The Effectiveness of Anger Management and Control Training On the Aggression Reduction of Male High School Students

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A B S T R A C T

The aim of this study was to determine the effectiveness of anger management and control training on the aggression reduction of male high school students of Bandar Abbas. The statistical population of the study was all the male students in secondary high schools in Bandar Abbas. The research sample consisted of 50 subjects (25 subjects in the control group and 25 in the test group) who were selected by purposive sampling (non-random) method and through matching and random replacement. Information gathering tool was Buss and Perri aggression questionnaires (1972). In order to conduct the survey, a cognitive-behavioral approach with emphasis on child-adult relationship presents a multiple training model regarding anger management which has been compatible with Islamic-Iranian culture in the review level and is been designed in twelve 2-hour sessions. Results in this study showed that the approach of cognitive-behavioral approach (anger management and control training) has a significant effect on the aggression reduction (F value= 2464.21 at p <0.001). Therefore, the program of cognitive-behavioral approach (anger management and control training) is proper in the reduction of students' aggression.

Keywords: Anger Management And Control Training, Aggression, Male Students.

INTRODUCTION

Anger is a natural emotion which is activated based on events in the environment and commands us to be attentive to and aware of potential risks. Anger activates the internal system of our excitements, strengthens us and causes our aggressive action against the uncomfortable condition. Accordingly, the anger in the Encyclopedia of Psychology[1] has been introduced as one of the most intense human emotions that are rooted of self-preservation sense, and aggression is described to be caused of the oppositional behavior that satisfies the desire to deal with the threat. Based on this, anger and aggression are inextricably related to each other and both of them are figures of human instinctive affections.

However, the effects of repeated experience of anger on physical-emotional health and social relationships can be devastating. Especially anger in adolescence is a major concern for society, because anger and aggressive behavior in adolescents in many cases causes even anti-social behaviors leading to a lot of damage[2]. Moreover, anger is correlated with depression, cocaine and alcohol addiction, suicide and cardiovascular diseases such as atherosclerosis and high blood pressure[1, 3].

Anger is an emotional status caused by physiologic arousal and thought related to implacability. Anger can be considered as an excitement and impulsivity as a behavior. Anger is a satisfying and meanwhile devastating emotion. The harmful effects of anger influences both the inside and outside of a person's character. By controlling anger, we can have a positive effect on mental health and the reduction of aggression[2, 4].

Experts believe that school is the best place for early intervention to students with anger management problems. Therefore, with the enrichment of learning programs, we can avoid serious complications that are following by uncontrolled anger. Different mental health centers often face with clients who have problems in controlling anger, because chronic anger has a negative effect on the physical and mental health, social interactions and social adaptation. Many experts emphasize the importance of teaching emotional management skills to children and adolescents nowadays. Therefore, the issue should be dealt in a proper manner and a reasonable way to resolve this problem should be adopted[4]. Due to this, the present study investigates the effectiveness of anger management and control training on the aggression reduction of male high school students of Bandar Abbas since there is no study done in the field of anger management and control training on the aggression of students in Bandar Abbas.

METHODOLOGY

The present study is done based on quasi-experimental method (pre-test, post-test) with test and control groups. The statistical population of the study consisted of all male students of Bandar Abbas. The research sample consisted of 50 subjects (25 subjects in the control group and 25 in the test group) who were selected by purposive sampling (non-random) method and through matching and random replacement. Accordingly, those students were selected who had mental health and aggression close together. So, 25 were considered as the control group and 25 as the test group.

Data collection tools in this study is Buss-Perry Aggression Questionnaire:

Buss-Perry Aggression Questionnaire: the new version of the Aggression Questionnaire was revised by Buss and Perry (1992) the previous version of which was called hostility questionnaire. This questionnaire is a self-administered questionnaire which contains 29 phrases and four subscales consists of physical aggression (PA), verbal aggression (VA), anger (A), and hostility (H). Subjects answer

to each of the phrases in a 5-degree Likert range: from quite like me (5), somewhat like me (4), not like me and not dissimilar to me (3), somewhat not similar to me (2), to not like me intensity (1). Two phrases of 9 and 16 are scored in reverse. The total score for aggression is obtained with the sum scores of subscales. Aggression questionnaire has an acceptable reliability and validity. Results of retest coefficients for the four subscales (with an interval of 9 weeks) were obtained 0.80 to 0.72 and the correlation between the four subscales were obtained 0.38 to 0.49. Cronbach's alpha coefficient was used to evaluate the internal reliability of the scale. The results indicated the internal consistency of physical aggression subscale as 0.82, verbal aggression as 0.81, anger as 0.83, and hostility as 0.80 respectively (Buss and Perry, 1992). Cronbach's alpha coefficient was used to determine the reliability of the questionnaire in this study.

