

# The Effect of Emotion Regulation and Empathy on Prosocial Behavior among Junior High School Students in Yogyakarta

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## Abstract:

**Background:** This study was performed in response to the issue of prosocial behavior among adolescents. The purpose of this study is to determine the effect of emotional regulation and empathy on prosocial behavior among junior high school students in Yogyakarta.

**Materials and Methods:** This research used quantitative method and was ex-post facto in nature. The research involved 377 students in Yogyakarta. The sample technique was probability sampling, and the data collection tool was a scale of prosocial behavior, emotion regulation, and empathy. Expert judgment was used to validate instruments, and reliability was determined by the Cronbach's Alpha coefficient. This Research employed multiple regression to analyze the data.

**Results:** The results show that emotion regulation and empathy had a significant effect on prosocial behavior ( $0.000 < 0.05$ ), it implies that emotion regulation and empathy may increase prosocial behavior in junior high school students when combined. Emotion control and empathy make 56.5% effective contribution to prosocial behavior. As a result, it may be concluded that emotion regulation and empathy influence prosocial behavior in junior high school students.

**Conclusion:** Emotion regulation and empathy had a significant effect on prosocial behavior

**Key Word:** Emotion regulation, empathy, prosocial behavior.

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## I. Introduction

Humans are social beings who are created in association and cannot live individually. Woodworth et al (Arifin, 2015) stated that humans from birth to death always live in society. An individual cannot live as a normal human being if he/she lives outside the community, therefore humans are always in touch and interact with one another. Relationships with others become a challenge during adolescence in life, this is because adolescence is often known as the period of searching for identity, this happens because adolescence is a transition period between the life of children and entering adult life (Ali, Mohammad & Asrori, 2018)

The transition period in adolescents has many demands to reach maturity according to the age faced by adolescents. In adolescence they are expected to no longer act like children, to be more independent, responsible and able to build good relations with the opposite sex and the same sex (Ali, Mohammad & Asrori, 2018). In addition, during adolescence there is an emotional increase appropriately known as the period of storm and stress. Therefore, adolescents are required to achieve certain developmental tasks according to the age of adolescent development.

The statement above reveals that one of the things that must be achieved at the age of adolescence (SMP) is to be responsible for fostering relationships or interacting effectively with the social environment. Prosocial behavior is a form of behavior that appears in social interactions, where humans establish harmonious relationships, help each other and help each other. Eisenberg, Spinard and Knafo (Branscombe & Baron 2017) state that prosocial behavior is a form of an act of helping that benefits others without having to provide a direct benefit to the person doing the action, and may even involve a risk for the person helping.

According to Batson and Powell; Grusec et al; Grusec and Suherman (Shadiqi, M. A., & Mangkurat, 2018) actions that display prosocial behavior, namely helping, sharing, showing consideration, giving attention, defending and recovering after a deviation. Prosocial behavior basically exists in every human being, because helping behavior is our natural tendency as humans who have a basic need to ask for and provide help (Rahman, 2016: 218).

The reality is that with the development of the times, teenagers have less prosocial behavior. This can be seen from the results of the Need Assessment analysis conducted by guidance and counseling teachers at

SMP N 01, SMP N 05, SMP N 08 and SMP Piri using the AKPD (Student Needs Analysis) instrument. The results were obtained that students who were not used to studying together or in groups with a percentage of 1.43% were in the medium category. Based on this percentage, it can be seen that there were still some students who were not used to learning together, this was because of the individualistic attitude of the students, while in prosocial behavior there was an aspect of cooperation where the indicator is that individuals can carry out activities with other people (Hosnan, 2016: 193).

The individualistic attitude can be seen from the high percentage of students who liked to lose track of time while playing social media, which was 3.54%. The increasing percentage of playing social media was due to the current current of globalization and a hedonic culture that was more concerned with one's own happiness without caring about other parties. The modernization movement in the era of globalization which includes all aspects of human life causes a shift in the pattern of interaction between individuals and changes in values in social life (Trifiana, 2015).

