

Attention Training Technique in Depression Reduction among Male Students

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Abstract: Depression is one of the common problems among the students, especially those studying in high school which brings about several problems and harms for the students, families and the educational system. Therefore, the present study aims at investigating the efficacy of attention training technique in depression reduction among male high school students. The research method used in this study is a quasi-experimental one including experimental and control group along with pre-test, post-test and follow-up. The statistical population of this study included all the male high school students in Khomeini Shahr, Isfahan, Iran in 2014. 30 students were chosen as the sample using multistage cluster method. Then they were randomly categorized in two groups, the experimental and the control. Kutcher depression scale was utilized as the research tool. The experimental group received seven attention training sessions, each lasting 90 minutes. Afterwards, the data was analyzed using ANOVA with repeated measure. The findings show that there is a significant relationship between attention training technique and depression reduction among the students.

Keywords: Depression, Attention Training Technique.

INTRODUCTION

Achieving higher educational levels and a good job is one of the frequent wishes of most students and their families. In educational systems, the studying periods are divided into some stages in which the high school is one of the most crucial ones accompanied by adolescence. This period of outstanding changes in psychological and physiological growth along with puberty comes with acknowledging adult social roles. In this stage, it is necessary to adapt childish behaviors with acceptable social norms. In adolescence period, biological changes suddenly happen; therefore, the adolescents' self impression may change. In this period, students face many challenges. On the one hand, they must adapt themselves with their internal changes and adjust themselves with their family members and peer students. Unfortunately, the rate of disappointment and despair has increased with the spread of people's mechanical life and the rate of disappointment among the youth and adolescents is higher than other age groups [1]

Depression is called psychological cold because of its commonness and about two third of the depressed patients think of suicide. 10-15 percent of them commit suicide to end their lives. 10-12.5 percent of men and 25 percent of women have at least experienced depression once [2]. Depression is one of the emotional disorders whose main factor is sorrow. Those suffered from depression described their own

mood as cheerless and helpless; there is always some amount of reluctance to some extent and nothing attracts their attention [3]. Depression is a regressing illness which has many social, economic, physiological and psychological consequences [4]. The major depression leads to economic loss due to the person's inability and repeated absence [5]. The term depression refers to the feeling of sorrow, failure and disappointment which is accompanied by losing interest in enjoyable activities and foods, suffering from sleep chaos, losing concentration and body energy. Major depression periods normally take place four times. Those who are properly cured do not have any diagnostic signs of major depression. Some suffer from clinical depression for many years. Perhaps, the most significant psychological theory which is connected to depression is the cognitive theory. The basis of these theories is that one specific experience can have different impacts on two different individuals which are intolerable. It is stated that depression involves orientation towards negative information about self assessment [6]. This orientation decreases individuals' functions and make them more depressed. The patient forms some plots in his/her mind which process the negative emotional information selectively [7]. There is a direct relationship between negative emotion and also positive experience reduction and cognition [8].

Depression is one of the influential variables in high school students' behavior who have passed the

puberty and are experiencing the adult world recently. They must undergo the responsibility of life gradually and accept other problems. These problems have some unpleasant effects on adolescents and some of them may feel depressed. Some of them feel defeated, disappointed, absurd and unsociable; others show their depression with disagreeable, aggressive and ill-tempered behaviors along with repeated nag. Some go towards hazardous behaviors like smoking, misusing drugs, behaving anti-socially. Hence, it can be concluded that depression has a significant impact on adolescents' life especially in high school among which educational failure, physiological and social problems can be seen [9]. Different statistics have been mentioned about the spread of depression among Iranian students. In Iran it is reported that 73% of the female high school students and 58 % of the male high school students are suffering from depression [10]. This study aims at investigating the efficacy of attention training technique in depression reduction among male high school students.

METHODOLOGY

Sample and sampling method

In this study, the statistical population included all male students who were studying in one of the high schools in Khomeini Shahr, Isfahan in 2014. The total number of the high schools in this study was 18 and the total number of the students was 3813. The sampling method in this study was a multistage cluster one. First of all, one zone was randomly selected among the all four zones. Then, one high school in this zone was randomly chosen. Next, two classes were randomly chosen among the first grade ones. All the sixty students in these two classes were asked to fill out Kutcher depression scale questionnaires.

