

Implementation of Cognitive Restructuring Techniques to Improve The Open Mindedness of Students of SMPN 3 Masjid Raya Banda Aceh

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Abstract: This study aims to determine the influence of cognitive restructuring techniques on increasing the open mindedness of students of SMPN 3 Mesjid Raya Banda Aceh. An open-mindedness attitude or openness to new ideas and views is very important for the cognitive and social development of students because it can affect their learning process and social interaction. To maintain this attitude, one of the efforts that can be made is with cognitive restructuring techniques, which is an approach that aims to improve students' open-mindedness behavior. This research used an experimental method with a one-group pre-test post-test design. The population amounted to 22 students in grades VII and VIII, are taken by using the total sampling technique. Data collection instruments are in the form of questionnaires and documentation. Data analysis was conducted using a paired sample t-test with a significance level of 0.05 after meeting the test prerequisites. The results of the study showed an increase in the average score from pretest (47) to posttest (75), after cognitive reconstruction techniques were carried out, then based on statistical tests also showed a $t_{table} > t_{cal}$ value ($8,090 > 0.602$), so that H_a was accepted and H_o was rejected. This proves that cognitive restructuring techniques have a positive effect on increasing the open mindedness of SMPN 3 Mesjid Raya Banda Aceh students.

Keywords: : Cognitive Restructuring Techniques, Open Mindedness

INTRODUCTION

Open-minded skills (*open mindedness*) in the midst of the rapid flow of globalization and information development today, it is one of the crucial competencies that need to be possessed, especially by students who are experiencing cognitive and social development phases. Attitude *open minded* reflects openness to diverse ideas, viewpoints, and new thinking, as well as the ability to respond to differences and uncertainties in a positive and constructive way.

Open mindedness is a very important attitude in education, especially among students. This attitude allows learners to accept a variety of perspectives, collaborate with peers, and develop critical thinking skills. By improving open-mindedness behavior, students can be better at dealing with challenges and differences of opinion, which are an integral part of the learning process. Safitri, A. (2015).

According to Jason Baehr *open mindedness* involves a rational evaluation process that aims to find the truth, in which individuals must be willing to adjust their beliefs or belief levels based on the results of those evaluations. This shows that open-mindedness is not just about listening to other views, but also about being open to changing personal views if there is a strong argument. Baehr, Jason. (2011).

According to Robert Ennis, the *open mindedness* can be identified through a series of characteristics and attitudes that indicate the individual's ability to

consider and evaluate different ideas and views. The 13 indicators *open mindedness* according to Ennis are: assessing arguments critically, being open to different views, avoiding prejudices, thinking reflectively, acknowledging uncertainties, readiness to change opinions, accepting and respecting feedback, respecting different perspectives, thinking critically about one's own beliefs, participating in constructive discussions, respecting the views of others, integrating different ideas, maintaining open-mindedness in the face of conflict. Ennis, R. H. (1996).

Based on the results of initial observations at SMPN 3 Mesjid Raya, it was found that many students had not shown any characteristics *open mindedness* such as openness to new ideas and the ability to listen and consider different views without jumping to conclusions. This can be seen when teachers or classmates give opinions, some students at SMPN 3 Mesjid Raya do not listen attentively, do not even try to understand the perspective of others. In addition, when given the opportunity to express their opinions, students are often unwilling to express their opinions and do not engage in some discussions. This shows the lack of openness of students to new ideas. Observation, (2021)

The role of BK teachers in counseling guidance is very important, both in the sustainability of teaching and learning activities and as coaches as well as helping to handle various problems experienced by students. With the existence of BK teachers in school institutions, it is possible to solve a problem, including the problem of students who are not open-minded.

This case, BK teachers need to apply different techniques and approaches for each problem and student personality. In counseling guidance, there are many approaches and techniques that might be applied to solve students' problems, the technique applied in this study is cognitive restructuring.

