

Effectiveness of Rational-Emotive Behavior Therapy on the Level of Depression among Female Adolescents

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ABSTRACT

Introduction & Objectives: Clinical depression is a serious illness that can affect any individuals including the adolescent. Depression influences on the individual's thought, feeling, behavior, and health. The present study aimed at examining the effectiveness of Rational-Emotive Behavior Therapy on the adolescent girls' depression. **Method:** The research has been experimental in nature and has been done with a pre-test/post-test design taking into account a control group. After screening the candidates, a sample of 30 female school students who scored 20 or above in the Child Depression Inventory (CDI) Questionnaire (Kovacs, 1992) were randomly selected through a simple sampling procedure and were placed randomly at two groups of 15 subjects, the Experimental and control groups. The experimental group members participated, on a weekly basis, in 10 sessions of 50 minutes receiving Rational-Emotive Behavior Therapy trainings. Upon the completion of training sessions, once again, the subjects of the two groups replied to the questionnaire. The data gathered was analyzed using Analysis of Covariance (ANCOVA) test by using the SPSS software.

Results: The findings obtained show the effectiveness of the REBT on the decrease of depression inventory scores where the scores of the experimental group as opposed to those of the control group indicate an improvement in the construct under measurement in the post-test stage.

Conclusion: The results indicate that Rational-Emotive Behavior Therapy is affective on the reduction of depression in female adolescents more specifically with an emphasis on such principles and techniques as the identification of cognitive errors, the musts and the rules, the identification of core beliefs, challenging the irrational beliefs, the musts and the core beliefs, as well as distinguishing individuals from behaviors and from acceptance.

KEY WORDS: Rational-Emotive Behavior Therapy, Depression, Adolescent

INTRODUCTION

In the circle of any individual's psychological development, there is a period between his/her childhood and adulthood entitled as the adolescence which characterizes the end of one's childhood and starts the foundation of his/her maturity. Adolescents are often emotionally confused; they are mostly rioters and have mood fluctuations. For the majority of the adolescents, it is difficult to express their feelings and their temperaments and the only way they can express their emotions is through inappropriate behavior and emotional discharge (Dehshiri, 2012).

Clinical depression is a serious disease, which can affect any individuals including the adolescent. According to the results of previous research works, 10% of the adolescents may suffer from a serious emotional disease. Among the adolescents, one individual out of 8 may suffer from depression, the symptoms of which typically appearing in the age of 14-18 years old.

The symptoms of depression in the adolescents are resistant gruff temperament, anger, feelings of frustration and worthlessness, severe reaction to criticism, restlessness, insomnia or increased need for sleeping, indecision, non-participation in social, family or educational activities, educational failure or dropout, etc. In essence, if not treated in the adolescence, depression can provoke a wide range of problems and may create numerous difficulties both for the individual and for the society (Cyranowski et al., 2000; Monroe, Rohde and Seeley, 1999; Brown, Cohen and Johnson, 1999). There are many psychological and social factors relating to the etiology of adolescent depression and there are different theories focusing on a particular factors from among effective determinants of depression (Barchia & Busse, 2010; Burns, Andrews & Szabo, 2002).

Rational-Emotive Behavior Therapy (REBT) is a form of behavioral cognitive treatment, which assumes that individuals develop irrational core beliefs based on their interpretations of different events. For the betterment and treatment of patients, REBT strongly focuses on irrational core beliefs, the ability for thinking about how to think, and the relationships among cognition, emotion and behavior (Jena, 2008). REBT has been used for the improvement and treatment of a wide range of disorders, whether in the form of group treatments or

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as individual methodologies (Harrington et al., 1998; Jena, 2008). Cognitive treatment methods support the clients to recognize the challenges of the external world and possible problems of future and to find better ways to fight those problems (Chen et al., 2006). REBT is a comprehensive treatment method, which focuses on the intellectual aspects of human disorders in addition to emotive and behavioral dimensions. The formative elements of such false thoughts are irrational beliefs. In this relation, Ellis (2007) maintains that cognitive and emotive processes relate to each other in the sense that irrational cognitions result in emotive confusion. According to REBT theory, there are four irrational beliefs that result in emotive disorders: demandingness, catastrophizing, frustration intolerance, global condemnation of human worth (Stoun, 2009; Thompson and Brown, 2007). The main approach in REBT is to discuss about irrational beliefs. In general, three types of activities exist in this treatment method: 1) identification of irrational beliefs, 2) separating rational from irrational beliefs, 3) casing doubts on irrational beliefs (Shafi'abadi & Naseri, 2007).

Research literature has shown that REBT is a helpful treatment methodology and has significantly been effective on decreasing self-blaming, removing disorders of childhood and adolescence including depression (Turnr and Barker, 2013; Sava et al., 2009; Laida et al., 2008; David et al., 2008; Jamal and Kordi, 2006; Scott et al., 2000), conduct disorder, risk behavior and emotive disorders (DiGiuseppe and Bernard, 1990), increasing the self-confidence of depressed clients (Chen et al., 2006), improving some aspects of self-awareness, self-continenence, and resiliency (Coholic, 2011), and reducing anxiety disorders (Lorian, Titov, and Grisham, 2012).

