



Effectiveness of Modeling Techniques on the Empathy and Prosocial Behavior of Junior High School Students

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Abstract. Modeling techniques are interesting to study in the context of behaviors. Both positive and negative behaviors can inspire people who observe the models to imitate their behaviors. The study aimed to determine the effectiveness of the modeling technique on the increased empathy and prosocial behaviors of students in junior high school. The quantitative approach was employed in this study with a quasi-experiment design using the non-equivalent control group design. The participants were selected using a purposive sampling technique. The characteristics of participants of the study were the students experiencing low empathy and low prosocial behaviors. Based on the assessment, 6 students were recruited for the experimental group and 6 students for the control group. The empathy scale and the prosocial behavior scale were distributed for collecting the data. The Wilcoxon and the Mann Whitney test were conducted for data analysis and the Alpha Cronbach were calculated for a reliability check. The results showed that the modeling technique applied in a counseling group was effective in increasing students' empathy and prosocial behaviors. A Mann-Whitney test indicated that there was a significant difference in students' empathy with scores $z = 0.004$, $p < .05$ as well as students' prosocial behavior with scores $z = 0.004$, $p < .05$.

Keywords: Empathy · Prosocial Behavior · Modeling Techniques · Junior High School

1 Introduction

Adolescents need to be acquainted with the community environment to have social behavior, care about their surroundings, and help others. Research conducted by Keefe and Berndt [1] shows that adolescents who have positive friendships will encourage the emergence of much better prosocial behavior, high self-esteem, intelligence in managing their emotions well, and have a positive attitude towards school. If teenagers have friendship relationships that are negative, it will affect their ability to have forms of behavior that can be destructive in the school environment.

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Good social skills will make teenagers able to interact positively with their peers. One of the most important social skills is the ability to empathize. Allport said that empathy is a person's imaginative change to enter and see into the feelings, thoughts, and behavior of others [2]. Having high empathy will make adolescents able to identify things that are being felt and thought by others and then respond with the right attitude [3]. Empathy can also be said as an activity to understand without losing control of the individual concerned. The interaction of positive feelings, such as empathy, contributes positively to the moral development of adolescents [4]. Moral development is needed when interacting with others because it has a relationship with appropriate values and rules. Thus, adolescents who have a good sense of empathy will also have good moral development.

Indicators of good social interaction can also be assessed based on the attitude of helping each other in the form of prosocial behavior. This behavior can be interpreted as an action that is carried out voluntarily to provide benefits to others. The act of helping is carried out without expecting anything in return from others, is voluntary and is intended to benefit others. Eisenberg explained that prosocial behavior has benefits for the social development of students in the future because it is stable from childhood to early adulthood [5].

The results of the Cahyaningroom survey [6], conducted on 30 students at Vocational High School of Taman Siswa Sukoharjo, showed that there were symptoms of a decline in prosocial behavior. Eight students (27%) stated that notebooks were only for personal use, not for lending. 6 students (20%) said they only wanted to work with close friends. 9 students (30%) said they only wanted to help people they knew. 4 students (13%) stated that some of the pocket money went into their own pockets for snacks and not to be donated to people in need. 3 students (10%) stated that they often cheated during exams.

Based on the results of interviews with guidance and counseling teachers at State Junior High School 12 Yogyakarta conducted by researchers, it is known that there are several social problems in students in the form of a lack of concern and sensitivity to peers who have difficulties and problems, ridiculing each other and disseminating problems that are being faced by friends. Students often take advantage of friends, help friends insincerely, and have other goals by wanting to look good. In addition, students often help just to get praise from others and have a helping attitude because they have the hope of proper reciprocity. This condition makes students more individualistic because of the lack of concern for one another. This is because many individuals are now busy and fixated on their own personal interests, so concern for the environment is currently running low [7]. This is a challenge for counselors, where the ideal guidance and counselling teacher or counsellor figure is expected to answer the challenges of the current millennial era [8, 9].