The cognitive therapy approach was developed by Aaron Beck, according to him an individuals who experience depression reveal that individuals have negative beliefs in their lives. Cognitive restructuring is one of the cognitive techniques that is in the approach *cognitive behavior therapy*. Cognitive restructuring describes the scheme of change found in cognitive therapy. Cognitive therapy can be used in counseling at various levels of education, age, children to adults was used in schools, as well as vocational programs. Judith S, Beck, (2011).

Cognitive Restructuring techniques help clients systematically analyze, process, and address cognitive-based problems by replacing negative thoughts and interpretations with positive thoughts and interpretations. Cognitive restructuring involves applying learning principles to the mind. This technique is designed to help achieve better emotional responses by changing habitual assessment habits in such a way that they become less biased. Harwanti Novindari and Jawahirul Kawakib, (2021).

The above opinion is relevant to the results of research conducted by Nazwa Manurung and Siti Rahmi, who describe that Cognitive Restructuring Techniques can help and change negative views on failure, make clients more willing to carry out desired activities, focus more on change, eliminate negative

thoughts about something, and help clients to be more enthusiastic in living life. Nazwa Manurung and Siti Rahmi, (2021).

Based on the above background, this study will further explore whether cognitive restructuring techniques can improve attitudes *open mindedness* students with the title: "Implementation of Cognitive Restructuring Techniques to Improve the Open Mindedness of SMPN 3 Banda Aceh Grand Mosque Students".

METHODS

This study uses quantitative research methods, namely experimental methods, with model design *One Group Pre-Test Post-Test*. The researcher will conduct preliminary measurements (*Pre-test*) to the research subject, then gave treatment three times using cognitive restructuring techniques. After treatment, re-measurements are taken (*post-test*) to find out the changes that occur after the treatment is given.

The scheme of this research design is as follows:

Pre-Test	Treatment	Post-Test
O ₁	X ₁	O ₂

Information:

O₁ : Pre-test, which is the initial condition of students before being given treatment

using cognitive restructuring techniques.

X₁ : Treatment in the form of cognitive restructuring techniques.

O₂ : Post-test, which is the condition of the student after being given treatment.

The population in this study is all students of SMPN 3 Mesjid Raya in grades VII and VIII of the 2020/2021 Academic Year. Meanwhile, the sample of this study consists of 2 classes, namely class VII and class VIII which totals 22 students.

Then the instruments that will be used for data collection in this study are questionnaires and documentation. In the questionnaire, the Likert scale is used to measure respondents' attitudes, opinions, or perceptions of various statements related to the variables being studied.

RESULTS

1. Research Results

The results of the research described are in the form of presenting data on the results of the distribution of questionnaires. Data management is carried out through normality tests. The results of this study were obtained from research carried out on June 2 - June 11, 2022. The results of the research are described as follows:

a. Data presentation

The results of the distribution of questionnaires (*pre-tests*) to students in grades VII and VIII at SMPN 3 Mesjid Raya can be seen in the following table 1:

Table 1 Results of questionnaire scores (pre-test) of students of SMPN 3 Mesjid Raya

Yes	Name	Class	Shoes	Information
1	AN	VII	50	Low
2	WITH	VII	76	Tall
3	I	VII	55	Keep
4	RA	VII	53	Low
5	AP	VII	52	Low
6	AR	VII	85	Tall
7	NF	VII	64	Keep
8	AS	VII	54	Keep
9	AGO	VII	46	Low
10	MS	VII	44	Low
11	LN	VII	49	Low
12	WY	VII	67	Keep
13	AH	VII	43	Low
14	MF	VIII	65	Keep
15	BUT	VIII	62	Keep
16	MK	VIII	58	Keep
17	MR	VIII	45	Low
18	AH	VIII	60	Keep
19	MZ	VIII	42	Low
20	RU	VIII	41	Low
21	RR	VIII	39	Low
22	ZK	VIII	56	Keep

Based on the results of *the pre-test* score in table 4.1, it shows that students who have scores in the low category are 10 students, and in the medium category 10, and in the high category 2 students. Students who have low scores will be given treatment twice.

