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# EFFECTIVENESS OF EMPATHY TRAINING IN REDUCING AGGRESSIVE BEHAVIOR AND INCREASING SOCIAL INTIMACY OF STUDENTS IN IRAN

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## ABSTRACT

Improvement of social and interpersonal relationships through decreasing aggressive behavior and increasing intimacy can contribute to personal maturity and growth. In this regard, the objective of this study is to examine effectiveness of empathy training on reduction aggressive behavior and increase in social intimacy of students. This is an experimental study with pretest-posttest plan. Statistical population of study consisted of all first-grade high school students in Urmia, Iran in 2016. Of students who had obtained high score of Aggression Questionnaire and diagnosed as aggressive students by teachers, 50 members were chosen using convenience method. Test group members were taught empathy skill through 10 sessions and control group were waiting. Both groups filled out Aggression Questionnaire of Bus-Perry and Miller Social Intimacy Scale at base stage and after treatment. The obtained data were analyzed using SPSS22 software and ANCOVA test. The results showed that there was a significant difference between aggression and social intimacy level between two test and control groups after empathy training program ( $P < 0.05$ ). Empathy skill training has led to reduced aggression and increased social intimacy among students.

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## Introduction

Intimacy consists of tendency toward being committed to someone else, ability to share inner thoughts and feelings<sup>1</sup> including nine emotional, social, training, sexual, rational, psychological, physical, spiritual, aesthetic, and time aspects<sup>2</sup>. Quality of an intimate relationship plays a vital role in emotional and physical health of person and effects on total quality of happiness and general satisfaction of person<sup>3</sup> as well as one of essential factors in mental health and welfare of individuals<sup>4</sup>.

Aggression is a kind of behavior to harm others purposeful<sup>5</sup> that has two types of direct (physical or verbal) and indirect (passive behavior)<sup>6</sup>. Aggression is one of psychological problems among children and adolescences<sup>7</sup>.that might cause some problems in work, interpersonal relationships, and quality of life<sup>8</sup>. Research of Ly<sup>9</sup>showed that aggression is associated with many of physical diseases such as cardiovascular diseases and tensional headache; according to formal statistics, 70% of crimes of male adolescences and 305 of crimes committed by female adolescences are rooted in aggression. Therefore, it is essential to provide some solutions to control aggression. In opinion of Feshbach and Feshbach<sup>10</sup>, the best method to prevent aggression and reduce violence in society is to foster empathic behavior.

Empathy is defined as understanding personal experience of another person<sup>11</sup>and it is treated as an effective response to what the other person feels in order to perceive his/her situation<sup>12</sup>. Empathy leads to understanding feeling, anticipating thoughts, intentions, and behaviors of others<sup>13</sup>.

High empathy among individuals leads to increased positive social behaviors and altruistic attitudes and low empathy increases antisocial behaviors and limits ability of persons to understand feelings and situation of others<sup>14</sup>.Results obtained from studies conducted by Yeo<sup>15</sup>, and Stanger<sup>16</sup> indicated a negative relation between empathy and aggression so that this negative relations becomes stronger as the age increases. Therefore, empathy training is effective in increasing ability of persons to have empathy with others<sup>17</sup>.

According to the importance of empathy in improving interpersonal relationships and social interactions of students, the purpose of this study is to examine effect of empathy training program in reducing aggressive behavior and increasing social intimacy among students.

### Method

This is an experimental study with pretest-posttest plan.Statistical population of study consisted of all first-grade high school students in Urmia a city of Iran in 2016. Of students who had obtained high score of Aggression Questionnaire and diagnosed as aggressive students by teachers, 50 members were chosen using convenience method. Test group members were taught empathy skill through 10 sessions and control group were waiting. Both groups filled out Aggression Questionnaire of Bus-Perry and Miller Social Intimacy Scale at base stage and after treatment. The obtained data were analyzed using SPSS22 software and ANCOVA test.

### Research Instrument

**Aggression Questionnaire (AQ):**This scale was designed by Arnold H. Buss and Perry<sup>18</sup>. This questionnaire is a self-report scale that is scored based on Likert Scale from completely agree (score 5) to completely disagree (score 1). Two questions (9&16) have been scored adversely in this scale. This scale evaluates four subscales including physical aggression, theologianaggression, indignation, and hostility. Higher scores in each scale indicate more aggression at that scale<sup>18</sup>. Mohammadi<sup>19</sup> have calculated reliability coefficient of this questionnaire using Cronbach's alpha and reported scale of physical aggression equal to 82%, theologian aggression to 81%, indignation to 83%, and hostility to 80%.

**Miller Social Intimacy Scale (MSIS):** this scale was designed by Miller and Lefcourt<sup>20</sup> to assess intimacy obtained from various relationships. This scale consists of two groups of questions including 6 questions to describe frequency of intimacy and 11 questions to indicate intensity of intimacy experienced at present time. All questions were responded from very rarely or low (1) to almost or high (10) based on 10-point Likert scale. Cronbach's alpha coefficient has been reported from 86% to 91% in various versions. They have reported reliability coefficient to 84% for time interval more than 2 months using retest method and to 96% for time interval more than 1 month<sup>20</sup>. Daneshvarpooret al<sup>21</sup>conducted a study on 330-member sample and obtained Cronbach's alpha to 79%.

### Analysis Method

To train empathy, training package of Daniel Keeran<sup>22</sup> was used through 10 30-minutes sessions in which, students became familiarwith the concept of empathy, understanding of perspective of others, and see self in situation of others to understand feelings of others and to have an empathic response for others. Some of skills that were taught to students were distinguishing between thoughts and feelings, understanding persons' moods, and ability to imagine self in situation of other persons.