Measurement tools

Kutcher's adolescent depression scale (KADS-11)

The present scale was carried out on 1712 students in middle and high school by Kutcher in 2002. According to the previous research, this scale is valid and reliable. The present questionnaire is self-reporting which includes 11 expressions. The answers were planned in a four-point scale. Each subject's score equals the total score s/he gets for all expressions. The first choice will have 0 point, the second choice will have 1 point, the third choice will have 2 points, and the fourth point will have 3 points. The maximum score can be 33. In order to assess the validity, 12-18 year-old adolescents who had got one score higher than 15 in Beck depression inventory were asked to do Kutcher test, Beck depression inventory, mini international neuropsychiatric interview and major depressive episode again. The statistical analysis showed that Kutcher test has the highest recognition ability.

Attention training technique

Attention training technique is a treatment which has been planned to deal with continuous self-centeredness, hyper-engagement and increase in controlling processing flexibility. This method includes participating in a range of different external auditory stimulators and has three steps: 1. Selective attention 2. Rapid attention change 3. Divided attention [11]

1ST SESSION

AIM: Treater and other members of the group get familiar with each other; becoming familiar with treatment

CONTENT: Greeting by treater and introducing himself or herself and other members of group, defining the objective, holding training course and its length, establishing some rules by asking the members to share their ideas, and becoming familiar with types of thought models.

HOME WORK: Writing the thoughts which bother the most during the day and night.

2nd SESSION

AIM: Discovering the nature of disturbing thoughts

CONTENT: Familiarity with thought cycle, feeling and behavior and expressing the disturbing thoughts to discover the nature of them.

HOMEWORK: Investigating the effect of thought on daily feelings and behaviors.

3rd SESSION

AIM: Familiarity with ATT model

CONTENT: Group familiarity with the treating model and its emphasis on using distraction techniques, familiarity with positive and negative meta-cognition beliefs

HOMEWORK: Registering daily thoughts and discovering positive and negative meta-cognition beliefs.

4th SESSION

AIM: Increasing the treatment motivation

CONTENT: Motif, measuring the amount and direction of concentration using self measuring forms

HOMEWORK: Filing self measuring forms when experiencing disturbing thoughts.

5th SESSION

AIM: Visual attention training exercises

CONTENT: Drawing the table of meta-cognitive beliefs advantages and disadvantages

Accomplishing distraction techniques using painting boards

HOMEWORK: Working on visual attention when faced with disturbing thoughts, Complete self measuring forms daily

6th SESSION

AIM: Training auditory attention

CONTENT: Explaining auditory attention techniques for the group and performing that for 20 minutes, getting their feedback

HOMEWORK: Exercising twice at home in the morning and the evening.

7th SESSION

AIM: Auditory attention exercise and concluding

CONTENT: Attention exercise in the class, getting feedback and completing self measuring forms, Reviewe all sessions and answering the ambiguities

HOMEWORK: Continuing the exercises at home twice a day for the next week.

8th SESSION

Performing post test after one week and follow-up one month after finishing the training sessions.

RESULT AND DISCUSSION

Based on the hypothesis in this study, in order to investigate the efficacy of attention training techniques about depression, ANOVA with repeated measures was used. Statistical calculations were carried out using SPSS-18. Table 1 shows the depression mean and standard deviation for each group.

The results of table 1 shows that post test and follow up scores in experimental group has decreased in comparison with control group. In order to check the significance of this difference, regarding the fact that each subject's depression has been tested three times, ANOVA with repeated measures was used.

In order to check the depression scores normality, Shapiro-Wilks test was used. In order to investigate variance equality presupposition, Levin test was used and for investigating dependent variable co-variances equality, Box test was used. Mauchly test was generally used to investigate variant scores co-variance equality in all groups. The results of these analyses have been presented in tables 2, 3, 4, 5.