The category of *open mindedness* behavior level can be determined using the following formula:

$$x_{max} = 85$$

$$x_{min} = 39$$

$$\text{Range} : x_{max} - x_{min} : 85 - 39 : 46$$

$$\text{Mean} : \frac{x_{max} + x_{min}}{2} : \frac{85 + 39}{2} :$$

$$\text{Standard Deviation (SD)} : \frac{\text{Range}}{6} : \frac{46}{6} : 8$$

From the description above, it can be categorized as low, medium, and high as follows:

$$\text{Low} : x < M - SD$$

$$: x < 85 - 39$$

	: $x < 54$
Keep	: $(M - SD) \leq x < (M + SD)$
	: $(85 - 39) \leq x < (85 + 39)$
	: $54 \leq x < \text{this Article, the Parties shall ensure that}$
Tall	: $x \geq M + SD$
	: $x \geq 85 + 39$
	: $x \geq 70$

Thus, the category of *open mindedness behavior* can be seen in the following table 4.2.

Table 2 Categories of Open Mindedness Behavior

Yes	Value Limit	Category
1	$x < 54$	Low
2	$54 \leq x < 70$	Keep
3	$x \geq 70$	Tall

From table 4.2 above, it can be seen that students who have a score less than 54 are in the low category, while students who have a score greater than 54 and less than 70 are in the medium category and students who have a score greater than 70 are in the high category.

b. Data processing

1. Data Pre-test

Based on table 4.2 and referring to table 4.1 above, it is found that students who have scores in the low category are as many as 10 students who will then be given treatment (*treatment*) twice. The following is data on pre-test scores of students who are in the low category

Table 3 Pre-test Results of Students in the Low Category

Yes	Name	Class	Shoes	Information
1	AN	VII	50	Low
2	RA	VII	53	Low
3	AP	VII	52	Low
4	AGO	VII	46	Low
5	MS	VII	44	Low
6	LN	VII	49	Low
7	AH	VII	43	Low
8	MR	VIII	45	Low
9	MZ	VIII	42	Low
10	RU	VIII	41	Low

Source: Primary Data (processed) in 2022

The student data in the table above shows students who have a score less than 54. There were 10 students who had low scores. 10 participants will now be given treatment (*treatment*) with group guidance services through cognitive restructuring techniques to improve behavior *open mindedness*.

2. Treatment

Treatment (*treatment*) in this study was carried out based on the following table 4.

Table 4 Schedule of Group Guidance Action Research Activities

No	Waktu Pelaksanaan	Materi	Alokasi Waktu
1	Pertemuan I (6 Juni 2022)	Berfikir Kreatif	45 Menit
2	Pertemuan II (8 Juni 2022)	Perilaku <i>Open Mindedness</i>	45 Menit
3	Pertemuan III (10 Juni 2022)	Mengubah pandangan negatif	45 Menit

Table 4.4 above explains that the researcher provided treatment group guidance services to students three times. At the first meeting which was held on June 6, 2022 with the topic of creative thinking with a time of 45 minutes. The second meeting was held on June 8, 2022 with the topic of *open mindedness* behavior with a time of 45 minutes.

The implementation of group guidance is carried out in accordance with the steps through four steps, namely the initial stage, transition, activity and end.

3. Data Posttest

The results of the *post-test* questionnaire score after being given group guidance treatment can be seen in the following table 5.

Table 5 Score Results After Being Provided with Group Guidance Services

No	Nama	Kelas	Skor	Keterangan
1	AN	VII	66	Sedang
2	RA	VII	68	Sedang
3	AP	VII	65	Sedang
4	FA	VII	70	Tinggi
5	MS	VII	78	Tinggi
6	LN	VII	81	Tinggi
7	AH	VII	79	Tinggi
8	MR	VIII	83	Tinggi
9	MZ	VIII	88	Tinggi
10	RU	VIII	69	Sedang

Source: Primary Data (downloaded) in 2022

Furthermore, a comparison of students' *open mindedness* scores before and after being given group guidance services can be seen in the following table 4.6.

