

## The Effectiveness of CBT Group Counseling with Problem Solving and Role Play Techniques to Improve Students' Emotional Intelligence

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### Abstract

This study attempted to analyze the CBT group counseling with problem solving and role play techniques to improve students' emotional intelligence. The study employed pretest and multiple posttest design. Meanwhile, purposive sampling was used to select 18 experimental subjects assigned to three groups randomly, in other words, there were six students in each group. Their data were collected using emotional intelligence scale. The results of mixed ANOVA test showed that the CBT group counseling with problem solving and role play techniques was effective to improve students' emotional intelligence by having ( $F(1.15) = 12.097, p < 0.05$ ). It was also proved by several effects examined, namely time effect ( $F(2.30) = 1201.32, p < 0.05$ ), and the effect of time and group interaction ( $F(2.30) = 6.427, p < 0.05$ ). These asserted that the CBT group counseling with problem solving and role play techniques is effective to improve students' emotional intelligence.

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## INTRODUCTION

Emotion is a feeling or affection arise when someone is in an important state or an interaction (Santrock, 2007). Meanwhile, emotional intelligence refers to the ability to recognize our own and others' feelings, the ability to do self-motivation, and the ability to perform good emotion management within ourselves, and within the relationship with others (Goleman in Desmita, 2012). The emotionally intelligent person is a person who is able to recognize and use his emotion productively (Salovey, 2009).

By having good emotional intelligence individuals can manage their emotions for the sake of solving life problems and anxiety within themselves. They are also able to understand, realize, appreciate others' feelings and ideas, adapt to their social environment and be more sensitive to others' feelings (Bracket, Rivers, & Shiffman, 2006).

Suharsono (in Paninggar, 2018) states that individuals should have emotional intelligence in order to overcome any emotional problems occur. It is because if their emotion is immature, their social relations, both within the family and in the school environment can be affected. Additionally, (Bar-On in Desmita, 2012) argues that lacks of emotional intelligence can lead to lack of success and emotional problems.

Emotional intelligence or some of its components are negatively correlated to the tendency of using particular dysfunctional cognitive schemes. Experts say that beliefs and cognitive schemes exist within someone strongly influence his emotional function and emotional intelligence. Specifically, particular dysfunctional cognitive schemes make someone feels stressed, anxious, angry, and cause self-defeating behaviors (Dimitriu and Negrescu, 2015). To deal with these schemes, one can use cognitive behavior therapy as an effort to improve emotional intelligence.

Cognitive behavior therapy (CBT) approach can be used to improve emotional intelligences. It is because this approach helps individuals rebuild mindsets (attitudes, assumptions, and beliefs), examine mindsets, and

decide something beneficial, and unbeneficial (Wilding & Milne, 2013). This ideas are supported by Atefvahid's study (2018) which found that CBT is effective to improve emotional intelligence components and coping ability.

Based on the above previous studies, this study used CBT group counseling with problem solving and role play techniques to improve students' emotional intelligences. These techniques were considered effective to improve students' emotional intelligence because those techniques have significant ways to change emotion and individual behavior, namely by performing changes in their attitudes.

The previously mentioned facts are similar to the results of Khon's study (2016) that the counseling design with problem solving technique is effective to improve emotional intelligence. Even though the studies about CBT and problem solving technique prove that these two variables are effective, Khon (2016) recommends the future researchers to examine the use of the combination of CBT with problems solving technique and character-based counseling. One technique which can promote students' characters is role play. Young (2013) explains that role play can be used to exercise new behavior. He also states that role play is usable for counselors in providing social skills training, and assiting clients to deal with situations they avoid. It is in line with Heyward's study (2010) that role play technique can be used as a pedagogical approach to enhance learning through emotional involvement. In his study, role play technique was considered able to bring the character of students so that it can improve students' learning through emotional involvement.

In addition, Paninggar et. al's study (2014) has similar results to the above study, namely role play technique can improve students' emotional intelligence. The difference is this study applied role play in the framework of counseling. Similarly, Pepriyanti et. al (2018) implemented role play technique in content mastery. They found that role play technique can improve students' emotional intelligence.

Based on the description of some of the studies above, this study was expected to

contribute ideas in the testing of effectiveness of CBT group counseling with problem solving and role play techniques to improve students' emotional intelligence according to recommendations in previous studies.

