



Research Paper: The Effectiveness of Cognitive Hypnotherapy in Reducing the Anxiety of Women with Generalized Anxiety Disorder



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Abstract

The aim of the current research was gauging the effectiveness of cognitive hypnotherapy in reducing anxiety in women with generalized anxiety disorder. This research was semi-experimental in terms of practical purpose and data collection. The population of the research included all women with generalized anxiety disorder who had referred to four counseling centers in the city of Bandar Anzali. For this purpose, 30 women were selected according to the psychiatrist's diagnosis of generalized anxiety disorder and were randomly divided into an experimental (15 people) and a control (15 people) group; the short scale of generalized anxiety disorder was implemented on both groups and then, cognitive hypnosis therapy was performed for 2 months during 8 one-hour training sessions, for the participants of the experimental group individually and the control group did not receive any treatment. Next, the said questionnaire was again implemented on both groups. The data were analyzed using the covariance statistical method. The findings showed that cognitive hypnotherapy was effective in reducing the anxiety of women with generalized anxiety disorder. Therefore, it can be concluded that psychologists and psychiatrists can use cognitive hypnotherapy to reduce the anxiety of women with generalized anxiety disorder.

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1. Introduction

Generalized anxiety disorder is one of the most chronic anxiety disorders the main feature is excessive and uncontrollable worry (Khodabakhsh Pirkalani & Rahim Jamarouni, 2013). Worry is mainly verbal, future-oriented, and catastrophizing thinking, which has been identified as a common feature of all anxiety disorders (Newman et al., 2017). The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* has stated the 12-month prevalence rate of this disorder between 0.4 and 3.6 percent (American Psychiatric Association 2013). It seems that due to the inhibited sympathetic system in these people, their physical symptoms appear in the form of restlessness, fatigue, muscle tension, irritability, and difficulties in concentrating and sleeping (Abdi et al., 2016). On the other hand, worry is the main characteristic of generalized anxiety disorder, which is usually activated as a kind of coping strategy in response to a disturbing negative thought (Wells, 2006). Worry can be thought of as an ineffective cognitive effort to solve the problem and eliminate the perceived danger, while simultaneously causing the avoidance of distressing emotional and physical experiences that naturally occur during the processing of fear exposure. As a result, the worry is reinforced negatively by eliminating scary and disturbing images, and therefore the worry continues (Borkovec et al., 2004). For this reason, psychological intervention has a special place in generalized anxiety disorder. One of the effective methods of intervention in the treatment of generalized anxiety disorder is cognitive hypnotherapy.

Cognitive hypnotherapy is a combination of hypnosis with cognitive therapy methods (Robertson, 2013) which is based on the assumption that most psychological disturbances are the result of negative self-talk and acting on the basis of self-suggestion or hypnosis, so that negative thoughts make the patient more suggestible than the persuasive conversations of cognitive therapy when they are critically in the hypnotic state (Burrows et al., 2001). In fact, in this method, hypnosis is directly useful in modifying the core cognitions that revolve around disturbing negative thoughts. In many cases, cognitive hypnotherapists draw the client's attention from the negative aspects of life (which are often true) to the positive and adaptive aspects (which are often potentially true), and the non-verbal nature of hypnotic techniques. It can allow them to access implicit preverbal cognitions. This method can lead to less negative self-talk, reduce negative cognitions or even replace them with positive cognitions and lead to better mental health (Dowd, 1993).

Cognitive hypnosis in itself is accompanied by calmness and a sense of relaxation, so it is effective in the treatment of anxiety. One of the distinctive characteristics of hypnosis is differentiation in a way that enables the patient to separate anxiety into two groups of psychological and physical experiences. Hypnosis enables the patient to learn that he or she has more mastery and control over his existence than he or she imagined and that he or she does not just feel the physiological changes. However, it can even be created (Wells, 2006). During cognitive hypnosis, there is a decrease in

critical thinking and measuring reality, and an increase in the scope of reality distortion, which has different degrees in terms of depth in different trances and is one of the characteristics of the imaginary thinking of the unconscious mind. It is in this state that the subject accepts the suggestions without critical and analytical thinking (Sebastiani et al., 2003); moreover, changes occur in the autonomic central nervous system in response to hypnotic suggestions (Williamson et al., 2002).