Table 4. 6 Comparison of *Pre-test* and *Post-test* Scores of Open Behavior

Yes	Name	Pre-test	Information	Post-test	Information
1	AN	50	Low	66	Keep
2	RA	53	Low	68	Keep
3	AP	52	Low	65	Keep
4	AGO	46	Low	70	Tall
5	MS	44	Low	78	Tall

6	LN	49	Low	81	Tall
7	AH	43	Low	79	Tall
8	MR	45	Low	83	Tall
9	MZ	42	Low	88	Tall
10	RU	41	Low	69	Keep

c. Data Interpretation

To find out the changes in students, it is by comparing the score of the open *mindfulness* behavior questionnaire before and after being given group guidance treatment. The change in question is an increase in the score of open *mindfulness* behavior. If the score of open *mindfulness* behavior increases, the group guidance services provided have an effect on open *mindfulness* behavior.

The comparison of open *mindfulness* scores in the pre-test and post-test can be seen in the following table 4.7.

Table 4. 7 Comparison of Pre-test and Post-test Scores

Yes	Category	Pre-test		Post-test	
		F	%	F	%
1	Tall	0	0%	6	60%
2	Keep	0	0%	4	40%
3	Low	10	100%	0	0%
	Sum		100%		100%

The comparison of pre-test and post-test scores has increased significantly. From the pre-test scores before being given group guidance services, it shows that there are 10 students in the low category. The post-test results after being given group guidance services showed that out of 10 students in the low category, 6 students experienced an increase in the high category with a percentage of 60% and 4 students experienced an increase in the medium category or equal to 40%. Students experienced an improvement after being given group guidance services. Therefore, it can be concluded that group guidance services can improve open-mindedness behavior through cognitive restructuring techniques.

a. Normality Test

To conduct further analysis, the final test must be tested for normality first to find out whether the data is distributed normally or not. Good and useable data is data that is normally distributed. The normality test was carried out using SPSS.

Table 8 Normality Test Results

Uji Shapiro-Wilk		
	Pre-test	Post-test
Mean	47	75
Standard Deviation	4	8
Sig. (2-tailed)	0.503	0.320
α	0.05	0.05
Verdict	Distributed data	Distributed data

normal	normal
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Based on the results of the calculation in the table above, the results of testing the normality of research data can be obtained as follows:

If the $\text{sig} > 0.05$ then the data is normally distributed

If the $\text{sig} < 0.05$ then the data is not normally distributed

In the pre-test group with a significance of $0.503 > 0.05$, the research data was distributed normally, while in the post-test group the significance was $0.320 > 0.05$ then the research data is normally distributed.

b. Uji Hypothesis

The hypothesis test used in this study is the paired sample t-test. This paired sample t-test can be performed if the data comes from a normally distributed population. After it is known that the data comes from a normally distributed population, the paired sample t-test can be continued with a significant level of $\alpha = 0.05$. With the test criteria, if the t_{cal} value is $> t_{\text{table}}$, H_a is accepted. The results of the hypothesis test are presented in the following table 4.4.

Table 4. 9 Paired Samples Test Results

		<u>Paired Differences</u>		T	df	Sig. (2-tailed)
		Mean	Standard Deviation			
<i>Pair 1</i>	<i>Pretest - Posttest</i>	28	2	8.090	9	0.000

In the paired samples test, the t_{count} was obtained $> t_{\text{table}}$ ($8.090 > 0.602$) with a significant 0.00 which means $0.00 < 0.05$ so H_a was accepted and H_o was rejected. This proves that the results of the open-mindedness behavior hypothesis test before and after have higher scores. It can be concluded that there is a significant influence between group guidance services in improving *open mindedness behavior* through cognitive restructuring techniques, H_a is accepted, meaning that there is a difference between before and after being given treatment (group guidance services) and means that the treatment provided has a positive effect.

C. Discussion of Research Results

1. Open Mindedness of students in grades VII and VIII of SMPN 3 Mesjid Raya Banda Aceh before *Treatment*

The implementation of this research applies group guidance services to students who have behavioral *open mindedness* low. Based on table 4.2, it is known that there are three categories of open mindedness behavior in students, namely low, medium and high. Results of the initial distribution of the questionnaire *open mindedness* In the students, it shows that there are 10 students in the low category, 10 students in the medium category and 2 students in the high category. Furthermore, 10 students in the low category will receive treatment for 3 meetings with different topics.

