



The Effectiveness of Cognitive-Behavioral Group Therapy Anger and Assertiveness of Adolescents

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The present study was conducted with the aim of determining the effectiveness of cognitive-behavioral group therapy on adolescent anger and assertiveness. The present research was a semi-experimental type of pre-test, post-test and its design were in two groups (experimental group and control group) and two stages of pre-test and post-test with the control group. The statistical population included male adolescents of Karaj city in the age group of 12 to 18 years in 2022, among them 30 people who have high scores in the anger and aggression scale of Nislon et al. (2000) and low scores in the assertiveness questionnaire of Kotler and Giura and were willing to cooperate with the researcher, were selected and then randomly assigned to two groups of 15 people, experimental and control. The experimental group was subjected to cognitive-behavioral therapy group intervention, including anger management and assertiveness therapy by Patrick M. Reilly and Michael S. Shropshire during eight sessions, but the control group did not receive any intervention, then in both groups, anger and assertiveness questionnaires were repeated. Varzi was implemented (post-test). The collected data were entered into the statistical software for analysis. After analyzing the data using covariance analysis test, the results showed: cognitive-behavioral group therapy is significantly effective in reducing anger and increasing assertiveness in male adolescents was ($p < 0.01$). Also, cognitive-behavioral group therapy was effective and significant in reducing the anger subscale of relationships with peers ($p < 0.01$).

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Introduction

Adolescence, as a stage of transition from childhood to adulthood (Sawyer, Azzopardi, Wickremarathne & Patton, 2018), is a period during which independence in decision-making grows, relationships with peers deepen, and the adolescent follows Intellectual preoccupations and social relationships arise (Sadock, Sadock and Ruiz, 2015; translated by Farzin Rezaei, 2018). The World Health Organization (1965) declared that adolescence begins from the ages of 10 to 20 years with the signs of puberty and noted that there is less defined end point for this stage of life. These definitions can change under the influence of culture and social context (Sawyer et al., 2018).

Among the behavioral problems of teenagers, we can mention the category of anger; Anger-related problems such as aggression are important reasons for teenagers to be referred to psychological and counseling centers. Research findings indicated the existence of problems caused by lack of anger control, including loss of temper, arguments with adults, confrontational behavior and ignoring rules at home or school (Tampsoan & Daglas, translated by Farhi, 2017).

Anger refers to an emotional or emotional state that ranges from mild excitement to wild anger or widespread anger, often manifested when the way to achieve one's goals or fulfill one's needs is blocked (Alia-Klein, Gan, Gilam, Bezek & Bruno, 2020)..(

Uncontrolled anger in adolescents puts their adaptation and health at serious risk, and if not treated, it usually disrupts their social functions (Galambos, Johnson & Krahn, 2018). Based on the research of Iverson, Terry, Luz, Zafonte & McCrory (2019), anger suppression, like expressing anger, most likely leads to a person's negative self-evaluation, negative self-concept, feelings of inferiority and unworthiness, which are symptoms of depression. has it. Also, based on studies of major depressive disorder, social phobia, panic disorder, and generalized anxiety disorder were most related to anger and anger attacks (De Bles, Ottenheim, van Hemert, Pütz, 2019).

What has caused researchers to pay attention to aggressive behavior is its adverse effects on intrapersonal states and its subsequent effects on interpersonal behavior of people, as well as one of the causes of creating a negative image among peers and teachers, rejection by peers, academic failure, drug use, and delinquency. is aggression (Barjali and Burhani, 1400). Therefore, anger management in high school teenagers can make them more stable in terms of personality to enter higher education levels and provide the basis for their adaptation to family and society. On the other hand,

the reduction of aggression caused by the lack of anger management in teenagers reduces the risk of delinquency, truancy, running away from home and irresponsibility in them (Sadaqt, Moradi and Ahmadian, 2013).

Bruno considers daring as a behavioral characteristic, which is characterized by positive social behavior in order to defend the right or achieve the right. He believes that daring behavior should be considered as a spectrum, on one side of which is passive behavior and on the other side is aggressive behavior. Self-assertive behavior is the correct or optimal response to a situation that can cause a feeling of failure. Assertiveness and the desire to express oneself not only include the correct expression of anger and other irritations, but also all kinds of emotions and from it. The sentence includes warm and affectionate feelings, and in fact, it can be said that daring to defend one's personal rights, express one's thoughts, feelings, and beliefs in a direct, honest, and appropriate way (Biramlui and Aruti Mawafaq, 1401).