Several researches have been conducted to investigate cognitive hypnotherapy on anxiety disorders. For example, Fayyaz et al. (2015) find that group hypnosis training is more effective than group cognitive behavioral training in reducing depression, anxiety and stress disorders. Additionally, Mirzamani et al (2012) show in a study that hypnotherapy can help improve anxiety in anxiety disorders. In the research conducted by Lotfifar et al. (2012) titled the effect of hypnotherapy in reducing anxiety, which was conducted using the covariance method, the results reveal that hypnotherapy is effective in reducing anxiety. In the research of Holdevici and Craciun (2013) examining the effect of hypnosis on the treatment of patients with anxiety disorders, it is shown by the covariance analysis method in which hypnosis plays an important role in the treatment of anxiety disorders. Contrary to the common belief that indicates a moderate level of impairment in the functioning of generalized anxiety disorder, this disorder is associated with significant impairment in psychosocial functioning and rarely recovers by itself and, more than other anxiety

disorders, it remains chronic (Mirzamani et al., 2012). Various therapeutic approaches have been used and been effective in the treatment of generalized anxiety disorder, but relying on the discussion of having empirical support, various types of psychotherapies have always caused challenges in the treatment of generalized anxiety disorder. Since the most important sources affecting the reduction of anxiety are cognitive components, the basic assumption in the cognitive approach is to emphasize the fact that cognitive change leads to behavioral and emotional changes as well. Both experience and science support the assumption that even the degree of hypnotizability of humans and the degree of their influence by hypnosis has a direct relationship with their belief and understanding of the process of change (Burrows et al., 2001). Therefore, by correcting and changing inefficient cognitive components (self-centered thoughts, intermediate beliefs, fundamental beliefs) that increase anxiety, emotional and behavioral changes can be made and the level of anxiety can be reduced; in cognitive hypnotherapy, it is assumed that the cause of many psychological discomforts are the negative forms of hypnosis itself, in which negative thoughts are accepted without being criticized and even without awareness, the therapist uses hypnotic techniques, cognitive techniques, modification as well as change, and constructive visualization, and most importantly, suspension of critical thinking, to reduce anxiety (Khayat Ardestani et al., 2020). Consequently, the problem of the current research is whether cognitive therapy hypnosis can be effective in reducing the

anxiety of women with generalized anxiety disorder?

2. Method

This research was practical in terms of purpose and had semi-experimental method with a pre-test and post-test design with a control group. The population included all women suffering from generalized anxiety disorder who had referred to the counseling centers of the city of Bandar Anzali (4 counseling centers) in 2022 for the treatment of this disorder. Generalized anxiety disorder was diagnosed in these people by a clinical interview with a psychiatrist. For this purpose and considering that the minimum sample size in semi-experimental researches is suggested to be 15 people (Wilson & Morgan, 2007), 30 people from this community were selected using the available sampling method based on the entry and exit criteria. They were selected and then randomly assigned to two groups of 15 people for testing and control; then the short scale of generalized anxiety disorder (GAD-7) was performed on both groups; after that cognitive hypnotherapy intervention for eight one-hour sessions (one hour each week) was performed individually on the experimental group and no intervention was performed on the control group. After the implementation of the intervention, the research questionnaire was re-administered on both experimental and control groups. The entry criteria included: their age should be between 20 and 50 years old, their education level is at least a diploma; their hypnotizability based on the criteria provided by Shor and Orne

(1963) is between medium (three and above) (Shor & Orne, 1963), they have had the ability to speak and informed consent to participate in the research. Furthermore, the participants were asked to sign the consent form after fully reading the details of the research and it was decided that all their information would remain confidential.

2.2. Instruments

Generalized Anxiety Disorder Short Scale (GAD-7): This scale was created by Spitzer et al. (2006) with the aim of creating a short scale for diagnosing cases of generalized anxiety disorder and measuring the severity of the patients' clinical symptoms, which has seven main questions and one additional question that measures the level of interference in individual and social functions measuring a person's family and career and it is graded based on a four-point Likert scale (never = zero to almost every day = three); thus the highest score of the scale is 21. A score higher than 11 indicates the presence of generalized anxiety disorder in a person. Using Cronbach's alpha coefficient and retest coefficient, the scale score was obtained as 0.92 and 0.83, respectively. The correlation coefficient of the generalized anxiety scale score with the Beck anxiety questionnaires is 0.72, with the mental symptoms checklist with 90 questions is 0.74, and with the health background questionnaire and its dimensions are between 0.30 for the physical performance dimension and 0.75 for the mental health dimension (Spitzer et al., 2006). In the research of Naeinian et al. (2009), the reliability of the scale was obtained based on the retest coefficient of 0.48 at the alpha level of 0.01.