REBT is, at the same time, a theory and a strategy and is capable of helping individuals to fight their negative feelings and behavior. It is also an effective intervention method for reducing severe motives and behavior (Spencer, 2005). Although REBT claims to be successfully applied to the treatment of disorders of the childhood and adolescence, it is important to take the fact into consideration that some children fail to understand some components of REBT. However, having regarded the relatively high prevalence of depression and emotive disorders in adolescence, it seems to be quite necessary to do research works in regard with the efficiency of treatment methods which are assumed effective on disorders of the childhood and adolescence. That is why the present authors have done the present study aiming at testing the effects of REBT method on depression in female adolescents.

METHOD

Research Design

The present research is an experimental (experimental) study, by type, and an applied research, by purpose, which has been done within pre-test-post-test design taking into account a control group (Figure 1).

Figure (1): Research Design

Experimental group		
Depression Pre-test	Intervention (REBT) 10 Sessions of 50 Minutes For 10 Weeks	Depression Post-test
Control group		

Statistical Population, the Sample and the Sampling Procedure

The statistical population of the study consists of female students of junior secondary schools of Galougah city for a total of 320 individuals in the academic year 2012-2013. The sample includes 30 subjects (15 in the Experimental group and 15 in the control group) selected through a two-stage sampling procedure, the 1st stage consisting of a cluster random selection and the 2nd stage, of a simple random selection. To do the task, in order to screen the female depressed students, two schools were selected by drawing lots and all their students for a total of 290 students replied to the Child Depression Inventory (CDI) Questionnaire (Kovacs, 1992). 69 students gained the score 20 or higher. A list of such students was prepared and again, by drawing lots, 30 students were randomly selected to be divided into two groups of 15 subjects: a control group and a experimental group. The experimental group, then, received Ellis's treatment model through 10 sessions of 50 minutes on a weekly basis. The control group, however, did not receive any interventions during the same period. At the end of the 10th week, both groups replied, once again, to the Child Depression Inventory (CDI) Questionnaire.

Data Collection Instrument

Child Depression Inventory (CDI): This test has been developed by Kovacs (1992) to be applied to children and adolescents of the age 7-18 years old and, in comparison with other similar depression tests, it requires the least level of reading literacy. This instrument can measure symptoms of depression including low mood, inability of enjoying oneself, deficiencies with critical functions, self-assessment and interpersonal behavior. The instrument includes 27 items each of which consisting of 3 choices to be scored on a value range of 0, 1 and 2. Bandura, et al. (1999) have reported a reliability coefficient of 0.86 for the instrument. Caprara (as

cited by Bandura, et al., 1999) has compared CDI with Child Self-efficacy Questionnaire. Chronbach's alpha coefficients for the two instruments were reported to be 0.88 and 0.86 respectively, while the reliability coefficients were reported to be 0.88 and 0.92. In Iran, CDI was first used by (2005) who reported a reliability of 0.83 for it.

Rational-Emotive Behavior Therapy

In the present research, 10 treatment sessions of 50 minutes have been considered based on Ellis's model to be presented to the clients on a weekly basis. The sessions used to be held at Ma'edeh Junior Secondary School in Galougah city with the participation of both the two schools under study during March and May 2013. REBT includes such principles and techniques as the identification of cognitive errors, the musts and the rules, the recognition of core beliefs, challenging irrational beliefs, challenging the musts and the core beliefs, separating the behavior from the individual and from the acceptance. General principles and the treatment process typically followed in REBT have been shown in Table (1) below:

Table (1): REBT Interventions per Session

Sessions	REBT Interventions
1	Expression and identification of feelings as expectations and preferences; comparison between consequences of expressing the feelings in the form of expectations or preferences.
2	Exploring the roles played by the musts and irrational beliefs in the creation of expectations; making explicit the roles played by one's thoughts and feelings in the creation of behaviors.
3	Instruction of the model ABC; exercises regarding the role played by one's thoughts in his/her feelings and behaviors.
4	Discussing about rational and irrational beliefs; instruction of how to recognize rational from irrational beliefs.
5	Discussing about rational and irrational beliefs (continued); exercises aimed at making explicit the roles played by irrational beliefs in the creation of negative feelings and emotions.
6	Training aimed at separating behavior from personality.
7	Introduction of rational errors; challenging the irrational error of catastrophizing.
8	Discussing about unconditional self-acceptance; naturalization of making mistakes by human beings
9	Discussing about acceptance others ; naturalization of making mistakes by human beings (continued)
10	Integration of ABCDEF Model where A = activating events, B = belief, C = (behavioral and emotive) consequence, D = Disputing, E =effect, F = feeling

Data Analysis Method

In order to analyze the data, we have used One-Way Covariance Analysis Test (ANCOVA). All stages of analysis have been done by using SPSS software.

Findings

Table (2) shows the statistical description of the CDI questionnaire scores gained by participants of the two groups under investigation. It indicates that the mean score of the experimental group in the pre-test stage has been 25.7 while it has been 19.7 in the post-test stage. In other words, there has been a considerable decrease in the depression scores of members of the experimental group in the post-test stage as opposed to the pre-test stage.