Another study was the results of interviews with guidance and counseling teachers in junior high schools, prosocial behavior has begun to appear but there are still some that have not been seen. Prosocial behavior that has emerged was shown by students helping their friends and playing together. On the other hand, there was the behavior of teenagers who only helped their close friends. This behavior is in line with studies (Poorthuis, Thomaes, Denissen, van Aken, & Orobio de Castro, 2012) that an individual tends to display prosocial behavior to people who are close to him or who they know.

Continuing on the results of observations in junior high school, it seems that prosocial behavior is not shown by teenagers willing to help when people who are in trouble are friends of their group members, teenagers help teachers who are in trouble because they are ordered by the teacher, teenagers want to help when they are rewarded, teenagers help because they want to be praised and teenagers just keep silent or be indifferent when he sees his friend is in trouble. This makes teenagers more likely to have a selfish nature and ignore existing social norms.

Based on field data related to the low level of prosocial behavior in adolescents, the development of prosocial behavior is a major concern. Marion (2015: 75) states that prosocial behavior is intended to meet a person's needs both psychologically or emotionally. (Wurster & Xie, 2014) suggest that the age range of adolescents, the social environment plays an important role in their lives, while prosocial behavior is a strategy used by a person to be liked by his environment. This shows that an individual's ability to control emotions can lead to a positive view of an individual towards social situations so that they can display prosocial behavior.

One of the factors that can influence prosocial behavior is emotion regulation. (Benita, Levkovitz, & Roth, 2017); and (Drupadi, 2020); also stated that emotion regulation had an effect on children's prosocial behavior. Furthermore (Hein, Röder, & Fingerle, 2018) stated that emotion regulation is very important to increase prosocial behavior.

Facts in the field, there were 3.28% of adolescents who did not know how to control their emotions which were in the high category, then there were 1.98% of teenagers who get angry easily without knowing the cause were in the medium category. This is because a person's ability to control emotions is very diverse. People who are easily angry and cannot control their emotions are a picture of someone with low emotional regulation. (Gross, 2014) emotions can cause behavioral changes, affect accuracy in making decisions and affect memory for an important event, besides that it can facilitate social interaction. (Lockwood, Seara-Cardoso, & Viding, 2014) suggests that someone who has low emotional regulation will not show good prosocial behavior and may even cause antisocial behavior/aggressive behavior in response to emotional management. Conversely, if individuals can regulate their emotions well, they will show a high level of social competence and positive social behavior (Drupadi, 2020).

Prosocial behavior is also influenced by empathy. (Lockwood et al., 2014) in their findings suggest that empathy is a driving factor for prosocial behavior. (Solekhah, Athikah, & Istiqomah, 2018) in their findings state that empathy can influence a person to behave prosocially. This proves that the increase and decrease in prosocial behavior can be influenced by the ability of empathy possessed by adolescents.

Empathy is a person's internal framework of thinking accurately in understanding other people's circumstances, where individuals seem to enter into other people and share what is felt and experienced by that person without losing their own identity, Carl Rogers (Taufik, 2012). The interaction of positive feelings, such as empathy, contributes to the moral development of adolescents, Santrock (Hazri, 2018). Moral development relates to the rules and values regarding what a person should do in his interactions with others, Santrock (Hazri, 2018). Moral development refers to the problems faced by adolescents where students often act unconcerned when they see others in distress.

Based on the problems described above, this research is important for the development of students in junior high school, because the regulation of emotions and empathy will be able to contribute to the increase or decrease in adolescent prosocial behavior. The development of students in schools can be influenced by the individual himself and the help of guidance and counseling teachers. Guidance and Counseling is a systematic,

objective, logical, and sustainable and programmed effort carried out by a counselor or Guidance and Counseling teacher to facilitate the development of students/counselors to achieve independence in their lives.

The task of the guidance and counseling teacher is to facilitate the development of students in achieving independence in their lives. Guidance and counseling teachers assist students in solving problems, so that the hope for guidance and counseling teachers is to be able to provide guidance in the form of the importance of emotional regulation and empathy in adolescents in order to influence prosocial behavior in students in junior high school for the better so that students avoid antisocial behavior. Therefore, this study aimed at determining the effect of emotion regulation and empathy on prosocial behavior among junior high school students in Yogyakarta.