2.2. Training sessions

The training sessions were conducted by a psychologist with a doctorate degree and a valid certificate of completion of cognitive-

behavioral and hypnosis courses from the International Hypnosis Association. The outlines of the topics raised during the hypnosis intervention included in the following:

Table 1

Intervention program and cognitive hypnotherapy implementation method based on the protocol of Hawten et al. (1989 as cited in Moghtader et al., 2016)

Session	Task
First	Obtaining a history and getting to know the patients, completing the questionnaire and completing the informed consent form by the participants
Second	Inducing relaxation techniques, expanding awareness and presenting positive thoughts
Third	Reviewing the content of the previous session, self-hypnotic relaxation techniques, conscious expansion in relation to cognitive constructions and providing positive therapeutic suggestions, and at the end coming out of the hypnotic trance and discussing trance experiences and giving homework.
Fourth	Reviewing the contents of the previous session and reviewing the tasks of presenting cognitive hypnotherapy model in a conscious way and expanding awareness and positive cognitive suggestions and indirect suggestions, ending the session and presenting homework.
Fifth	Reviewing the contents of the previous session and reviewing assignments, presenting the cognitive hypnotherapy model with mood and excitement, ending the session and presenting homework.
Sixth	Reviewing the contents of the previous meeting and reviewing the tasks of presenting the cognitive hypnotherapy model in relation to reducing negative disturbing emotions and providing suggestions to increase positive emotions, ending the session and assigning homework.
Seventh	Reviewing the contents of the previous session and reviewing the tasks of presenting the cognitive hypnotherapy model in relation to increasing self-esteem and self-confidence and positive relationships with others, ending the session and assigning.
Eighth	Reviewing the content of the previous session and reviewing assignments, reviewing all sessions and skills taught, discussing the benefits of training and generalizing skills to other aspects of life and increasing rehabilitation.

3. Results

The studied sample was 30 women with generalized anxiety disorder in the city of

Bandar Anzali. The mean and standard deviation and research variables are reported in [Table 2](#):

Table 2

Mean and standard deviation of the pre-test and the post-test levels of anxiety in the control and experimental groups

Indicator criterion	Groups	Test	Mean	Standard deviation
Generalized anxiety	Control	pre-exam	15.28	4.19
		Post-exam	14.1	4.08
	Experiment	pre-exam	37.57	14.21
		Post-exam	8.86	9.90

According to the results presented in [Table 2](#), the mean of anxiety in the control group in the pre-test and the post-test was 15.28 and 14.1, respectively; moreover, the mean of anxiety in the experimental group in the pre-test and the post-test was 37.57 and 8.86, respectively. As can be seen in [Table 2](#), the changes in the control group in the pre-test and the post-test stages were insignificant, but the changes in the pre-test and the post-test stages of the experimental group in the generalized anxiety variable were thought provoking.

In addition, in order to perform the covariance test, the p value of the

Kolmogorov-Smirnov test was checked in all variables, which was greater than 0.05 (The pre-test of the experimental group, $z=0.323$, $p<0.05$, and the post-test of the experimental group, $z=0.147$, $p<0.05$, and the pre-test of the control group, $z=0.355$, $p<0.05$, and the post-test of the group control ($p<0.05$, $z=0.211$) And therefore, the normality of the variables was confirmed and the F value in Levin's test was not significant, which showed that the assumption of equal variance of adaptive behavior was the same in both experimental and control groups ($p<0.05$, $F=0.217$).

Table 3

Results of covariance analysis of the effect of cognitive hypnotherapy on general anxiety scores

Indicator	Total	Mean	df	F	Sig	η^2
general anxiety	325.30	325.30	1	6.21	0.03	0.55

Based on [Table 3](#), the obtained results revealed that the F value equaled to 6.21 was

significant at the error level of less than 0.05. Therefore, cognitive hypnotherapy was

effective in reducing the anxiety symptoms of women with generalized anxiety disorder. The effect size indicated that 55% of the variance of generalized anxiety can be explained through group differences.

