

# The Effect of Reality Therapy on Resilience and Cognitive Emotion Regulation of Anxious Students

## Abstract

The aim of this research was to study the effect of reality therapy on the resilience and cognitive emotion regulation of student anxiety. This design of the study was pretest, post test control group. The sample include 30 student anxiety (15 group experimental and 15 group control) were selected purposive sampling and the were requested to answer resilience Connor & Dawidson (2003) scale and cognitive emotion regulation Garnefci and alt (2001) scale questionnaire. For analyzing the results we used variance ANOVA Repeated Measures and covariance (MANCOVA and ANCOVA). The results of data analysis showed that as ap reality therapy caused the increase of resilience and cognitive regulation of emotion positive and decrease cognitive regulation of emotion negative student anxiety experimental groups in comparison to the witness group. That as ap reality therapy was effectiveness on the increase of resilience and cognitive regulation of emotion positive and decrease in cognitive regulation of emotion negative student anxiety.

**Keywords:** reality therapy, resilience, cognitive emotion regulation positive and negative

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## Introduction

The adolescent is in a critical stage, and one can daresay that adolescents experiencing anxiety suffer from mental and physical deterioration given to the conflicts of adolescence. Several elements have a role in anxiety, such as individual, family, biological, and social ones, the identification of which is of great significance in saving adolescents. Because of physical-cognitive changes and crises of this period, the existence of cognitive problems is always a serious threat to adolescents during adolescence (Dallas, 2017). The lack of resilience interrupts interpersonal communication in anxious adolescents and can reduce cognitive-emotional function (Walsh, 2008; translation by Deghani, Khajeh Rasouli, Mohammadi, and Abbasi, 2017). Low resilience in adolescents affects the level of adaptation when faced with disasters or stress, reducing a person's internal ability, instability of social skills, and poor interaction with the environment. Moreover, low resilience results in a lack of improvement (Diener, 2018). Moreover, one has to state that disorders in Cognitive emotion regulation (CER) in adolescents result in anxiety-reducing mental health and self-esteem. The purpose of CER is to support the formation of self-esteem, self-efficacy, and individuality. This could be discussed to increase positive emotion, avoiding negative emotion to form a positive emotion, with a high level of positive CER leading to emotional recovery (Vandekerckhove et al., 2016). Mental health cannot be improved when faced with cognitive challenges unless people are emotionally empowered. It can be said that people can suffer from emotional disabilities due to challenges that threaten their emotional health and self-esteem (Yan & Nedelz, 2019). One has to consider what therapy can have a positive effect on improving resilience, and positive and

negative cognitive regulation of anxious students. It has to be noted that reality therapy is an effective approach to reducing cognitive-emotional problems since it is the cultivation of responsibility in the individual and the creation of a successful identity. The person needs to identify the behavior he or she is trying to correct. They must pay full attention to it, not make excuses to deny responsibility. This approach makes efforts to identify life's short-term and long-term goals and explicitly define them, evaluate ways to achieve their goals, choose the methods that lead to more favorable results and experience a more positive feeling towards oneself (Dan & Wilers, 2019). It has to be stated that reality therapy is an internal control system and explains why and how to choose the options that determine the direction of people's lives (Wubboking, 2013). Choice therapists argue that individuals choose their behaviors as a way to resolve the failure caused by an unpleasant relationship (Cery, 2001; translated by Seyed Mohammadi, 2016).

Kim (2015) reported that the use of choice theory treatment is an appropriate treatment approach to reduce disorders. As already stated, anxious students struggle with psychological and emotional problems and their resilience and cognitive regulation of emotion decrease as a result of their anxiety. It has to be noted that to enhance the emotional and cognitive status of these people, reality therapy, which is effective during research, can be effective in improving the problems of these people. Hence, the purpose of the study was to examine the effect of reality therapy on resilience and CER of anxious students, and the question is whether reality therapy affects enhancing resilience and CER of anxious students or not.