## II. Material And Methods

**Study Design:** This study used a quantitative approach, while the type of research carried out in this study was using ex-post facto research.

**Study Location:** This research was conducted in junior high schools throughout Yogyakarta, Indonesia

**Study Duration:** September-October 2021

**Sample size:** 377 students

**Sample size calculation:** Determining the number of samples from the existing population can be done by looking at the Krejcie and Morgan sample tables. The Krejcie and Morgan sample tables were used to determine the number of samples from a known population of 20668 students.

Based on Krejcie and Morgan's sample table, the sample obtained was 377 students. The sampling method used was Probability Sampling, which means that each element of the population had an equal chance of being selected as a sample, while the sampling technique was multi-stage proportional random sampling.

### Procedure methodology

#### Data analysis technique

The data analysis technique used in this study is descriptive statistics using SPSS version 20. Regulation of emotions, empathy and prosocial behavior is categorized into three groups: high, medium, and low. The categories of emotion regulation, empathy and prosocial behavior are presented in the table below:

**Table 1: Actual Score Conversion to Three Criteria**

Interval Score	Category
$M + 1 SD \leq X$	high
$M - 1SD \leq X < M + 1SD$	medium
$X < M - 1SD$	low

Notation: M = Ideal score average, SD = Ideal standard deviation, X = Actual score total

Furthermore, the data analysis technique in this study was multiple regression analysis with two predictors.

## III. Result

Emotion regulation, empathy and prosocial behavior were revealed using an emotion regulation scale with 31 statement items, an empathy scale with 30 statement items and a prosocial behavior scale with 38 statement items. Based on the results of data analysis from the three scales, the results of the categorization of emotional regulation scores, empathy and prosocial behavior were obtained as follows:

**Table II. Scores categorization of Emotion Regulation, Empathy, and Prosocial Behavior**

Category	Emotion Regulation		Empathy		Prosocial Behavior	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
High	49	13 %	125	33,15 %	89	23,60 %
Medium	326	86,47%	243	64,45%	253	67,10%
Low	2	0,53%	9	2,4%	35	9,3%

Based on table II above, the emotional regulation of students in the high category was 49 students (13%), in the medium category was 326 students (86.47%) and in the low category was 2 students (0.53%). The empathy variable in the high category was 125 students (33.15%), in the medium category was 243 students

(64.45%) and the low category was 9 students (2.4%). While, in the prosocial behavior variable in the high category was as many as 89 students (23.60%), in the medium category was as many as 253 students (67.10%) and in the low category was as many as 35 students (9.3%).

The results showed that the data analyzed amounted to 377 samples and obtained a significant result of 0.000 ( $p < 0.05$ ). This means that there is an influence of emotional regulation and empathy on prosocial behavior in junior high school students throughout the city of Yogyakarta. The results of the analysis can be seen in the following table:

**Table III: Coefficient of Regression Equation**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.466	5.813		.252	.801
	emotional regulation	.518	.061	.305	8.493	.000
	Empathy	.769	.046	.599	16.718	.000

From the table above, we get the regression equation  $Y = 1,466 + 0,518X_1 + 0,769X_2$ .

Based on this equation, it is known that the value of Y is obtained by multiplying the value of X by the coefficient value of  $X_1$  (0.518) and  $X_2$  (0.769) which is then added to the constant value (1.466). The value of the coefficient on the independent variable illustrates that if the estimated constant value is equal to zero, the value of the dependent variable is estimated to increase or decrease according to the sign of the regression coefficient of the independent variable. If prosocial behavior is not affected by both independent variables or emotion regulation and empathy or both variables are zero, then the average magnitude of prosocial behavior will be 1.466 (constant).