**METHODS**

This study applied pretest and multiple design. For more, the experimental subjects were selected purposively using purposive sampling technique. Of 160 students, there were 18 students selected based on the consideration of having low emotional intelligence. Also, random assignment was conducted to place those 18 people in three groups which were given the intervention in form of the CBT group counseling with problem solving and role play techniques.

This study was conducted in four stages. First, the provision of pretest to examine the level of students' emotional intelligence prior to the intervention. Second, the provision of intervention to problem solving technique experimental group for six times with the duration of 90 minutes for each session. In the same way, the role play technique experimental group and the group with the combination of both techniques also received six times session with 90 minutes duration for each. Third, after the intervention, the researchers gave posttest to find any differences in the results of intervention. The last, after two weeks of posttest, the subjects received follow up to know the extent to which the students maintained the changes in their emotional intelligence.

Data collection technique used in this study was realized by the use of a scale of emotional intelligence developed by Mulawarman (2014). This scale consists of 35 items. After being tested, all items were declared valid ( $r_{xy} = 0.415-0.806$ ) and had an alpha coefficient of 0.982.

**RESULTS AND DISCUSSION**

Based on the data description, it was known that the initial condition of all students' emotional intelligence was in the low level. After

the intervention was given, the level changed to high. Also, from the results of pretest, posttest, and follow-up, the researchers found that the CBT group counseling with problem solving and role play techniques could improve students' emotional intelligence.

**Table 1.** Data Description

Aspects		T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>
Problem solving	M	76.50	121.00	137.83
	Sd	4.50	3.40	4.36
Role play	M	75.50	124.00	132.66
	Sd	3.45	3.17	2.25
Combination	M	75.83	131.66	147.33
	Sd	5.27	3.89	7.34

Information:  
 T<sub>1</sub> (Pre-test), T<sub>2</sub> (Post-test), T<sub>3</sub> (Follow-up)

The above table 1 shows that the mean and standard deviation of emotional intelligence in the combination technique experimental group gained the increase of (M = 75.83; SD = 5.27) in pretest to posttest (M = 131.66; SD = 3.89) and follow-up (M = 147.33; SD = 7.34). These results proved that this group got higher than other experimental groups, such as problem solving technique group's pretest (M = 76.50; SD = 4.50) to posttest (M = 121.00; SD = 3.40) and follow-up (M = 137.83; SD = 4.35) and in the role play technique experimental group's pretest (M = 75.50; SD = 3.45) to posttest (M = 124.00; SD = 3.17) and follow up (M = 132.66; SD = 2.25).

**Table 2.** The Analysis Results of mixed ANOVA

Effects	F	df	p
Time	1201	2.30	< 0.05
Group	12.1	1.15	< 0.05
Time*Group	6.43	4.30	< 0.05

The analysis of mixed ANOVA in table 2 shows the effects of time on the improvement of students' emotional intelligence (F (2.30) = 1201, p <0.05). In general, the results of comparison of the effects of time on students' emotional intelligence from (T1-T2), (T1-T3), (T2-T3) showed improvement. This could be said that there was always an improvement in students' emotional intelligence in each phase of measurement. In details, the level of improvement in each group is presented in table 3.

**Table 3.** Pairwise Comparison Results

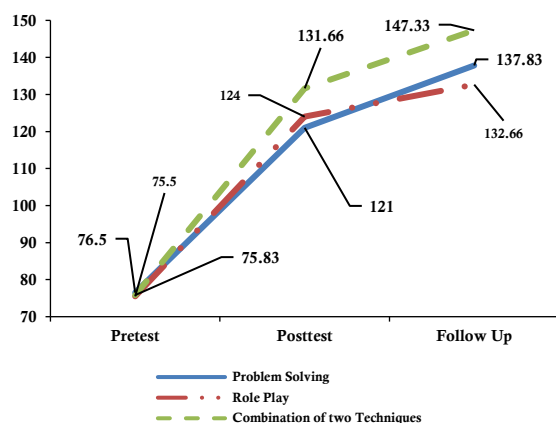
Time	MD	SE	P
Problem Solving Group			
T <sub>1</sub> -T <sub>2</sub>	-44.500*	1.765	< 0.05
T <sub>1</sub> -T <sub>3</sub>	-61.333	2.801	< 0.05
T <sub>2</sub> -T <sub>3</sub>	-16.833	1.537	< 0.05
Role Play Group			
T <sub>1</sub> -T <sub>2</sub>	-48.500	0.992	< 0.05
T <sub>1</sub> -T <sub>3</sub>	-57.167	1.249	< 0.05
T <sub>2</sub> -T <sub>3</sub>	-8.667	1.256	< 0.05
Combination Technique Group			
T <sub>1</sub> -T <sub>2</sub>	-55.833	3.060	< 0.05
T <sub>1</sub> -T <sub>3</sub>	-71.500*	2.930	< 0.05
T <sub>2</sub> -T <sub>3</sub>	-15.667	3.809	< 0.05