The validity of Buss and Perry Aggression questionnaire is presented as the following table with item analysis by the researcher and its reliability is been offered by Cronbach's alpha.

Table 1. Validity and reliability of Aggression questionnaire of Buss and Perry

The tool	The total validity (item analysis)	Level of significance	The total reliability (Cronbach's alpha)
Aggression questionnaire of Buss and Perry	51-0.89	0.0001	0.85

In this study, the revised version of intervention program of Fireworks (Smith, 2004) was used. By a cognitive-behavioral approach with emphasis on child-adult relationship, this program presents a multiple training model regarding anger management which has been compatible with Islamic-Iranian culture in the review level and is been designed in twelve 2-hour sessions. The researcher in this study has played the role of family training instructor and the anger control meeting plans are as follows:

First session:

Theme1: the introduction of anger control training program and its objectives.

Theme2: the statement of the rules of participating in the program: confidentiality, keeping the content of the meeting secret, the number of sessions, homework and points.

Theme3: the introduction with other members.

Second session:

Theme1: the statement of the general objectives of the program (learning problem solving, controlling and appropriate release of anger).

Theme2: the definition of anger and the consisting components (physical, behavioral, cognitive).

Theme3: the assignment of homework (anger registration forms).

 Third session:

Theme 1: a review of the first session, going over the assignments.

Theme 2: the measurement of participants' problem-solving skills: using one of the examples raised in anger registration forms.

Theme3: assignment

Fourth session:

Theme 1: a review of the previous sessions and reviewing homework.

Theme 2: the introduction of the ways of anger expression and its short-term and long-term consequences.

Theme 3: assignment

Fifth Session:

Theme1: a review of the previous session and assignments and discussion on the importance of dealing with anger management.

Theme 2: the rest of modes of anger expression and dealing with the distinction between anger and aggression.

Theme 3: assignment

Sixth Session:

Theme 1: a review of the past, reviewing homework and choosing an event of anger to fit the meeting.

Theme 2: providing an indirect selection of views and implications for cognitive evaluation by selecting and talking about one of the events of anger from anger registration forms.

Theme 3: homework

Seventh session:

Theme 1: a review of the content and assignment of the previous session.

Theme 2: Logging into anger control discussion (Stating the characteristics of people who are controlling their anger).

Theme 3: Group discussion about how we can achieve these characteristics, considering one of the problems outlined in anger registration forms in this regard.

Theme 4: assignment

Eighth Session:

Theme 1: a brief overview of the content and tasks of the previous session.

Theme 2: The expression of anger control levels: emotional self-awareness, anger management, assertive expression.

Theme 3: Introduction of emotional self-awareness and its purpose.

Theme 4: Introduction of anger Control based on the three components of anger.

Theme 5: Discussion on how to control the physical feelings, the need for relaxation and expressing deep breathing techniques to keep calm.

Theme 6: assignment

Ninth session:

Theme 1: Running the deep breathing technique at the beginning of the meeting and a review of the content and tasks of the previous meeting.

Theme 2: addressing the role of thoughts in anger management.

Theme 3: assignment

Tenth session:

Theme 1: Running the deep breathing technique at the beginning of the meeting and a review of the content and tasks of the previous session, Group discussion on the selected issue from one of the forms and implementing cognitive control methods for it.

Theme 2: The assertive expression of anger (Assertiveness). A dramatic case was conducted to exercise the decisive expression of dismay and anger.

Theme 3: assignment

Eleventh session:

Theme 1: running the deep breathing technique at the beginning of the meeting. A review of the assignments and selecting an event and practicing the assertive expression about that in the class to solve the students' problems in assertive statement of the report, the emphasis on the cognitive challenges roles in the given tasks.

Theme 2: the introduction of problem solving skills with group discussion, statement of problem-solving processes, expressing a topic and a group discussion on that.

Theme 3: to involve students more in the topic, one of the members of the groups whose only solution for many of the issues rose in the fighting was asked to discuss a problem and try to use the problem solving methods to troubleshoot the problem with the help other members.

Theme 4: assignment

Twelfth session:

Theme 1: a review of the tasks of previous meeting and debug the problems that existed with respect to problem solving and assertiveness.