### Findings

Participants of this study consisted of 50 male students who were at age range of 14-16, had average economic situation, had educated parents (95%), and all of them (100%) were living with their parents.

In the following, tables related to mean, variance, standard deviation, minimum, and maximum of both groups in pretest and posttest are provided as well as distribution of scores in aggression and Levin test to examine homogeneity of variances and table of ANCOVA for aggression and social intimacy scales.

**Tale 1.** Mean, variance, standard deviation, minimum, and maximum of both groups in pretest and posttest

group		Report			
		Aggression		Social Intimacy	
		pretest	posttest	pretest	Posttest
test	Mean	59.0800	37.1600	27.0800	68.8400
	Variance	49.160	24.973	23.410	79.640
	Std. Deviation	7.01142	4.99733	4.83839	8.92412
	Minimum	40.00	30.00	20.00	44.00
	Maximum	68.00	45.00	40.00	78.00
	Sum	1477.00	929.00	677.00	1721.00
control	Mean	54.7600	53.7200	25.6800	25.7600
	Variance	62.523	34.543	27.727	14.107
	Std. Deviation	7.90717	5.87736	5.26561	3.75588
	Minimum	41.00	40.00	20.00	20.00
	Maximum	70.00	65.00	38.00	35.00
	Sum	1369.00	1343.00	642.00	644.00

According to table1, mean scores of test group has been decreased after training empathy that shows the effect of this skill on participants of test group. Also, mean score of social intimacy has been increased in test group after training empathy skill.

**Tale 2.** Distribution of scores in aggression test

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
<b>Aggression Pretest</b>	.113	50	.152	.963	50	.121
<b>Aggression Posttest</b>	.125	50	.049	.948	50	.027
a. Lilliefors Significance Correction						

Since skewness and kurtosis values of aggression variable are at interval of (-2, +2) in pretest and posttest, distribution is probably normal.

**Tale 3.** Levin Test for homogeneity of variances

	Levene Statistic	df1	df2	Sig.
Aggression Pretest	.033	1	48	.857
Aggression Posttest	.001	1	48	.972

According to table 3, significance level of Levin Test (0.972, 0.857) is more than 0.05%; therefore, it can be stated that variances are homogeneity.

**Tale 4.** ANCOVA for Aggression Scale

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	882.516 <sup>a</sup>	2	441.258	10.210	.000
Intercept	471.443	1	471.443	10.909	.002
Aggression (Posttest)	649.236	1	649.236	15.023	.000
group	881.543	1	881.543	20.398	.000

Error	2031.164	47	43.216		
Total	164908.000	50			
Corrected Total	2913.680	49			

According to significant F value (20.398), it is concluded that empathy skill can effect on aggression of students and it can be stated at confidence level of 95% that teaching empathy skill to students leads to reduction in aggression among students.

**Tale 5.** ANCOVA for social intimacy scale

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	170.124 <sup>a</sup>	2	85.062	3.696	.032
Intercept	202.902	1	202.902	8.816	.005
group	101.001	1	101.001	4.389	.042
intimacy (posttest)	145.624	1	145.624	6.328	.015
Error	1081.656	47	23.014		
Total	36047.000	50			
Corrected Total	1251.780	49			

According to significant F value (6.328), it is concluded that empathy skill can effect on aggression of students and it can be stated at confidence level of 95% that teaching empathy skill to students leads to increase in social intimacy among students.

**Discussion and Conclusion**

Empathy as a basic skill plays a vital role in improving interpersonal relationships, keeping and increasing intimacy in friendly relationships among students, and increasing anger control. Also, empathy as a fundamental capacity of persons contributes to relationship arrangement, supporting common activities, and group coherence<sup>23</sup>.

The results obtained from this study indicated that training empathy skill is effective in reducing violence, aggression and increasing intimacy among students. These results are in line with findings of studies conducted by Yeo et al<sup>24</sup>.showing that increased empathy skills, training and strengthening such skills can reduce aggressive behaviors, and results obtained from study conducted by Gordon<sup>25</sup>that children who had participated in empathy training programs had less aggression and more social behaviors as well as increased social and emotional understanding. The results of present study are also matched with results obtained from following studies: study conducted byGaraigordobilet al<sup>26</sup>, Lovett and Sheffield<sup>27</sup>that indicated increased empathy can contribute to decrease in aggression level, study conducted by Strayer and Roberts<sup>28</sup> that showed a negative relation between empathy, physical aggression, and theologianaggression among children, studies conducted by Jolliffe and Farrington<sup>14</sup> that showed a negative relation between empathy and bullying among male adolescences and study conducted by Shahin<sup>29</sup> that showed a relation between empathy training and reducedbullying behavior among students.

Findings obtained from present study are also matched with results of studies conducted by Jeni et al<sup>30</sup> indicating that empathy contributes to improved family and social relationships, with findings of study conducted by Borba et al<sup>31</sup> that showed a positive relation between empathy, physical and theologian interactions, and with findings obtained byKusche and Greenberg<sup>32</sup> that showed the relation between empathy and increased sociability, intimacy, and responsibility.

**Conclusion:** Empathy and understanding others’ feelings as well as the ability to represent empathic behavior would improve interpersonal relationships that lead to reduced aggression. In this regard, schools can play a vital and effective role in reducing aggression among students that leads to reduced social harms in society.

**Constraints and Recommendations:** statistical sample consisted only of boys; hence, it is recommended using both genders in further studies.

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