Methods

The study was applied in terms of purpose and experimental (pre-test-post-test design with the control group) in terms of research method. The population was all anxious high school female students in Ahvaz. The sample size was 30 anxious high school female students selected using the purposive sampling method. Therefore, firstly, a list of anxious high school female students was prepared based on participating in the call for anxiety tests, including 63 people according to the list and inclusion criteria, and according to a previous study, 30 anxious high school female students were selected as available. Then from among the research samples, 15 anxious high school female students in the experimental group and 15 anxious high school female students in the control group were randomly selected using simple random sampling without substitution with the probability of the same selection and the probability of one. Fifteen anxious high school female students were placed in the experimental group and 15 anxious high school female students in the control group. The inclusion criteria were getting a score higher than the cut-off point of the anxiety test, the ability to attend treatment sessions, and criteria for scoring out of range and absence in more than two treatment sessions during the treatment process.

#### Research tools

Resilience questionnaire: Connor and Davidson (2003) developed this questionnaire to measure resilience. The developers of the questionnaire argue that this questionnaire can well distinguish resilient individuals from non-resilient ones in clinical and non-clinical groups and can be used in research and clinical situations. The questionnaire has 26 items scored on a Likert scale between 0 (completely incorrect) and 4 (always correct) (Hosseini, 2012). Shakerinia and Mohammadpour (2010) obtained the reliability coefficient of the questionnaire through Cronbach's alpha and Table 1. The summary of therapy sessions

split-half methods as 0.90 and 0.88, respectively. The validity of the questionnaire was obtained by correlating it with the Ahvaz Psychological Resilience Scale of 0.64 at a significance level (0.001) which indicated the questionnaire has high reliability. The reliability of the questionnaire was obtained as 0.87 using Cronbach's alpha method.

Cognitive Emotion Regulation Questionnaire (CERQ): The questionnaire was developed by Garnowski et al. (2001) and is a multidimensional questionnaire used to identify emotional-cognitive coping strategies of individuals after experiencing negative events or situations. This scale is a self-report tool with 36 items and two subscales of positive emotion cognitive regulation (acceptance, positive refocusing, planning refocus, positive reassessment, underestimate), cognitive negative emotion regulation (self-blame, rumination, catastrophizing, and other-blame). The scale scores range from 1 (Almost never) to 5 (Almost always). The cognitive regulation of positive emotion scale includes 20 items and the cognitive regulation of negative emotion scale has 16 items (Besharat, 2009). Besharat (2009) reported the reliability of the questionnaire using Cronbach's alpha method for subscales from 0.78 to 0.89. Validity was reported through correlation coefficients with the Emotional Intelligence Questionnaire for subscales from 0.42 and -0.49 at the level of 0.001. In the present study, the reliability of the questionnaire through Cronbach's alpha for positive and negative emotional cognitive regulation was 0.87 and 0.88, respectively.

Reality therapy sessions: Reality therapy sessions were conducted on the experimental group during 8 sessions of 90 minutes based on the practical guide of Glasser's choice theory (2012) translated by Sahebi (2016). The summary of the sessions is as follows:

Sessions	Purposes	Content and techniques	Assignments
First	Familiarity of members with the concept of selection theory and stating the purpose of sessions	Emotional involvement with group members, explaining the rules of group counseling, explaining self and each other evaluation, needs, and demands from each other, motivation to encourage the useful and effective presence of members, concluding treatment contracts with members	Assignment: Each member has to write their positive and negative traits separately, stating what they want to see changed in their behavior.
Second	Familiarity of members with their identity, types of identities	Characteristic of successful identity, failure identity, examining the assignments of the previous session, examining excuses for irresponsible behavior, presenting information on how to increase the quality of life, encouraging members to discuss current behavior, the statement that only past events are addressed if they affect how people	Assignment: Focus on the admirable and positive aspects of the relationship with others