Assertiveness is a skill that is regularly emphasized in social and communication skills training. This skill is at the head of the chapters provided by the World Health Organization and its training is necessary and necessary for all people. Being bold is one of the communication skills (interpersonal skills) (Rajabi, 2019).

Glancey (2005) reported that anger management group therapy with a cognitive-behavioral approach improves the adaptive mechanisms of anger and reduces sensitivity to its triggers in those suffering from aggression and anger. This approach has been effective in suppressing anger and reducing general anger (Hojjati, Momeni and Shafiei, 2013).

The cognitive-behavioral approach can also play an effective role in improving the courage of people due to its emphasis on the role of knowledge and thoughts on behavior. Cognitive-behavioral therapy is a structural and participatory psychotherapy that emphasizes the link between thoughts, emotions and behavior in mental disorders (Khodaigani, 2016).

Yang, Weinberg and Beck (2001) showed in their research that cognitive-behavioral techniques such as courage or relaxation techniques are effective in helping people regain control over daily activities. In addition, in previous researches, other educational packages were used to improve adolescent anger control and assertiveness. including the training of the social-emotional skills program on anger control and the ability to solve social problems in substance-dependent adolescents (Sadri Demirchi, Asadi Shishegran and Ismaili Qazi Valoui, 2016), mindfulness-based intervention on adolescent anger control (Keshavarzadeh, Zakiri Pour and Watankhah, 2014),

teaching life skills (anger control, courage and effective communication) on stubbornness and coping strategies of teenagers (Bagheri, Mirzaian and Fakhri, 2016) and... Each of these interventions, different techniques and methods have been used, and although the review of previous research shows that treatments based on cognitive-behavioral psychology have an effect on a wide range of psychological variables. , but what is certain is that treatments based on cognitive-behavioral group therapy are less effective for adolescents has been used, on this basis, in this research, we try to use cognitive-behavioral techniques, including rational reconstruction, desensitization, behavioral training, role playing, role modeling, verbal and video feedback, thought stopping, and the like. As well as teaching anxiety management, behavioral relaxation, etc., teenagers can use basic strategies for anger management and express bold answers instead of aggressive and passive answers when faced with tensions and problems. Thus, the present study was conducted with the aim of determining the effectiveness of cognitive-behavioral group therapy on adolescent anger and assertiveness.

Methodology

The current research was a type of experimental study with a pre-test and post-test design with a control group and random assignment. The statistical population included male teenagers of Karaj city in the age group of 12 to 18 years in 1401. Based on the type of semi-experimental design and the conditions of their access, 30 people (15 people for each experimental group and 15 people for the control group) were replaced by random method. Subjects were selected from among male adolescents in the city of Karaj in the age group of 12 to 18 years and were randomly assigned to two experimental groups and a control group. In order to conduct experimental and semi-experimental research, a sample size of at least 15 people is suggested for each group (Delaware, 1400). Entry criteria include healthy physical condition, absence of oppositional defiant disorders and behavior based on DSM criteria. 5- Informed consent to participate in the experimental sessions and absence from the training sessions was the exit criterion. In order to carry out the research, after implementing the anger and aggression questionnaires of Nislon et al. (2000) and Kotler and Giura's assertiveness among male adolescents aged 12 to 18 in Karaj city, 30 people who have high scores on the scale of anger and low scores on They were courageous and willing to cooperate with the researcher, they were selected and then randomly assigned to two groups of 15 people, experimental and control. The experimental group was

subjected to cognitive-behavioral therapy group intervention including anger and courage management therapy by Patrick M. Reilly and Michael S. Shropshire during eight sessions, but the control group did not receive any intervention, then anger and courage questionnaires were administered again in both groups. Varzi was implemented (post-test). The collected data were entered into statistical software for analysis. Covariance analysis was used to test the research hypotheses. Analysis of research data was done with SPSS-25 software.