As a process that requires social interaction, be it between family, peers, or school, the process of forming empathy and prosocial behavior can be understood using the social learning theory developed by Albert Bandura. Bandura believes that social factors are the key to understanding the process of learning and development in children [10]. Based on social learning theory, the learning process will occur when individuals observe and imitate the behavior of others. Impersonation and modeling can be said to occur in the learning process, especially in the social and moral context, through the process of

imitation and modeling. This is the meeting point where modeling can be a key factor for someone to have an attitude of empathy and prosocial behavior through observations of figures who are considered models in the surrounding environment. The assumption is that if the individual gets many models that apply the values of empathy and prosocial, then the individual will imitate and apply similar behavior.

Research related to modeling techniques that were carried out previously, namely research conducted by Drabman and Thomas [11] found that people, including children, who have looked at and observed generous models (others), will be generous people compared to people who are generous. People who do not view the prosocial model. Then another study conducted by Nofijantie and Fitriah [12] stated that the modeling technique used by the teacher can change the behavior of students in a better direction by seeing and imitating the model of one of their friends. However, other studies reveal that the modeling technique will be effective if it is in accordance with the given model.

Although there are several similar studies, the research carried out only examined two variables and not a single entity, namely modeling techniques for increasing empathy and prosocial behavior, so that the results are still in doubt. The researchers used the subjects of this research, namely junior high school adolescents in the age range of 12–15 years. This research is expected to be useful for the development of guidance and counseling services, counselor competency [13] and aims to determine whether modeling techniques are effective in increasing empathy and prosocial behavior. It is the duty of the guidance and counseling teacher to prepare students to have life skills [14].

2 Method

This study uses a quantitative approach, with the type of research including quasi-experimental research in the form of a non-equivalent control group design pattern. The subject of this research used a purposive sampling technique. The characteristics of the subjects in this study were students who had very low empathy and prosocial behavior. Based on this technique, there were 6 students in the experimental group and 6 students in the control group. The experimental group and the control group were two different groups which were both given a pre-test and a post-test, but only the experimental group was given treatment in the form of modeling technique group counseling, while the control group was only given lectures. We collected data using an empathy scale and a prosocial behavior scale. Researchers took student data before being given treatment (pretest) and after being given treatment (post-test). The data analysis used in this study is non-parametric statistics with the Mann Whitney test, while the instrument reliability test uses Cronbach's Alpha.

3 Findings and Discussion

After the researcher conducted the modeling technique group counseling, the researcher gave a 1-week deposition period. Then, the researcher gave a posttest with the aim of knowing the changes after being given treatment. The data from the treatment was then analyzed using the Mann-Whitney test. The results of the analysis are presented in Table 1.

Table 1. Empathy Hypothesis Test Results.

	Test Statistics
Mann-Whitney U	0.000
Wilcoxon W	21.000
Z	-2.903
Asymp. Sig. (2-tailed)	.004
Exact Sig. [2*(1-tailed Sig.)]	.002b

Table 2. Hypothesis Test Results for Prosocial Behavior Data.

	Test Statistics
Mann-Whitney U	0.000
Wilcoxon W	21.000
Z	-2.898
Asymp. Sig. (2-tailed)	.004
Exact Sig. [2*(1-tailed Sig.)]	.002b

Based on Table 1, the significance value of Asymp.sig is $0.004 \leq 0.05$, so it can be concluded that the modeling technique is effective for increasing student empathy. While the results of hypothesis testing on prosocial behavior variables can be seen in Table 2.

Based on Table 2, the significance value of Asymp. Sig is $0.004 \leq 0.05$, so it can be concluded that the modeling technique is effective in improving students' prosocial behavior. The effectiveness was obtained from the differences in the scores of students' prosocial behavior in the post-test of the experimental group and the post-test of the control group.

The focus of concern in modeling techniques is the process of observing the model's behavior and then internalizing that behavior into himself. Through observation, individuals can learn by imitating what must be done, so that they can avoid mistakes and minimize things that do not need to be done. This is also in accordance with the opinion of Martin and Pear [15] that modeling is a procedure in which an example of a certain behavior is shown to someone to cause the individual to perform the same behavior. As a learning process in the context of changing behavior, there is a social activity that occurs through interactions between individuals as observers and the observed model.

