I and cycle II was 80.64 vs. 93.54%) in junior high school students (Nurhayati et al, 2015).

On his official website, the Minister of Education and Culture stated that one of the problems faced by children in Indonesia is the lack of self-confidence. However, this feeling affects its development. The formation of children's character for self-confidence starts from family education. The family is the basic foundation of children's education. Self efficacy will encourage people to be able to work hard, so people are capable, do not feel they are capable and this sense of ability is important. Many people are capable but do not believe in themselves, that they have the ability. The Minister of Education and Culture said that some research related to self-efficacy in students was still lacking. So actually they are able, but they don't feel they can, because they don't feel they can, then it is suggested that they don't have the courage to do it(www.kemdikbud.go.id).

The same thing is also experienced by students at SMP N2 Silima Punggapungga. Based on the results of interviews conducted with teachers who teach at the school, it is stated that there are students who feel less confident in their abilities and also many students who feel less confident about the tasks they have done on the grounds that the students are afraid of making mistakes. Another thing is also known that during teaching and learning activities students sometimes actively ask questions related to the material, but it depends on the material presented and also if given time to ask questions there are some students who

will spontaneously ask questions but more of them must be directed directly by the teacher. The student will ask questions related to the material taught in class.

According to Alwisol (2018), self-efficacy is self-assessment, whether you can take good or bad actions, right or wrong, can or cannot do as required. Self-efficacy is important for student growth and development because it is related to student development tasks, namely personal development maturity. Students are expected to be able to recognize their own characteristics, accept themselves realistically and positively, and participate in positive activities in order to develop their abilities and personality. Perceptions of self-efficacy are subjective and specific to various things. According to Yusuf and Nurihsan (in Noviandari and Kawakib, 2016),

There are several aspects that affect self-efficacy, the first is the level (level), which refers to the types in various levels of the task, the second is generality, namely self-confidence in all abilities in dealing with problems on the task, and the third is strength. (strength) which is felt by the ability that a person can complete the given task (Monika & Adman, 2017). Student learning self-efficacy is also influenced by several factors, including experience of mastery, social modeling, social persuasion, physical and emotional conditions. To increase student learning self-efficacy, it is necessary to have guidance and counseling.

Related to the above, it is necessary to make an effort to increase self-efficacy, one of which is counseling with Cognitive Restructuring techniques. This technique is one of the cognitive-behavioral approaches. According to Erford (2016), to train self-efficacy students can be given CBT counseling with cognitive restructuring techniques, namely to help clients systematically analyze, process, and overcome cognitive-based problems by replacing negative thoughts and interpretations with positive thoughts and interpretations. Furthermore, Putranto (2016), states that Cognitive Behavior focuses on activities to change the destructive mindset of thoughts and behavior. Several types of cognitive behavior therapy (CBT) practice are known with different techniques, some emphasize cognitive processes rather than behavior, but some work purely on cognitive aspects. In CBT, it is directed to modify the function of thinking, feeling and acting by suppressing the role of the brain in analyzing, asking, acting and deciding again so that it is expected to change it to be more positive (Cormier & Cormier, in Mirza & Sulistyaningsih, 2013). It was further explained that the Cognitive Behavior approach basically believes that human thought patterns are formed through a series of interconnected Cognitive Stimulus Response (CRC) processes that form a kind of SKR network in the human brain, where cognitive processes will be the determining factor in explaining how humans think, feel.

Based on research conducted by Noviandari and Kawakib (2016), it is known that group counseling with cognitive restructuring techniques is effective in increasing the learning self-efficacy of students in class X APk SMK PGRI Rogojampi for the 2016/2017 academic year. Other results also showed that there were differences between the experimental group and the control group in increasing learning self-efficacy. When (self-efficacy) is high, we feel confident that we can make a certain response to get reinforcement. Conversely, if it is low, then we feel anxious that we are not able to carry out the response.