Instruments

Assertiveness Questionnaire: This questionnaire was designed and compiled by Kotler and Giura in order to measure daring behaviors in different situations. This questionnaire has 20 questions and measures assertiveness based on the Likert scale with questions such as (Do you have a critical spirit towards the opinions or opinions and behaviors of others?). Questionnaire scoring: Items 4 and 6 are scored in reverse. To calculate the score of each subscale, add the score of each item related to that subscale together. To calculate the total score of the questionnaire, add the scores of all the questionnaire items together. The score range of this questionnaire will be between 20 and 80. A score of 35 and below is classified as a low score (low courage) and a score of 67 and above as a high score (good courage) and scores between 36 and 68 are classified within the normal range. In his project, Rezaei (2008), the validity of content, form and criteria of this questionnaire have been evaluated. Cronbach's alpha coefficient calculated in Rezaei's research (1388) for this questionnaire was estimated to be above 0.7.

Anger and Aggression Questionnaire for Children and Adolescents: This questionnaire is a self-report tool that measures various situations that cause anger, as well as the intensity of anger and aggression and social skills of children. This questionnaire was created by Nislon et al. (2000). This test has been prepared for ages 6 to 16 and includes the first elementary to high school levels, which was standardized in Iran in 2007 by Majdian in 2013. The cut score of aggression in this test is 8. The questionnaire contains 39 statements and four sub-scales of failure of physical aggression - relationships with peers and relationships with authority figures and is divided into 4 options: 1- I don't pay attention, 2- It bothers me, 3- I get really upset, 4- I get angry. Nislon's Anger Intensity Questionnaire contains 39 questions and examines the intensity of anger in 4 dimensions: failure (11 questions), physical aggression (9 questions),

relationships with peers (9 questions) and relationships with authority figures (10 questions). Based on a four-point Likert scale (1: I don't care, 2: It bothers me, 3: I get really upset, and 4: I get angry), the statements were scored. The minimum and maximum score of each person is between 39 and 156, and a higher score indicates more anger and vice versa. The test subscales include failure (11 questions): 1-2-3-13-14-15-25-26-28-27-38, physical aggression (9 questions): 10-11-12-22-23-24- 35-36-37, relationships with peers (9 questions): 7-8-9-19-20-21-32-33-34 and relationships with authorities (10 questions): 4-5-6-16-17 -18-29-30-31-39. The range of scores is from 39 to 156. Higher scores indicate higher aggression. In other words, children whose aggression score is two standard

deviations higher than the average (girls 117.48 and boys 125.77) are considered aggressive. The validity and reliability of this questionnaire has been confirmed in studies inside and outside Shakur. It was implemented abroad by Nelson et al. on 1604 students and the results of retest coefficient 0.65 to 0.75, internal consistency 0.85 to 0.86 and validity of four subscales were obtained 0.93. In Iran, Mohammad Majdian (2008) reported the same results as Nelson et al. (Zibaei et al., 2013). Psychometric features to check the reliability and validity of the questionnaire, this test was performed on 1604 students. The results of retest coefficients are 0.65 to 0.75, internal consistency is 0.85 to 0.86, and the validity of the four subscales is 0.93.

Table 1. Summary of cognitive-behavioral group therapy by Patrick and Michael S. Shropshire

| Meetings and their Objectives | Meetings Content |
|--|---|
| First session Objective: A perspective on anger management group therapy | Introducing group members together and explaining the psychotherapy program Group rules were fully explained to group members. Examining the consequences of inappropriate expression of anger, which apparently has many benefits for a person, becoming aware of anger, fully explaining boldness and its difference from aggression, strategies to control anger and its effective management were explained, and the expression of anger scale. Homework |
| second session Purpose" to introduce events and signs | This session teaches the group members how to analyze anger, as well as identify events and signs that show the intensity of anger. Check the signs of anger Homework |
| third session Purpose: Anger control programs | In this meeting, the group members started training based on cognitive-behavioral strategies to control anger: including quick strategies (those that can be used at the peak of moments when anger quickly intensifies) and preventive strategies (that which can be used to prevent the intensity of anger before the onset of anger). Relaxation through breathing Homework |
| fourth Session Purpose: cycle of aggression | Introducing the cycle of aggression and gradual muscle relaxation Homework |
| fifth meeting Goal: cognitive reconstruction | ABCD model and thought-stopping: (a form of cognitive restructuring made by Albert Ellis and the thought-stopping method) Group members were asked to identify events that made them angry, cues related to the anger-inducing event, and strategies they used to manage their anger in response to the event. |
| The sixth session Purpose: Repeat the first session | Reinforce learned concepts A process report was obtained from group members who had to report the highest level of anger they had experienced during the past week, and group members were also asked to report their use of the ABCD model during the past week. Homework |
| Seventh and eighth sessions Purpose: teaching assertiveness and conflict resolution model | Session seven and eight are combined because it takes more time than one session to adequately introduce assertiveness, aggressiveness, and the conflict resolution model. Assertiveness is a basic interpersonal skill and anger management, and the group will spend two weeks to develop this concept. did After the test |