		<p>behave in the present, although problems may have their roots in the past. By learning better ways to increase satisfaction, and calmness in their lives, they have to learn how to deal with them in the present. In this session, the therapist specifically considers reducing negative thoughts.</p>	
Third	<p>Familiarity of the members with taking responsibility for their behavior</p>	<p>Familiarity with important members, the need for responsibility in life, examining the homework of the previous session, and exploring the general direction of life this exploration is a prelude to further assessing whether their behavior, thoughts, or desires are desirable. The session is focused on gaining awareness and changing the current behavior completely. The need for commitment in life was discussed. Increased segregation levels per member were assessed to enhance compliance.</p>	<p>Assignment: Write different tasks of the week. Explain their behavior to others, what do you do if someone rejects your request.</p>
Fourth	<p>Familiarity with internal resistance from the perspective of selection theory</p>	<p>Relaxation skills training for mental health, examining the assignment of the previous session while reviewing the previous sessions of the therapist. Listen carefully to what members have to say about their feelings. Although acknowledging these feelings, instead of focusing on those feelings, he encourages members to take action and change what they do and think. Changing what we do and think is easier than changing our emotions. To Glasser (1992), it is impossible to deny that it is easier to see what we do. The summary of the activities in this session was the regulation and planning of behavior change, irrational thoughts, distorted beliefs such as mind-reading, extreme generalization, ways to change negative thoughts, and replacement of positive thoughts. According to Bowen, the therapist helped families to reduce their overall stress level and showed members ways to differentiate, to meet individual and family needs.</p>	<p>Assignment: They practiced both expressive and listening skills, and were asked to record the exercise on tape so that both they and the therapist could listen.</p>
Fifth	<p>Familiarity of members with basic needs, effective in real life</p>	<p>The effect of basic needs in life, their ability to choose the best way to meet basic needs, examining the assignment of the previous session, examining the level of commitment to project implementation, and creating new experiences while reviewing the content of the previous session in this session, the technique of returning home was used and members were instructed to return home to better</p>	<p>Assignments were given to members for the next meeting. Assignment: What has been the most enjoyable thing you have ever done?</p>

		understand the families in which they grew up. By doing so, the individuals could identify themselves more clearly. In this session, we discussed the feeling of being valuable and loving, which are two basic needs. Proper solutions to meet these two needs were taught to satisfy them.	
Sixth	Familiarity of the members with planning problem solving, planning for the current and present life	Behavior evaluation, asking questions to challenge irrational thoughts, studying the effects of previous sessions, and getting rid of the instant pleasures past the in each session help people evaluate their behavior. In this session, the aspects of life expectancy were discussed so that they could be understood by the members, the technique of personal relationships was practiced, and the therapist asked them to review and practice the contents of this session for themselves.	Assignment: self-assessment, practicing learned skills
Seventh	Familiarity of the members with how to commit to implementing plans and programs	Examining responsibility for behavior change, examining proper solutions to resolve disputes with each other, examining the natural consequences of behavior on the effects of behavior change, and thinking on life. There was a discussion and exchange, and in this session, the therapist challenged their decision to change their wrong behavior. Responsibility and its role in life, appropriate decision-making in solving various problems, proper solutions in solving different problems, presenting resolving disputes and practicing dispute resolution and doing it in real life (by playing a role)	Assignment: Work on resolving one of your disputes using the following four-step method: Step 1. Mutual respect Step 2. Identifying the real problem Step 3. Finding agreed bases Step 4. Mutual participation in decisions
Eighth	Familiarity of members with how not to accept excuses, excuses regarding the implementation of selected plans and programs	Examining the assignments of the previous session, summarizing the exercises in the previous sessions, eliminating the obstacles and problems in performing skills, and the need to use life skills while dealing with stressful situations. In this session, it was helped to examine the positive ways toward each other and change negative perceptions, to know the ways of satisfaction, be more intimate with each other, and emphasize the different roles of members in life. Before accepting various plans, they must first know themselves and be able to resolve their disputes. Practicing love and affection for others, reminding them, and not blaming each other if they make mistakes with others. They should try to solve the problem, and stress the need to repeat and practice the given assignments.	In this session, while distributing the questionnaire of the participant evaluation form and surveying them, the questionnaires were given to the people for post-test and at the end, their timely presence and effective cooperation during the course were appreciated and thanked.

Results

Table 1. Mean and standard deviation of resilience in experimental and control groups in pre-test and post-test stages

Variable	Group	Stage	Mean	SD	Frequency
Resilience	Experiment	Pre-test	37.93	3.84	15
		Post-test	68.80	6.62	15
	Control	Pre-test	39.26	3.12	15
		Post-test	40.10	2.85	15

As Table 1 shows, the mean and standard deviation of female students for the experimental group in the pre-test, and post-test was 37.93, 3.84, 8, 68.80, and 6.62 and for the control group in the pre-test stage, post-test was 39.26, 3.12, 40.10, and 2.85.