Erford (in Rufaidah and Karneli, 2020) states that cognitive restructuring is commonly used with individuals whose minds are polarized, show fear and anxiety in certain situations, or overreact to ordinary life problems by using extreme measures. According to Connolly (in Noviandari and Kawakib, 2016), the purpose of implementing cognitive restructuring techniques is to help counselees learn to think differently, to change wrong, basic thoughts and replace them with more rational, realistic, and positive thoughts. Thinking errors are expressed through negative self-statements. Negative self-statements indicate irrational thoughts, views and beliefs

Based on the cases and phenomena described above, it shows that counseling with cognitive restructuring techniques can increase student self-efficacy. So the researchers are interested in conducting a study with the title "CBT Counseling with Cognitive Restructuring Techniques to Improve Self Efficacy in Learning for Students at SMP Negeri 2 Silima Punggapungga". The hypothesis in this study, Ho = there is no difference in student learning self-efficacy before and after being given CBT counseling with cognitive restructuring techniques, while Ha = there is a difference in student learning self-efficacy before and after being given CBT counseling with cognitive restructuring techniques.

Based on the background of the problem described above, the formulation of the problem in this study is "How is CBT Counseling with cognitive restructuring techniques to increase the self-efficacy of learning at SMP Negeri 2 Silima Punggapungga". The purpose of this study was to increase students' self-efficacy through CBT counseling with cognitive restructuring techniques for students of SMP Negeri 2 Silima Punggapungga.

## **II. Research Methods**

The type of research used in this research is pre-experimental design research. Sugiyono (2017), revealed that this design is not yet a real experiment. This is done because there are still external variables that also influence the formation of the dependent variable. So the experimental results which are the dependent variable are not solely influenced by the independent variables. This can happen, because there is no control variable, and the sample is not chosen at random. The research design used in this study was "One Groups Pretest-Posttest Design", namely a research design that contained a pre-test before being given treatment and a post-test after being given treatment. Thus it can be known more accurately, because it can be compared with being held before being given treatment (Sugiyono, 2010).

According to Sugiyono (2016) population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics set by researchers to be studied and then drawn conclusions. The population of this study was all class VIII at SMPN 2 Silima Punggapungga, totaling 96 students. The sample is part of the number and characteristics possessed by the population. The sample in this study amounted to 75 students. The number of samples in this study used the provisions revealed by Isac and Michael (in Sugiyono, 2016) with the results of calculating the minimum sample size of 75 students for an error rate of 5% based on a population of 96 students. According to Sugiyono (2016) the sampling technique is a sampling technique that aims to determine the sample to be used in research. The sampling technique used in this study was proportionate stratified random sampling. This technique is used because the population is proportionally stratified, because there are the same samples in each class.

According to Prasetyo and Jannah (2014) the steps that must be taken before determining the sample are taking each proportion from the population group and multiplying it by the sample size. The following is a table that describes the sampling technique in determining the number of samples from each strata or level proportionally in this study, namely:

		Number of samples
Class	The number of students	(class population/Overall population) x specified number of samples
VIII A	32 students	$32/96 \times 75 = 25 \text{ students}$
VIII B	32 students	$32/96 \times 75 = 25 \text{ students}$
VIII C	32 students	$32/96 \times 75 = 25 \text{ students}$
Total	96 students	75 students

The data to be obtained in this study is through the provision of counseling with cognitive restructuring techniques in the form of pre-test and post-test. The pre-test and post-test were used to determine the effect of cognitive restructuring on students' self-efficacy. The data collection method used in this study was to use a scale to measure students' self-efficacy at school. The type of scale used in this study is the Likert scale.

### III. Results and Discussion

This research was conducted on September 1, 2021 on 75 students of class VIII SMP Negeri 2 Silima Punggapungga. Data collection begins by distributing the self-efficacy scale with the Likert scale method to assess the research variables. The weight calculation for each item is inputted into Microsoft Excel and then copied and calculated using IBM SPSS Statistics Version 25 software for data analysis.

The hypothesis in this study, Ho = there is no difference in student learning self-efficacy before and after being given CBT Counseling with Cognitive Restructuring Techniques. Student learning self-efficacy did not increase after being given CBT Counseling with Cognitive Restructuring Techniques, while Ha = there was a difference in student learning self-efficacy before and after being given CBT Counseling with Cognitive Restructuring Techniques. Self-efficacy learning in students will increase after being given CBT Counseling with Cognitive Restructuring Techniques. The results obtained from the statement and table paired sample T Test can be concluded that the subject data Ha is accepted and Ho is rejected, which means that there is a difference in student learning self-efficacy before and after being given CBT Counseling with Cognitive Restructuring Techniques.