Findings

Based on the demographic information related to the sample group, there were 15 people in each of the control and experimental groups, and the same number participated in the post-test without dropping out. The age of people in the control group is 13.33% of the respondents equal to 2 people 13 years old, 13.33% of the respondents equal to 2 people 14 years old, 26.67% of the respondents equal to 4 people 15 years old, 26.67% of the answer 4 respondents are 16 years old, 20

percent of respondents are 3 people 17 years old, and in the test group, 20 percent of respondents are 3 people 13 years old, 13.33 percent of respondents are 2 people 14 years old, 26.67 The percentage of respondents was equal to 4 people 15 years old, 20% of respondents equal to 3 people 16 years old, and 20% of respondents equal to 3 people 17 years old.

Table 2. Descriptive indices and Kalmagarov-Smirnov scores of the control and experimental groups in the variables of daring, anger and its subscales

| Group | Variable | Subscale | | M | SD | Skewness | Kurtosis | Static | Sig | | |
|-----------------------------|---------------|-----------------------------|---------------|---------------------|-----------|----------|----------|--------|--------|-------|-------|
| Experiental | Assertiveness | - | Pre-test | 36 | 4/408 | -1/405 | -0/173 | 0/119 | 0/200 | | |
| | | | Post test | 57/47 | 6/545 | 0/925 | -0/658 | 0/159 | 0/053 | | |
| | Anger | Physical aggression | Pre-test | 24/53 | 4/911 | 1/183 | -0/005 | 0/083 | 0/200 | | |
| | | | Post test | 27/066 | 5/509 | 1/420 | -0/509 | 0/152 | 0/073 | | |
| | | Relationship with peers | Pre-test | 25 | 4/75 | 2/255 | -0/678 | 0/142 | 0/127 | | |
| | | | Post test | 27/73 | 4/905 | 1/470 | -0/510 | 0/128 | 0/200 | | |
| | | Relationship with authority | Pre-test | 24/60 | 4/595 | -0/409 | -0/269 | 0/127 | 0/200 | | |
| | | | Post test | 26/13 | 5/139 | -0/639 | -0/398 | 0/121 | 0/200 | | |
| | | Total score | Pre-test | 96/40 | 8/862 | 0/171 | -1/109 | 0/168 | 0/300 | | |
| | | | Post test | 105/53 | 10/561 | 1/815 | -1/491 | 0/136 | 0/162 | | |
| | | Control | Assertiveness | - | Pre-test | 34/13 | 4/549 | 2/174 | 1/303 | 0/195 | 0/131 |
| | | | | | Post test | 33/47 | 4/068 | -0/339 | 0/807 | 0/208 | 0/08 |
| | | | Anger | Physical aggression | Pre-test | 20/06 | 3/654 | -1/195 | 0/243 | 0/161 | 0/200 |
| | | | | | Post test | 23/33 | 2/99 | -0/516 | -0/557 | 0/158 | 0/200 |
| Relationship with peers | Pre-test | | | 22/93 | 5/52 | -0/129 | -0/340 | 0/205 | 0/089 | | |
| | Post test | | | 23/666 | 4/592 | 1/314 | 1/125 | 0/171 | 0/200 | | |
| Relationship with authority | Pre-test | | | 25/13 | 3/377 | -0/172 | 0/329 | 0/222 | 0/056 | | |
| | Post test | | | 24/66 | 5/219 | 0/178 | 0/299 | 0/205 | 0/059 | | |
| Total score | Pre-test | | | 27/80 | 6/155 | -0/300 | -0/007 | 0/153 | 0/200 | | |
| | Post test | | | 25/66 | 4/685 | -0/892 | 0/055 | 0/208 | 0/08 | | |
| | Pre-test | | | 95/933 | 8/786 | 0/932 | -0/459 | 0/191 | 0/147 | | |
| | Post test | | | 97/333 | 8/764 | 1/849 | -0/996 | 0/202 | 0/089 | | |

