The effectiveness of anger management and control training on mental health promotion of male 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 mental health promotion 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 Mental Health questionnaire GHQ-28 of Goldenberg and Hiller (1979). 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 mental health (F value= 1811.60 at p <0.001). Therefore, the approach of cognitive-behavioral approach (anger management and control training) is proper in the improvement of students' mental health.

Keywords: Anger Management And Control Training, Mental Health, Male Students.

INTRODUCTION

Anger management training is a cognitive behavioral therapy approach with the aim of changing people's cognition and behavior and includes the effective factors in interpersonal relationships. In fact, an education is regarded which teaches skills for challenges and behavior change and futile thinking and the inhibition of severe emotional responses with a self-control procedure. The emphasis of all anger management interventions on the balance of severity, duration and frequency of anger expression and the increase of non-aggressive responses is in interpersonal relationships[1].

Anger management is not after removing anger, but is after encouraging self-cognitive, emotional and behavioral monitoring which is a method of self-control[2].

In the majority of models that have been presented for anger management, cognitive preparation components, skill acquisition and practical training are considered as the main components of the anger management program.

In a meta-analysis study, researchers reported that most studies have used interventional anger management programs based on cognitive-behavioral therapy. This approach can be a combination of various methods such as relaxation, cognitive restructuring, problem solving, stress inoculation (vaccination) and usually these methods are not used alone[3].

This approach defies wrong thoughts and attitudes and tries to promote social behavior, increase intimacy and have positive relationship with the child as well as teaching coping strategies, internal dialogue and problem-solving strategies[4]. Investigating the background of anger control training programs with cognitive-behavioral therapy approach for different groups including the prisoners, the mentally retarded individuals, adolescents with behavioral problems and bad behavior parents show the effectiveness of the efficiency of these types of programs.

In a general division, health is divided into two types: physical health and mental health. But they have overlap areas and influence each other very much[5]. Mental health is of utmost importance due to the direct relationship with individual-social performance and psycho – social damages. This importance causes the codification and conduction of different mental health programs in three dimensions of prevention, treatment and rehabilitation. These three dimensions include all the objectives and activities of mental health[6].

On the other hand, one behavioral disorder that occurs for all people in various forms, especially school-aged children and adolescents is called aggression. In today's society, there is a need to examine mental health due to some social behaviors. Anger can often reduce mental health. Therefore, the effect of anger control training on mental health is important.

METHODOLOGY

This study aims to investigate the effectiveness of anger management and control training on the mental health of male school students in Bandar Abbas. Accordingly, the study is applied based on the purpose and is quasi-experimental based on the method with pre-test, post-test and test and control groups. The project is composed of two groups and each group was measured twice. The first measurement was done by pre-test and second one by post-test. The overall plan of the project consisted of comparing the effect of family education on the test group and control group.

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. The data collection tool in this study was questionnaire.

The questionnaire used was as follows:

GHQ-28 Mental Health Questionnaire of Goldenberg and Hiller (1979): GHQ-28 Mental Health Questionnaire: 28-question form of this questionnaire was designed by Goldenberg and Hiller (1979) through the implementation of factor analysis on its long form. The questions of the questionnaire examine the mental status of an individual in the past one month and include symptoms such as abnormal thoughts and feelings and dimensions of the visible behaviors which emphasize the present position. The questionnaire begins with questions related to physical symptoms and then questions are posed that mostly deliver psychiatric symptoms. The questionnaire included four subscales of physical symptoms, anxiety and insomnia, social dysfunction and depression. All the items are graded with 4 options on a scale. The credibility of the Persian version is been reviewed and verified by Taghavi[3]. The validity of the questionnaire was obtained as 0.93. In this study, Cornbach's alpha coefficient was used to calculate the reliability of the questionnaire.

The validity of GHQ-28 of Mental Health questionnaire of Goldenberg and Hiller is presented as the following table with item analysis by the researcher and its reliability is been offered by Cornbach's alpha.