Information:

T<sub>1</sub> (Pre-test), T<sub>2</sub> (Post-test), T<sub>3</sub> (Follow-up)

According to table 3, there were the effects of group on the improvement of students' emotional intelligence. Among them, there was a significant difference ( $F(1,15) = 12.1, p < 0.05$ ). The details in the level of difference in each group can be seen in table 1. Moreover, other results also showed the effect of time interaction with group on the improvement of students' emotional intelligence ( $F(4,30) = 6.43, p < 0.05$ ).

Based on the results of the interaction effect, it could be seen that the group which received the combination of two techniques had the highest level of emotional intelligence improvement at the time of follow-up compared to the other groups on the same measurement. The comparison can be seen in Figure 1.



**Figure 1.** Emotional Intelligence Graph

The findings of this study indicated that the CBT group counseling with problem solving and role play techniques could improve students' emotional intelligence. It is in harmony with the previous studies related to CBT approach, problem solving technique, and role play

technique aimed to improve emotional intelligence.

The results were also similar to Masjedi et. al's study (2015) which shows that CBT group counseling influences the improvement of emotional intelligence and health of adolescents. It is because one of effective ways to change individuals' emotion and behaviors is by making changes in their attitudes. The automatic thoughts activated by various events are the significant things related to feelings. Thus, changing these ideas can lead to recognition and emotional development.

Furthermore, Shahbazi's study (2018) reveals that problem solving technique positively influences various emotional intelligence subscales, namely emotional self-awareness, self-actualization, optimism, flexibility, assertiveness, and independence. What makes this technique effective is that this technique invites individuals to define their problems and teach them how to approach the problems, provide possible strategies to develop, and prevent the possibility of any existing psychological difficulties.

The next study explains that role play technique has significant effect to improve emotion regulation. It is because this technique develops a number of emotions on students so that they can understand, internalize and integrate those emotions with their responsibility (Irmayanti, 2017). This thing plays a fundamental role that the use of problem solving and role play techniques in CBT counseling can improve emotional intelligence.

According to the recommendations of the previous studies, the findings of this study succeeded to prove that the CBT group counseling with problem solving and role play techniques was effective to improve students' emotional intelligence. The success could be achieved because in its implementation, the students were directed to challenge the dysfunctional cognitive schemes embedded in their mind. Further, these schemes were the main concern that affect students' behavior and emotions, the performed behavior and emotions, and closely related to emotional intelligence (Hofmann, 2013).

Emotional intelligence is focused more on the effort to recognize, understand, and manifest emotion in the right portion. It is also realized as an effort to control emotion and utilize it to solve life problems, especially those related to human relationship (Salovey, 2009). In this way, students who confront their dysfunctional thoughts would have new understandings and be able to automatically shift their thoughts for the problems being experienced. As a result, they can control their behavior, emotion and improve emotional intelligence.

The findings confirmed that the combination of both techniques resulted more effective results. Elaborately, role play technique is effective to improve students' emotional intelligence because of the provision of role play where students can express what they experienced. This techniques emphasizes emotional involvement and sensory observation on the problems experienced so that the students can identify their own responses and beliefs (Papadopoulou, 2012). After the students were able to identify their problems, they described and looked for possible solutions as well as strategies by using problem solving technique. This technique was aimed at controlling their emotion.

Despite all the advantages, this study had a limitation in it. The limitation was in the domination of female gender as the subjects. As a result, the study has not yet found the effect of gender.

Based on the findings, guidance and counseling (BK) teachers are suggested to use CBT group counseling with problem solving and role play techniques. For optimum results, they should cooperate with the students.

## CONCLUSION

The findings of this study show that the CBT group counseling with problem solving and role play techniques is effective to improve students' emotional intelligence in SMA Kesatrian 2 Semarang. Hence, counselors are suggested to implement the CBT group counseling with problem solving and role play techniques to improve students' emotional

intelligence. Meanwhile, the future researchers are recommended to select more varied subjects to that gender effect can be found.

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