Table 2 shows the descriptive indices of central tendency and dispersion of assertiveness, anger and its subscales in two experimental and control groups in the pre-test and post-test. Skewness and stretch values also show the normal distribution of the data. Also, the results of the Kolmogorov-Smirnov test show that the distribution of the scores of the research variables is normal in all conditions, and therefore the main premise for performing parametric tests is established.

In order to test the hypothesis of the research regarding the effectiveness of cognitive-behavioral group therapy on anger and assertiveness of teenagers, analysis of covariance was used. Before the covariance analysis, the presuppositions of this test were examined.

The results of the default test of covariance matrices showed that the covariance matrices are meaningful ($F=1.161$, $p>0.01$). Therefore, the Hotelling effect index is cited as a multivariate test. Based on the multivariate covariance analysis test, the Hotelling effect is significant. In other words, the general model means the effect of the combination of independent variables on the combined score of dependent variables is significant and has an effect size of 0.94 ($F(2,25)=195.645$; Hotelling Trace, 0.001; $\eta^2=0.940$). Also, the results of the equality of error variances test showed that the error variances in anger and assertiveness variables are the same. Therefore, the presuppositions of the covariance analysis test were confirmed.

Table 3. Covariance analysis test of the effect of cognitive-behavioral group therapy on anger and assertiveness

| Source of changes | Dependent | sum of squares | Degrees of freedom | mean square | F | Meaningful | Eta squared |
|-------------------|-----------|----------------|--------------------|-------------|---------|------------|-------------|
| Group | Daring | 485/3488 | 1 | 485/3488 | 824/386 | 0/001 | 937/0 |
| | anger | 683/454 | 1 | 683/454 | 333/20 | 001/0 | 439/0 |
| Fault | Daring | 475/234 | 22 | 018/9 | | | |
| | anger | 403/581 | 22 | 362/22 | | | |
| Total | Daring | 467/5151 | 25 | | | | |
| | anger | 367/3141 | 25 | | | | |

Table 3 shows that between the averages of the groups in the post-test of boldness scores ($F(1,22)=386.824$, $p<0.01$, $\eta^2=.937$) and anger scores ($F(1,22) = 20.333$, $p<0.01$, $\eta^2=.439$) there is a significant

difference. The effect of cognitive-behavioral group therapy on boldness is more than anger.

Table 4. Adjusted averages of post-test anger and assertiveness of experimental and control groups

| Dependent | Group | Average | The standard error | 95% confidence interval | |
|------------------------|------------|---------|--------------------|-------------------------|-------------|
| | | | | lower limit | upper limit |
| So the test of courage | experiment | 503/50 | 785/0 | 891/54 | 116/58 |
| | Control | 430/34 | 785/0 | 818/32 | 043/36 |
| So the anger test | experiment | 418/105 | 235/1 | 878/102 | 957/107 |
| | Control | 449/97 | 235/1 | 910/94 | 988/99 |

Table 4 shows the adjusted averages of anger and assertiveness for the experimental and control groups. In other words, in this table, the effect of covariance variables (pre-tests) has been statistically removed.

Discussion

The present study was conducted with the aim of determining the effectiveness of cognitive-behavioral

group therapy on adolescent anger and assertiveness. The findings showed that there is a significant difference between the averages of the experimental and control groups in the post-test of assertiveness and anger scores. The effect of cognitive-behavioral group therapy on assertiveness was more than anger. The findings are consistent with the results of Soleimani (2011), Hemti (2011), Rahimi Ahmedabadi (2010), Haji Hosni et al.

(2011), Hojjati, Momeni and Shafiei (2013) and Gorenstein et al. (2007).