The first treatment (*treatment*) was carried out on June 6, 2022, the researcher provided group guidance services to 10 students in grades VII and

VIII with the theme "Creative thinking" by providing this service to students who can know and improve how to think creatively. Then the second treatment on June 8, 2022 at 45 minutes with the theme "Open mindedness". Open mindedness is the main goal of this study so that students can think openly and accept the opinions of others, as well as the development in students from previously not open, quiet, and confident so that there are changes in these students. Furthermore, the last treatment was carried out on June 10, 2022 with the theme "Changing negative views" for 45 minutes. According to Meichenbaum, cognitive restructuring techniques are able to change negative views on failure, making counselors more willing to carry out the desired activities.

2. The Use of Cognitive Restructuring Techniques to Improve *Open Mindedness* student

Results obtained from the distribution of questionnaires *open mindedness* which showed an improvement in open mindedness using the guidance of the cognitive restructuring technique group. An increase in every indicator of mindset, negative predictions, self-criticism, stress, open thinking, trying to be actual, sensitive to other people's feelings, and sensitive to other people's knowledge so that there are better results *open mindedness* in students.

Based on table 4.3 of the initial results of the questionnaire distribution *open mindedness* (pre-test) in students shows that there are 10 students who are in the low category. In this study, an account was carried out (*treatment*) in the form of group guidance services 3 times. The results of the study can be evaluated after providing treatment (*treatment*) group guidance services at the first meeting with the theme "Creative Thinking". According to Susanto, open thinking or critical thinking needs to be developed in students because through critical thinking skills, students can more easily understand concepts, be sensitive to problems so that they can understand and solve these problems.⁵²

Furthermore, the provision of second group guidance services was carried out with the theme "behavior *open mindedness*". The evaluation obtained is that students can know how to think better and critically. Because thinking openly will help students in solving the problems they face. Then, the researcher provided a third group of guidance services with the theme of "changing negative views". The negative views that were previously embedded in the minds of students are reduced, students are more trying to do the desired activities.

3. *Open Mindedness* of Grade VII and VIII Students of SMPN 3 Mesjid Raya Banda Aceh after *Treatment*

After three treatments (*treatment*), then the researcher conducts a final measurement (post-test) to see the difference in results before and after being given treatment (*treatment*). Based on the final results of the questionnaire distribution *open mindedness* (post-test) it is known that there are 60% of students in the high category and 40% in the medium category. Comparison of behavioral improvements *open mindedness* The participants can now be seen in Table 4.7.

Furthermore, judging from the average pre-test and post-test scores of students, there was a change in behavior *open mindedness* Students, i.e. the average score of the questionnaire *open mindedness* students in the pre-test was 47 while the average score of the students' open mindedness questionnaire in the post-test was 75.

Furthermore, based on table 4.9 of the results of the paired sample t-test that has been carried out, the tcount value of >the t-table ($8,090 > 0.602$) is obtained with a significant 0.00 which means $0.00 < 0.05$ so that H_a is accepted and it is found that there is an influence of using cognitive restructuring techniques to improve behavior *open mindedness* student. In addition, the increase in the results of the post-test questionnaire also proves that the cognitive restructuring technique can improve the open-mindedness behavior of students of SMPN 3 Mesjid Raya Banda Aceh.

DISCUSSION

Based on the results of the research that has been carried out, it can be concluded that the cognitive restructuring technique can increase *the open mindedness* of students, this can be seen from the increase in the average score from pre-test (47) to post-test (75). Then added from the results of the statistical test showed that the value of the $t_{cal} > t_{table}$ ($8,090 > 0.602$), so that H_a was accepted and H_o was rejected. Thus, it can be proven that cognitive restructuring techniques have a positive effect on increasing *the open mindedness* of students of SMPN 3 Mesjid Raya Banda Aceh.

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