With the results of the calculated value ( $t$ ) = 0.252, the probability significance of 0.0000 is less than 0.05 ( $p < 0.005$ ), and the prosocial behavior equation ( $Y$ ) =  $1.466 + 0.518X_1 + 0.769X_2$  can be used to predict how much influence  $X_1$  has. and  $X_2$  to Y or predict the influence of emotion regulation and empathy on prosocial behavior.

The magnitude of the effective and relative contribution of emotion regulation and empathy to prosocial behavior can be seen from the coefficient of determination as follows:

**Table IV. Coefficient of Determination Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.752 <sup>a</sup>	.565	.563	7.960

a. Predictors: (Constant), empathy, emotion regulation

Based on the table above, it shows the magnitude of the coefficient of determination ( $R^2$ ) is 0.565, meaning that changes in prosocial behavior (Y) can be influenced by emotional regulation variables ( $X_1$ ) and empathy ( $X_2$ ), collectively 56.5%. While the remaining 43.5% is influenced by other factors outside the research conducted. The amount of effective contribution and relative contribution for more detailed information can be seen in the following table:

**Table V. Effective and Relative Contribution**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	1.466	5.813		.252	.801			
	emotional regulation	.518	.061	.305	8.493	.000	.491	.402	.289
	empathy	.769	.046	.599	16.718	.000	.694	.654	.570

a. Dependent Variable: prosocial behavior

Based on the table, it is known that the relative and effective contribution of emotional regulation is 15% and the effective contribution of empathy is 41.5% so that the total effective contribution is 56.5% towards prosocial behavior, while 43.5% is influenced by other factors. More detailed information for effective and relative contributions can be seen in the table below:

**Table VI. Effective and Relative Contribution Result**

Variabel	Effective Contribution	Relative Contribution
emotional regulation	15%	26,5%
empathy	43,5%	73,5%
Total	56,4%	100%

#### **IV. Discussion**

Based on the results of data analysis on research and hypothesis testing, it can be concluded that emotion regulation and empathy have a positive impact on prosocial behavior in junior high school students. It can be seen from the results of the regression analysis that there is a significant influence on emotion regulation on prosocial behavior, empathy for prosocial behavior and emotion regulation and empathy for prosocial behavior.

Emotion regulation can predict prosocial behavior of junior high school students. (Hein et al., 2018) stated that individuals who have the ability to regulate emotions well are associated with high empathy and one's prosocial behavior. Individuals with better emotional regulation can increase pleasant emotional experiences and reduce unpleasant emotional experiences (Deng, Sang, & Chen, 2017). In this study, the results of the categorization revealed that the majority of students' emotional regulation was in the moderate category, namely 86.47%. This category is quite influential, therefore it is known that there is an influence of emotion regulation on prosocial behavior. Individuals who have high emotional regulation so that they are able to behave properly and benefit themselves and others, such as will help even in unfavorable conditions. (Benita et al., 2017) revealed that adolescents who are skilled in regulating adolescent attention and behavioral responses, not only tend to feel more caring for others but are also more likely to help others.

The process of developing social behavior is closely related to emotional development. Therefore, the ability to regulate emotions must be developed properly in order to bring out behavior that is in accordance with social expectations. (Gross, 2014) explains that strategies in developing emotional regulation for an individual can be done by: situation selection, namely actions to avoid or approach everything that can cause negative or positive emotions, modifying situations, namely trying to change the situation so that it can change the emotional impact. From the environment, the use of attention is an effort to direct attention to certain situations to affect their emotions, cognitive change is changing the way of thinking about the situation itself, and the last is response modulation, namely efforts to make changes in emotional responses to affect physiological and emotional experiences. Based on the explanation above, it can be concluded that emotion regulation has a positive effect on prosocial behavior.

In addition to emotion regulation, empathy can also predict prosocial behavior. (Lockwood et al., 2014) which shows that empathy is a driving factor in increasing prosocial behavior. In line with Lockwood et al (Williams, O'Driscoll, & Moore, 2014) revealed that someone who experiences empathy for what others feel will increase that person's prosocial behavior. This explains that if a person's empathy ability is good, they will tend to behave well prosocially. In this study, the results of the majority empathy categorization were 64.45% in the medium category. This category is quite influential, therefore it is known that there is an influence of empathy on prosocial behavior. The higher a person's sense of empathy, the more likely someone is to behave prosocially. Wenchao and Xinchun (2020) revealed that adolescents with higher empathy are more sensitive and sympathetic to the suffering of others. (Xiao et al., 2021) also said that empathy is a motivator for prosocial behavior, where someone who has high empathy will help more than someone who has low empathy.