In explaining the reduction of anger in the cognitive-behavioral approach, we can mention the following: First, the cognitive basis of cognitive-behavioral therapy is Beck's theory, and from Beck's point of view, "cognition" plays the main role in psychopathology. He believes that other aspects such as emotional, behavioral and physiological aspects arise from this aspect. Also, Beck believes that the treatment should be started from the level of spontaneous thoughts, and in this study, the recognition of negative spontaneous thoughts, logical errors and negative main beliefs, and behavioral and relaxation techniques are emphasized, and cognitive change is created in them in this way. It is possible that people are taught more logical thinking skills and people learn to consciously oppose their negative thoughts. In order to confirm this hypothesis, we can refer to Hemti's research (2013) whose findings showed that cognitive-behavioral group therapy is effective in reducing aggression and increasing self-expression. In Rahimi Ahmadabadi's research (2013), the results indicated that cognitive-behavioral therapy had a significant effect in reducing anger and aggression in people with head trauma. Gorenstein et al. (2007) conducted a study on cognitive-behavioral therapy to reduce persistent anger, and the results indicated that patients experienced a reduction in anger after 12 sessions.

In explaining the effectiveness of cognitive-behavioral therapy in reducing anger, it can be said that anger is generally "caused by muscle tension and excitation of the autonomic nervous system, endocrine activity, and irrational beliefs about others, and this therapeutic approach is through reducing negative self-directed thoughts and Reducing the use of cognitive distortions and increasing the use of objective understanding of events and correct and efficient logic and the use of behavioral techniques will reduce the amount of anger. This therapeutic approach by using behavioral techniques and confronting and identifying negative spontaneous thoughts, reducing cognitive distortions and increasing the use of the C-B-A model and objective understanding of events and correct logic, improved the scores of the experimental group in the amount of control of internalizing and externalizing anger. has been

In addition, in this group intervention, students became aware of their ability to learn and develop new ways of life, and there are reasons to believe that they can also learn to control their anger and adopt socially acceptable behavior on their own. to express For this reason, group therapy appears to be a potentially useful method for these individuals to aid their recovery and allow them to

see others who have experienced similar difficulties and a sure chance of Provide expansion and practice of their new skills.

Some cognitive-behavioral techniques in this research were rational reconstruction, desensitization, behavior practice, role playing, role modeling, verbal and video feedback, thought stopping, etc. but, as mentioned, based on this type of cognitive-behavioral therapy in which the identification of cognitive processes associated with anxiety, the training of cognitive strategies for managing anxiety, the training of behavioral relaxation, and the training situation based on performance, have come together to develop a skill after Another skill should be acquired, practiced and repeated until it becomes stable and permanent; A low-level person not only gets rid of his anxiety and worries, but with increased courage, he can use the learned skills in similar situations in the future and deal with problems and problems well and have more peace in the future life. experience it yourself; As seen in previous researches, the increase of daring behavior and anxiety (especially social anxiety) have an inverse correlation, that is, the increase in daring leads to a decrease in anxiety and a decrease in anxiety leads to an increase in daring (Shokri Mirhosseini, Alizadeh). and Farrokhi, 1400.(

Due to the fact that self-report method (questionnaire) was used in this research and the favorable bias of the social view has unintentionally interfered, the answers may have been distorted. In this research, it was not possible to control variables such as parents' education level, parents' economic and social status, personality characteristics, etc. of the participants. In this research, it was not possible for the researcher to follow up to study the continuity of the effect of the independent variable. Among the bottlenecks of this research was related to the spatial scope of the research; The research samples were formed by male students in the age group of 12 to 18 years, which may change the results if the research sample is changed. Due to the limitations of the questionnaire, it is better to use other methods such as structured and unstructured interviews. It is suggested to control parents' education level, parents' economic and social status, personality traits, etc. in future researches. If possible, follow-up should be done to study the effect of cognitive behavioral training on anger and shyness. Another suggestion is that this intervention can be studied on adolescent girls in other cities and provinces of the country. It is suggested to the researchers to plan studies in the future that examine the effectiveness of the cognitive-behavioral courage training program with different variables of empathy, loneliness, interpersonal problems, enhancing behaviors, social support,

attachment styles, and self-efficacy. In this way, a coherent knowledge about the mentioned variables and the relationships of these structures and other structures that have more capability in related planning can be obtained.

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