4. Discussion

The aim of the present study was to measure and evaluate the effectiveness of cognitive hypnosis therapy on reducing the anxiety symptoms of women with generalized anxiety disorder. The results showed that cognitive hypnosis therapy was effective in reducing the anxiety symptoms of women with generalized anxiety disorder. The results of the present research are in agreement with the researches of [Fayyaz et al. \(2015\)](#), [Mirzamani et al. \(2012\)](#), [Lotfifar et al. \(2012\)](#), [Holdevici and Craciun, \(2013\)](#), [Patterson \(2010\)](#), [Sebastiani et al. \(2003\)](#), [Burrows et al. \(2001\)](#).

In explaining the obtained results, it can be said that hypnosis was twice more effective than conventional psychotherapies ([Badeleh et al, 2013](#)). However, many researchers and clinical experts have observed that hypnosis creates a synergistic effect, especially when it is combined with cognitive behavioral therapy ([Shahidi, 2008](#)). Treatments based on hypnosis provide a double strength in cognitive behavioral therapy methods ([Helmi et al., 2011](#)). Suspension of critical thinking in the hypnotic state makes the patient more suggestible so that he or she can accept the persuasive conversations of cognitive behavioral therapy ([Moghtader et al., 2015](#)). Usually, with the appearance of anxiety, the activity of the sympathetic system also

increases. In other words, physiological indicators such as heart rate and blood pressure increase with increasing anxiety. This is while during hypnosis, upon receiving relaxation suggestions, these indicators return to the state of balance and the parasympathetic system will be activated. The activity of this system and the reduction of symptoms such as heart rate have helped to reduce the anxiety level of the patient ([Ghadimi et al., 2016](#)). Since hypnosis is associated with a relaxed state and separated from the requirements and tensions of the material environment, psychologically, it puts a person in a safe and relaxed state, which will lead to a reduction in anxiety and worry ([Shakibaei et al., 2008](#)).

Cognitive hypnotherapy is one of the methods that can greatly help in strengthening the physical and mental powers of a person by taking a person to the depth of relaxation ([Akbari et al., 2016](#)). Besides, in this method, suggestions are given to the person, which indicate that constructive anxiety is a part of life and every person faces it during his life, and after the treatment, this thought should not bother him so much and reduce the negative burden resulting from it. ([Soleimani & Esmaili, 2021](#)). Hypnotherapy has been effective in adapting the patient's life to a truly distressing situation. In hypnosis, there are two important stages of exposure and suggestibility, which can be very effective in patients. In a trance, a person experiences mental conditions that increase the patient's resistance and create a pleasant feeling in a favorable condition ([Akbari et al., 2016](#)). Age regression and age advancement in hypnosis can be very effective in calming

and resolving conflicts formed in a person. With age, adjustment of personal complexes makes a person reconcile with his unaccepted parts and achieve a level of acceptance. On the other hand, advancing age causes a person to experience a good sense of life by envisioning himself in the future, which makes him more hopeful for life. Creating this hope increases resilience to achieve desirable results and makes a person more resistant to getting better (Halsband & Wolff, 2015).

Among the limitations of this research was its implementation in the city of Bandar Anzali, and to generalize it to women in other cities and provinces, one should act cautiously, and it was also implemented only on women. The lack of control over economic and social conditions may also increase the level of anxiety and affect the results. In the future, it is suggested that research be conducted on both sexes, and cognitive hypnotherapy therapy should be compared with other psychotherapy methods.

5. Conclusion

Based on the findings of the upcoming research, clinical implications can be considered based on these results. Since today's modern lifestyle requires full adaptation to new situations and presents many sources of anxiety and challenges to people, it is very effective in the treatment of generalized anxiety disorder that the people of a society can develop the ability to control anxiety in the fields of emotion, cognition and behavior with the help of the field of psychology and psychotherapy. Therefore,

cognitive hypnotherapy plays an effective role in reducing the anxiety of people with generalized anxiety disorder.

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Conflict of interest

The Authors declare that there is no conflict of interest with any organization. Also, this research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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