# **3.1** Assumption Test

According to Yuliawati, et al (2019), before testing the hypothesis, assumptions were first tested. In experimental research, this assumption test is needed to see the normality test and homogeneity test.

# 3.2. Normality Test

Normality test is a procedure used to determine whether the data comes from a normally distributed population or is in a normal distribution. If the variable meets the assumption of normality, then the variable is considered to meet normality (Nuryadi., et al. 2017). Here are the results of the normality test.

**Table 1.** Normality Test Results Case Processing Summary

	V	Alid	Case Missing		Total	
N		Percent	N	Percent	N	Percent
Pretest	75	100.0%	0	0.0%	75	100.0%
Posttest	75	100.0%	0	0.0%	75	100.0%

**Tests of Normality** 

Kolmogorov-Smirno Va				Shapiro-Wilk			
Statistics		df	Sig.	Statistics df		Sig.	
Pretest	.083	.083 75 .200* .977		75	.192		
Posttest	.065	75	.200*	.988	75	.726	

Based on the normality test table above, namely the Shapiro-Wilk test with a significance > 0.05 in the pretest and posttest subjects, namely 0.192 and 0.726, so that the results of the normality test obtained data with normal distribution.

# 3.3. Homogeneity Test

Homogeneity test is a statistical test procedure intended to show that two or more groups of sample data come from populations that have the same variance (Nuryadi., et al. 2017).

**Table 2.** Homogeneity Test Results

		lavender Statistics	df1	df2	Sig.
Pretest and posttest	Based on Mean	2,511	1	148	.115
results	Based on Median	2,529	1	148	.114
	Based on Median and with adjusted df	2,529	1	140,863	.114
	Based on trimmed	2,491	1	148	.117
	mean				

Based on The homogeneity test table above is the Test of Homogeneity of Variance with a significant value > 0.05 on the mean pretest and posttest results on the subject of 0.115 (0.115 > p = 0.05), so from the homogeneity test results obtained that the sample is homogeneous.

# 3.4. Hypothesis Test

After the assumption test is accepted, the hypothesis is tested. The hypothesis in this study is to see an increase in student learning self-efficacy before and after being given CBT counseling with cognitive restructuring techniques.

**Table 3.** T. Test Results Paired Sample Statistics

	mean	N	Std. Deviation	Std.Error Mean
Pretest	98.93	75	10,712	1,237
Posttest	104.36	75	8,647	.998

Paired Samples Correlations

	N	Correlation	Sig.	
Pair 1 Pretest & Posttest		75	.507	.000

Paired Samples Test

	Tuned bumples Test									
					Differences					
				95% Confidence of						
				Std.	the Di	fference				
			Std.	Error			t	df	Sig	
		mean	Deviation	mean	Lower	Upper			. (2- tailed)	
Pair 1	Pretest -									
	Posttest	-5.427	9.782	1,129	-7,677	-3.176	4.8 05	74	.000	

The correlation value between before and after CBT Counseling with Cognitive Restructuring Technique is 0.507 with a significance of 0.000. The result of the T test was - 4.805 with a significance of 0.000, =5% or 0.05, df=74 significance=0.025, Ha=accepted if sig.(2-tailed) < 0.05 Ha=rejected if sig.(2-tailed) > 0.05

From statements and tables paired sample T Test above, it can be concluded that the data subject Ha is accepted and Ho is rejected, we can see from the data sig. (2tailed) found in the t-test above is 0.000 where 0.000 0.05, it can be concluded that Ha is accepted and Ho is rejected, which means that there is a difference in student self-efficacy before and after being given CBT Counseling with Cognitive Restructuring Techniques. Self-efficacy learning in students will increase after being given CBT Counseling with Cognitive Restructuring Techniques.

#### IV. Conclusion

Based on the results of the study, it can be concluded that CBT counseling with cognitive restructuring techniques has an effect on increasing learning self-efficacy in students of SMP N 2 Silima Punggapungga. This can be seen from the value of the results of data analysis using paired T test, the correlation value (r) between before and after conducting CBT counseling with cognitive restructuring techniques is 0.507 with a significant 0.000 and T = -4.805 with a significant p = 0.000 < 0.05 which indicates that there is a difference between learning self-efficacy before and after CBT counseling with cognitive restructuring techniques, which means that the hypothesis can be accepted.

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