Table 3 shows that depression data was normal in both groups. The presupposition of using ANOVA test with repeated measures was followed. In order to investigate equality in depression variant variance, Levin test was used. Table 3shows this analysis.

As it can be seen in the table-3, depression variance was equal in three stages; furthermore, the presupposition of using ANOVA with repeated measure was done. In order to investigate co-variance equality in both groups' depression, box test was used.

As it can be seen in the above table-4, both groups' depression co-variance was not significant even after three different measurements; moreover, the presupposition of using ANOVA with repeated measure was done. In order to investigate covariance equality of depression variable in three measuring steps, Mauchly test was totally utilized.

The results of Mauchley test shows table-5 that dependant variance co-variances are totally equal in all three stages. The presupposition of using ANOVA with repeated measure was carried out as well.

Table 1: Depression mean and standard deviation based on experimental and control group

Variables	Group	Mean	SD	Number
Pre test depression	Experimental group	14.64	6.39	15
	Control group	11.73	4.49	15
Post test depression	Experimental group	5.50	2.17	15
	Control group	13.93	4.69	15
Follow up depression	Experimental group	5.57	2.97	15
	Control group	11.46	4.17	15

Table 2: Shapiro-Wilks test in order to investigate the data normality

Changes source	Group	Shapiro-Wilk test	Statistics	df	Significance
Depression	Pre test	Experimental	0.934	15	0.349
		Group	0.931	15	0.280
	Post test	Experimental	0.914	15	0.180
		Group	0.937	15	0.349
	Follow up	Experimental	0.865	15	0.135
		Group	0.924	15	0.414

Table 3: Levin test to investigate groups' variances equality in depression variable

Changes source	F	Df ₁	Df ₂	Significance
Pre-test depression	0.554	1	27	0.122
Post-test depression	5.303	1	27	0.129
Follow-up depression	2.126	1	27	0.156

Table 4: Box test to equate groups' co-variances

Box test	F	Df ₁	Df ₂	Significance
18.103	2.650	6	5205.115	0.114

Table 5: Mauchly test to investigate co-variance equality of dependant variable

Changes source	F	Df ₁	Df ₂	p
Three measuring steps	0.822	5.084	2	0.079

CONCLUSION

The result of the study shows that post-test and follow-up depression scores for the experimental group have significantly decreased in comparison with control group. These findings were proved in other pieces of research like:

1. The efficacy of meta-cognition on reduction of depression and students' rumination [12]
2. The efficacy of att on reduction of major depression symptoms [13]
3. The efficacy of att on reduction of major depression [14]
4. The efficacy of att on the amount of depressed and worried patients' symptoms [15]

Studying the findings, it can be said that one of the significant signs of depression is disturbing and negative automatic thoughts which involve sense of disappointment, failure, sorrow, unfeeling, negative self image including self sarcasm and self shame. The depressed person has lots of self engagement in his or her mind over assessing past defeats which is the major factor of formation and increase in depression severity. His or her interpretations include ignoring, reducing the importance of achievements and considering them as random ones while magnifying the failures and blaming themselves. Moreover, one of the symptoms of depression is rumination which is related to the events that people cannot solve them using problem solving methods [16]. The students start ruminating and negative processing when they cannot solve a problem through effective problem solving methods; therefore, it is the beginning of depression [7]. Because affection has a direct relationship with cognition, negative self assessment, increase in negative affection and decrease in positive experience. Therefore they become depressed [8]. Next, students are involved in negative beliefs including: I am not a valuable person, I am not qualified and I am a loser. It seems that in this study, attention training helps students learn how to control these thoughts by effective distraction and attacking disturbing thoughts. Therefore, attention training through distraction training, thought control training,

attention to external stimulators instead of internal thought and physiological symptoms lead to reduction of both depressing thoughts and depression symptoms. Paying attention to the fact that ATT has been successful in reducing the depression severity of thoughts; furthermore, physical, emotional and behavioral symptoms are influenced and reduced. Therefore, with regard to thought cycle, it seems that cutting or controlling depression thoughts result in behavior modification.

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