Table (2): Statistical Description of Depression Test in the Experimental & Control group

Group	Variable	No. of Subjects	Pre-test		Post-test	
			Mean	Standard Deviation	Mean	Standard Deviation
Experimental	Depression	15	25.7	3.5	19.7	3.9
Control	Depression	15	25.6	4.43	24.7	4.5

Table (3) shows a summary of covariance analysis of depression in the two groups under study. As it can be observed, the effect of covariate is strongly significant ($p = 0.000$, $F(2.27) = 19.696$) and, as such, it is connected to the criterion. The F ratio, too, is statistically significant ($Eta = 0.437$, $p = 0.000$, $F(1.27) = 20.957$) indicating a significant difference between the mean scores of depression of the two groups which shows that REBT methodology has been effective and has decreased the level of depression of members of the experimental group.

Table (3): Summary of Depression Covariance Analysis in the Experimental & Control group after Eliminating the Mutual Effect

source	Sum of Squares	df	Mean of Squares	F	Sig	Eta
covariate	412.582	2	206.291	19.696	0.000	0.593
Pre-test	225.082	1	225.082	21.491	0.000	0.443
Between groups	219.492	1	219.492	20.957	0.000	0.437
Within groups	282.784	27	10.473			
Total	695.367	29				

DISCUSSION

The present research has aimed at exploring the theory and the techniques of REBT which can be applied to the treatment of depression in the adolescence. The analysis of the data gathered has shown that REBT has significantly been effective on depression in the experimental group as opposed to the control group. This finding is in line with results already reported by Turner and Barker (2013), Sava *et al.* (2009), David *et al.* (2008), Rajabi and Karjoo Kasmaie (2012) and Hassani, Mahzooni Najafabadi and Lotfi Kashani (2011). In this regard, Sava *et al.* (2009) has compared three treatment methods, namely, “cognitive”, “rational-emotive-behavioral” and “pharmaceutical” (i.e. Prozac prescription) treatments on a number of individuals who have been diagnosed as depressed patients during the period 2001-2004 on the basis of clinical interviews. They showed that all three treatment methods had proved to be equally effective on the reduction of depression symptoms during a period of 6 months from the pre-test to post-test stages. Moreover, follow up studies showed that both the post-test and follow up study depression scores were significantly lower than the post-test scores, but there was no significant change between the post-test scores and the scores of the 6-months follow up study.

Depressed individuals, due to irrational perceptions of themselves resulting in the feelings of inferiority, select irrational inaccessible goals and, as a result, they feel insufficient and inadequate. In rational-emotive treatment method, the existence of both irrational and rational beliefs in the individuals is emphasized, and the model ABC is under focus.

Human beings have aims of their own which are either supported or prevented by the events that activate (A); individuals, whether consciously or unconsciously, react through their belief system (B). When human beings believe that what they prefer must necessarily happen, an emotive disorder emerges and the emotive consequence (C) appears. REBT attempts to move towards psychological training, focusing on the such skills as the identification, criticism and substitution of inefficient beliefs and in so doing, it makes use of cognitive, emotive, mental imaging, behavioral and systemic skills (Ellis and Dryden, 2007; Thompson and Brown, 2007).

Thus, strategies offered to the clients during treatment sessions may help the depressed individuals to recognize irrational belief patterns involved in the feelings of inadequacy, and replace them with alternative rational and efficient belief patterns.

Many psychological theories have been inserted in the REBT including the Cognitive theory, the Behavior change theory and the Humanistic Psychology. REBT, as such, can specifically be attractive for the treatment of psychological disorders and, as a non-traditional and, at the same time, efficient approach that make clear how emotive and behavioral problems emerge, can be quite helpful (Spencer, 2005). The results of the present study showed that making prompt use of REBT could help the adolescent achieve a process of rational thinking and, accordingly, this method can be applied to the treatment of depression and emotive problems of the adolescence.

Now, in the end, it is the turn to find out how Ellis's REBT approach could reduce levels of depression in the Iranian female adolescents. Ellis maintains that people have both rational and irrational beliefs and that recurrent severe irrational beliefs make them unhappy (Ellis & McLaren, 2005). Published evidence has already shown that there will be a significant improvement in the individual's feelings and behavior, if his/her irrational beliefs decrease (Ellis & Harper, 2010). It seems that REBT has been capable of discovering the depressed adolescents' annoying irrational beliefs and of decoding their unconscious code. Whenever such irrational beliefs along with their respected inappropriate feelings have been questioned by the help of the therapists, and the depressed adolescents have been aware of their unconscious thoughts and managed to cast doubts on their own irrational beliefs changing them into rational alternatives, then they have also been able of releasing themselves from negative feelings and moods of depression.

Among the restrictions of the present research, we may refer to the shortness of the training period and the lack of a follow up study to explore the effectiveness of REBT intervention method. Furthermore, the criterion for depression has merely been based upon CDI instrument and, accordingly, judgments about the diagnosis of depression and about the research results have to be made with care.

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