Empathy that is owned by each individual is different, including in adolescents. So that in adolescence it is necessary to develop the ability of empathy. Goleman (2011) explains that there are 3 empathetic abilities that must be possessed by a person, namely: (1) being able to accept other people's points of view, meaning that individuals are able to see problems from the perspective of others in order to provide treatment in the right way, (2) have sensitivity to the feelings of others, individuals are able to see the tone of speech, facial expressions, and gestures displayed so that individuals are sensitive to other people who have difficulties, (3) are able to listen to others, individuals are able to listen and pay attention when other people talk to them. Based on the explanation above, it can be concluded that empathy has a positive effect on prosocial behavior. This means that empathy can predict a teenager's prosocial behavior.

The results of the explanation above show that the regulation of emotion and empathy affected the prosocial behavior of adolescents. This means that emotion regulation and empathy together can predict the prosocial behavior of junior high school students. The results in this study are in line with research from (Kao, Tuladhar, & Tarullo, 2020) which proves that individuals who have good emotional regulation will be able to show a high level of social competence and prosocial behavior. In addition (Brethel-Haurwitz, Stoianova, & Marsh, 2020) also revealed that emotion regulation supports in shaping prosocial behavior.

The results of the study (Abdullah, Hamsan, & Ma'rof, 2020) explain that empathy is a factor that influences prosocial behavior. An individual who has a good attitude of empathy will be able to understand others better and have a high sense of caring and can show a sensitive and caring attitude towards others, care

and then encourage to do something for others such as helping people who are in trouble. This is in line with research (Carlo et al., 2014) which shows that a person's empathy can describe that person's prosocial behavior.

These two factors play an important role in eliciting prosocial behavior. Emotion regulation and empathy affect prosocial behavior. Prosocial behavior is produced well if the interaction between the two goes well. When emotion regulation and empathy together influence prosocial behavior, it can predict prosocial behavior. So if you want to increase prosocial behavior, you can increase emotion regulation and empathy. Someone who is surrounded by an environment of prosocial people will increase the youth's readiness to show prosocial behavior to others. However, if the teenager is in a bad environment, the teenager will imitate this behavior (Busching & Krahé, 2020). That is, individuals with a good level of emotional regulation and empathy will increase prosocial behavior.

Based on the results of the research and explanations from the various studies above, it can be concluded that the better a person is in regulating emotions and increasing empathy, the more prosocial behavior will increase. This study illustrates that the regulation of emotion and empathy affects prosocial behavior in adolescents, especially junior high school students in the city of Yogyakarta. Based on the results of this study, counseling guidance teachers can understand what factors can influence the prosocial behavior of students at school. So that guidance and counseling teachers are able to know that the ability to regulate emotions and empathy together can predict prosocial behavior.

The importance of prosocial behavior for students is because as a social being an individual is required to be able to help each other because humans cannot live without the presence of other people. So it is very important for guidance and counseling teachers to improve the prosocial behavior of students at school so that students are able to provide assistance to others who have difficulties or problems without choosing who to help.

## V. Conclusion

The conclusion obtained from the results of the research that has been done is that there was a significant effect between the variables of emotion regulation and empathy on prosocial behavior among students in junior high school. The amount of the effect was 56.5% and the remaining 43.5% was influenced by other factors outside the regulation of emotions and empathy. To develop prosocial behavior together, it can be done by increasing the emotional regulation and empathy of students. This was because the increasing regulation of emotions and empathy also increased prosocial behavior among junior high school students. Therefore, for junior high school students whose prosocial behavior development has not been maximized, the results of this study can be used as a reference in improving prosocial behavior in junior high school students.

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