Table 1. Validity and reliability of GHQ-28 Mental Health questionnaire of Goldenberg and Hiller

The tool	The total validity (item analysis)	Level of significance	The total reliability (Cornbach's alpha)
GHQ-28 Mental Health questionnaire of Goldenberg and Hiller	-0.81 0.49	0.0001	0.79

To conduct the study, pre-test was done using research tools before implementing educational interventions firstly. Then, the information about the post-test of the control and test groups was gathered after the implementation of educational interventions on the test group. Anger management and control training package: 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.

This program consists of three components: 1. Conceptualization: teaching about the nature of anger and how people react to it. The learning is done through discussion about the past controversial experiences of the individual. 2. Skill acquisition and practice: using coping strategies with cognitive-behavioral approach. At this stage, the person practices the learned skills under the supervision of a therapist. 3. Application and following up: This component includes the application of learned skills in real life. To reach this stage, the person is facing with anger recall positions. Changing or replacement of new knowledge is

the main component of anger management program. In fact, according to cognitive theory, anger is the result of thinking pattern and people's expectations and changes in thinking pattern is to refrain from violence. Another cognitive technique to control anger is anger-record method. The person is encouraged to note the anger-trigger events and identify and document his perception of anger-provoking events. Participants learn anger control behavioral sub-skills as well as cognitive restructuring and practice to act appropriately when confronted with anger recall situations.

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 mental health variable in test and control groups in pre-test and post-test is been provided in Table 2.

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

Mental health	Number	Statistical index	Test group	Control group
	25	Mean	62.34	59.08
Pre-test	25	Standard deviation	15.74	19.04
	25	Mean	109.86	64.97
Post-test	25	Standard deviation	3.29	5.25

According to table 2, it is seen that the average of test group mental health in the pre-test is 62.34 and its standard deviation is 15.74 and the average of control group mental health is 59.08 and its standard deviation is 19.04. Moreover, the mental health average of the test group in post-test is 109.86 and its standard deviation is 3.29 while the mental health average of the control group is 64.97 and its standard deviation is 5.25. Table 1 presents mean and standard deviation of aggression reduction variable in the test and control groups in the 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 mental health	50	60.71	17.41	1.105	0.17
Control and test groups post-test in mental health	50	87.41	23.02	1.105	0.17

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 mental health variable with pre-test control of mental health

Resource	Total sum of squares	Degree of freedom	Mean squares	F	P	Effect size
Mental health pre-test	20.79	1	20.79	1.08	0.30	0.01
Group	34784.73	1	34784.73	1811.60	0.001	0.96
Error	1286.46	67	1286.46	-	-	-

As it can be seen in Table 4, there is no difference between the mental health pre-test in the test and control groups. But there is a significant difference in the mental health post-test in the test and control groups with the control of mental health pre-test with F value of 1811.60 at p <0.001. Also, the effect size difference between the two groups is 0.96 and that the amount of the difference is extremely high and demonstrates the effectiveness of the experiment. Therefore, the first 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 mental health variable between the test and control groups with pre-test control of mental health

Group	The average of mental health in the post-test with pre-test control	The mean differences of mental health in two groups	P
Control	65.02	44.78	0.001
Test	109.80		

As it can be seen, the average of mental health in the post-test with pre-test control in the control group is 65.02 and in the test group is 109.80. Therefore, a significant difference was seen between the two groups at p<0.001 due to the difference between the two averages as 44.78.

According to observations of Table 5, the average of post-test mental health in the test group is 109.80 and is 65.02 in the control group which shows the increase of mental health in the test group compared to the control group. So, the research hypothesis is confirmed.

CONCLUSION

According to the research findings and results' explanations, we can say that the effects of any kind of favorable education can be effective in the effectiveness and performance of individuals and anger control and management is not an

exception. Commenting on the research findings, it was observed that after the implementation of anger management and control training, there is no difference between the pre-test of mental health in the test and control groups. But there is a significant difference in the mental health 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. Also, a significant difference was obtained between the two groups according to the mean of mental health in the post-test level with pre-test control in the test and control groups. The results also showed mental health increase in the test group compared to the control group.

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