Table 3: Mean and standard deviation of positive CER in experimental and control groups in the pre-test, post-test stages

Variable	Group	Stage	Mean	SD	Frequency
Positive CER	Experiment	Pre-test	36.33	4.95	15
		Post-test	70.01	3.04	15
	Control	Pre-test	28.33	4.36	15
		Post-test	29.20	4.45	15

As Table 3 shows, the mean and standard deviation of positive CER of anxious students for the experimental group in the pre-test and post-test stages were 36.33, 4.95, 70.01, 3.04 and for the control group in the pre-test and post-test stages 28.33, 4.36, 29.20, 4.45.

Table 4. Mean and standard deviation of negative CER in experimental and control groups in pre-test and post-test stages

Variable	Group	Stage	Mean	SD	Frequency
Negative CER	Experiment	Pre-test	59.66	2.58	15
		Post-test	37.40	1.91	15
	Control	Pre-test	56.66	4.70	15
		Post-test	55.86	5.23	15

As Table 4 shows, the mean and standard deviation of negative CER for the experimental group in the pre-test and post-test were 59.66, 2.58, 37.40, and 1.91 and 56.66, 4.70, 55.86, and 5.23 for the control group in the pre-test stage and post-test.

Table 5. The results of the Kolmogorov-Smirnov test about the presumption of normal distribution of scores

Normal distribution of scores	Stage	Kolmogorov-Smirnov	
		Statistic	Sig.
Resilience	Pre-test	0.20	0.08
	Post-test	0.15	0.09
Negative CER	Pre-test	0.09	0.20
	Post-test	0.11	0.20
Positive CER	Pre-test	0.10	0.20
	Post-test	0.17	0.16

As Table 5 shows, the null hypothesis for the normal distribution of scores of the experimental and the control groups in the variables of resilience and positive and negative CER is confirmed. This means that the assumption of normal distribution of scores in the pretest and experimental group and the control group was confirmed.

Table 6. The results of the presumption of homogeneity of regression of the variables of the two groups in the population

Variables	Source of changes	F	Sig.
Resilience	Group interaction * pre-	1.67	0.51

Positive CER	test	0.95	0.82
Negative CER		1.21	0.37

As Table 6 shows, the F value of the interaction is insignificant for resilience, and positive and negative CER of the study. Hence, the assumption of regression homogeneity is confirmed.

Table 7: The results of Levene's test for the presumption of equality of variances of the variable's scores

Variables	F	First degree freedom	Second degree freedom	Sig.
Resilience	0.85	1	28	0.69
Positive CER	0.92	1	28	0.34
Negative CER	1.15	1	28	0.16

As Table 7 shows, Levene's test is insignificant for resilience, positive regulation, and emotional cognitive negativity. Thus, the variance of the experimental and control groups for resilience, positive and negative CER is insignificant. Thus, the assumption of homogeneity of variances was confirmed. The null hypothesis for equalization of score variances for all variables was confirmed - the assumption of the equality of variance of scores in the experimental and control groups was confirmed.

Table 8: The results of multivariate analysis of covariance on the mean scores of resilience, positive and negative CER of experimental and control groups with pre-test control

Tests	Value	Degree of freedom	Degree of freedom of error	F	p	Effect size	Statistic power
Pillai's Trace	0.98	3	24	289.37	0.001	0.90	1
Wilks Lambda	0.01	3	24	289.37	0.001	0.90	1
Hotelling's Trace	76.15	3	24	289.37	0.001	0.90	1
Roy's Largest Root	76.15	3	24	289.37	0.001	0.90	1

As is seen in Table 8, by controlling the pre-test, the significance levels of all tests show a significant difference between the female students in the experimental and control groups in terms of resilience, positive CER, and negative CER (F=289.37, and p<0.001). The effect or difference is 0.90. In other words, 90% of individual differences in resilience test scores, and positive and negative CER in anxious students are related to the effect of reality therapy. The statistical power is 1. In other words, the second type of error was impossible.