Theme 2: group review of the program and the concepts and methods presented in the sessions.

Theme 3: Problem-solving exercise for three common problems in life.

Theme 4: Discussion on how to use the learned techniques in future life issues and problems.

The questionnaires were distributed before and after the training program between students of the test and control groups and each time lasted 40 to 50 minutes.

Mean, standard deviation and descriptive graph were used in order to analyze the collected data in the descriptive statistics and Kolmogorov-Smirnov test was used to test the data normalization. One-way analysis of covariance (they are usually used in quasi-experimental studies to eliminate the effect of confounding variables such as time and etc.) was used to evaluate the hypotheses of research.

RESULTS

Mean and standard deviation of aggression reduction variable in test and control groups in pre-test and post-test is been provided in Table 2-4.

Table 2. Descriptive findings: mean and standard deviation of test and control group scores in the aggression reduction in pre-test and post-test

Aggression reduction	Number	Statistical index	Test group	Control group
Pre-test	25	Mean	51.82	50.25
	25	Standard deviation	10.73	10.88
Post-test	25	Mean	89.02	48.28
	25	Standard deviation	2.31	4.28

According to table 2, it is seen that the average of test group aggression reduction in the pre-test of the test group is 51.82 and its standard deviation is 10.73 and the average of control group aggression reduction is 50.25 and its standard deviation is 10.88. Moreover, the aggression reduction average of the test group in post-test is 89.02 and its standard deviation is 2.31 while the aggression reduction average of the control group is 48.28 and its standard deviation is 4.28. Figure 2-4 shows aggression reduction score in the test and control groups in pre-test and post-test.

Normal distribution of variables is one of the most important premises in parameter statistics. Accordingly, we have studied the hypothesis of normal distribution of collected data related to each of the variables using non-parametric Kolmogorov - Smirnov test. The results of Kolmogorov-Smirnov test that occurs as follows are summarized in Table 3:

Table 3. Kolmogorov-Smirnov test results

Variable	Number	Mean	Std. deviation	Z	p
Control and test groups pre-test in aggression reduction	50	51.04	10.75	0.860	0.45
Control and test groups post-test in aggression reduction	50	68.65	20.80	0.918	0.36

Since the obtained p-value for all the research variables is a number greater than 0.05, there is no reason to reject the null hypothesis (H_0) and the assumption of normality is confirmed for all variables. The results of covariance analysis are provided in Table 4.

Table 4. The results of one-way covariance analysis between test and control groups in aggression reduction variable with pre-test control of aggression reduction

Resource	Total sum of squares	Degree of freedom	Mean squares	F	P	Effect size
Aggression reduction pre-test	26.01	1	26.01	2.22	0.14	0.03
Group	28765.07	1	28765.07	2464.21	0.001	0.97
Error	782.09	67	782.09	-	-	-

As it can be seen in Table 4, there is no difference between the aggression reduction pre-test in the test and control groups. But there is a significant

difference in the aggression reduction post-test in the test and control groups with the control of aggression reduction pre-test with F value of 2426.21 at p <0.001. Also, the effect size difference between the two groups is 0.97 and that the amount of the difference is extremely high and demonstrates the effectiveness of the experiment. Therefore, the second hypothesis was confirmed.

After significance of covariance analysis, pair wise comparisons of Bonferroni were used for further investigation. Results are presented in Table 5.

Table 5. Pair wise comparisons of aggression reduction variable between the test and control groups with pre-test control of aggression reduction

Group	The average of aggression reduction in the post-test with pre-test control	The mean differences of aggression reduction in two groups	P
Control	48.35	40.65	0.001
Test	88.98		

As it can be seen, the average of aggression reduction in the post-test with pre-test control in the control group is 48.35 and in the test group is 88.98. Therefore, a significant difference was seen between the two groups at p<0.001 due to the difference between the two averages as 40.65.

CONCLUSION

The research findings show that there is no difference between the pre-test of aggression reduction in the test and control groups. But there is a significant difference in the aggression reduction post-test in the test and control groups with the control of mental health pre-test. Also, the effect size difference between the two groups is extremely high which demonstrates the effectiveness of the experiment. Moreover, a significant difference was obtained between the two groups according to the mean of aggression reduction in the post-test level with pre-test control in the test and control groups. There was a significant difference between the two groups according to the mean of aggression reduction in the post-test with pre-test control in the test and control groups. The results also showed aggression reduction in the test group compared to the control group.

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