The modeling technique is very much in line with the social learning theory developed by Albert Bandura, where this theory states that the learning process that occurs is the result of observing, mastering, and imitating the behavior of others. Bandura also suggested that individuals learn a lot about behavior through modeling even without the reinforcement they receive, and this kind of learning process is called observational learning. In social learning itself, the environment becomes very important because it

is from the environment that individuals gain experience and knowledge to form a new behavior or social skill.

The results of the initial study showed that 12 research subjects, both in the experimental group and the control group, were in the very low category in terms of the level of empathy and prosocial behavior. In the context of social learning theory, this can be influenced by the absence or lack of models that display forms of empathy and prosocial behavior that can be used as examples by research subjects. Ideally, the more and more individuals see examples of behavioral models, the higher the tendency to learn and apply these behaviors. And vice versa, if there are not many models that can be used as examples, then the opportunity to form a new behavior will be smaller than if many individuals have or are able to find their role models. This is in accordance with research conducted by Abel and Brown [16] that found individuals who see a character donating their money tend to donate more than 34% of their work bonus money in order to help deal with Covid-19. This finding also proves that individuals who see examples of positive behavior carried out by the model will have the urge and tendency to do the same thing.

At the time of giving the treatment, the researcher used a modeling technique in the form of a symbolic model in the form of showing videos of examples of individuals who have high empathy and prosocial behavior. The character who is used as a model can be an inspirational figure so that individuals can learn about socializing, morality, values, and self-quality [17]. Modeling techniques through video stimulate students to see the conditions in which empathy skills and prosocial behavior must be raised by the model. Indirectly, students will also learn to understand and get carried away by the emotions felt by others. Through modeling treatment, students get the right example of how to relate well to their environment by helping someone sincerely and understanding other people's feelings.

Of course, it is undeniable that there are many factors that can influence students to have good empathy and prosocial behavior. As well as the factors that influence social behavior as described by Eisenberg et al. [18], namely internal factors in the form of biological factors, cognitive process factors, emotional factors, and individual characteristic factors, as well as external factors, namely cultural factors of the local community, socialization experience, and situational factors. In addition, parenting factors also play an important role in the formation of prosocial behavior in children through the provision of social rewards whenever prosocial behavior appears [19]. However, as a process that requires social interaction with the environment as described in social learning theory, empathy skills and prosocial behavior can be trained by individuals observing and imitating the behavior of models in the surrounding environment. Logically, it can be understood that if an individual has a role model, he will have a figure that can be observed and imitated by his positive behavior. The modeling that is done can foster mutual respect and motivate individuals to behave in a way to help each other [20]. This also shows the importance of the role of modeling in forming empathy and prosocial behavior in students.

4 Conclusion

Based on the results of the research that has been presented, it can be concluded that proven modeling techniques in group counseling are effective for increasing empathy and prosocial behavior. The variable mean score resulted in empathy in the experimental group at the time of the pre-test showing 52.8 and after giving treatment and then giving a post-test the score became 83.67. While the results of the average score of prosocial behavior variables in the group experiment at the time of the pre-test show 40.6 and after given treatment and then given a post-test score becomes 68.8. This is evidenced by the results of the Mann-Whitney test, which shows the value of $z = 0.004$, $p < .05$ on the empathy variable and the value of $z = 0.004$, $p < .05$ on the prosocial behavior variable. So it can be concluded that group counseling is an effective modeling technique to improve empathy and prosocial behavior of grade VIII students at Junior High School 12 Yogyakarta.

The results of this study can provide information for students about empathy and prosocial behavior. Students can apply modeling techniques gradually in daily life to increase empathy and prosocial behavior. Students should maintain their prosocial behavior, learning how to participate in social activities implemented by the school, helping others who need help, etc.

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