Table 9. The results of one-way analysis of covariance on the mean scores of resilience, positive and negative CER of experimental and control groups with pre-test control

Variables	Source of change	Sum of squares	df	Mean squares	F	Sig.	Effect size	Statistical power
Resilience	Group	4091.46	1	4091.46	189.62	0.001	0.85	1
Positive CER	Group	5862.01	1	5862.01	357.44	0.001	0.80	1
Negative CER	Group	1734.68	1	1734.68	142.31	0.001	0.79	1

As the table above shows, there is a significant difference in the controlling pre-test between anxious students in the experimental and the control groups in terms of resilience (p <0.001 and F = 189.62), positive CER (p <0.001 and F = 357.44) and negative CER (p <0.001 and F = 142.31). In other words, reality therapy increased resilience and positive CER and decreased negative CER of anxious students in the

experimental group considering the mean of resilience, positive and negative CER of anxious students compared to the mean of the control group. The effect for resilience, positive and negative CER is 0.85, 0.80, and 0.79, respectively, indicating that 85, 80 and 79% of individual differences in the resilience scores of resilience, positive and

negative CER of the anxious students in the experimental group is related to the effect of reality therapy.

#### Discussion and conclusion

The purpose of the study was to examine the effect of reality therapy on resilience and CER of anxious students. The results indicated a significant difference between the anxious students in the experimental and the control groups in terms of resilience and positive and negative CER. In other words, reality therapy increased resilience and positive CER and decreased negative CER of anxious students in the experimental group given the mean of resilience, and positive and negative CER of anxious students compared to the mean of the control group. The results obtained were in line with those of Mirzaei (2020) showing that reality therapy improved emotional regulation, Wayne et al. (2021) concluded that reality therapy has an effect on increasing resilience, positive emotional regulation, and reducing negative emotional regulation, Milren et al. (2020) showing that reality therapy has a significant effect on increasing positive CER and reducing negative emotional CER, Liner et al. (2020) who determined that performing reality therapy intervention has a significant effect on increasing resilience, Dan and Wilers (2019) who indicated that reality therapy is effective in improving CER. In explaining this, one can state that anxious students do not have proper regulation of emotion because of their high anxiety and have poor resilient behavior. The study showed that reality therapy affects increasing resilience, positive CER, and reducing negative CER of anxious students. One can state that reality therapy intervention organized the standards set for themselves and others because the students experienced an empathetic and supportive relationship in this type of therapy, and this technique caused them to behave more triumphantly in a stressful situations. Glasser (2001) stated that choice theory is a turning point in reducing cognitive and emotional problems because this type of treatment causes a change in life and control over life. Reality therapy instilled hope in the individual by nurturing responsibility and made anxious students not give up easily in various situations, and this intervention increased resilience by increasing adaptive and coping processes. One can state that reality therapy reduces the problems of emotional regulation that cause perceptual anxiety by creating a relationship and changing thoughts and by modifying the cognitive programs of these people by organizing negative reactions due to anxiety perception. By creating value judgment and self-esteem, reality therapy intervention made anxious students have better control over their emotions by evaluating emotions and feel less frustration, self-blame thoughts, and unpleasant feelings. It has to be stated that by creating value judgment and self-esteem, reality therapy intervention allowed anxious students

to have better control over their emotions by evaluating emotions, and to feel less frustrated, self-blaming thoughts, and unpleasant feelings. One has to state that by creating learning to express emotion, fearless attitude, and self-esteem, reality therapy intervention led to the development of self-awareness, and positive self-esteem, and anxious students gained more emotional self-awareness and by creating emotional regulation caused their situation to match the environment and become more efficient in the face of problems and improve CER. Thus, one can state that reality therapy, with self-assessment patterns to deal with resilience, improve emotional cohesion, and adaptive behaviors, evaluate positive emotions, and improve emotional cognitive regulation of anxious students. Therefore, one can state that reality therapy affects increasing resilience, positive CER, and reducing negative CER of anxious students.

#### Limitations

- The results of the study cannot be generalized to anxious male students and caution needs to be careful in generalizing the results.
- Because of lack of time, it was impossible to run the follow-up period.

#### Suggestions

It is suggested that counseling and treatment centers should pay special attention to the effectiveness of reality therapy because of its positive effect on improving resilience and positive and negative CER.

It is suggested that health care trustees should pay special attention to the effect of reality therapy on the policies of referring anxious adolescents to the medical centers by specifying the effectiveness of this treatment and preparing these centers for this to use the effective method to moderate the emotional-cognitive problems of adolescents.

It is suggested that the treatment package should be provided as an educational package for adolescents in cooperation with the centers so that these adolescents can make good use of the effect of these therapeutic approaches on enhancing resilience and CER.

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