

The Effectiveness of Positive Thinking Therapy on Reducing Recurrent Negative Thoughts in Patients with Obsessive-compulsive Disorder in Corona Virus Period in Mahabad

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Abstract

The aim of this study was to determine the effect of positive thinking therapy training on reducing recurrent negative thoughts in obsessive-compulsive disorder patients in Corona Virus period. The research method was quasi-experimental by pretest-posttest with control group and experimental group. The statistical population of this study was obsessive-compulsive disorder patients in Mahabad. According to the data registered in Rajan Psychotherapy Center, 71 people were referred to primary and secondary obsessive-compulsive disorder in February 2021. Using the convenience sampling method, 30 patients with OCD were selected as the experimental group and 30 patients with OCD as the control group, and the experimental group was exposed to positive thinking skills training. In order to collect information, a Perseverative Thinking Questionnaire (PTQ) was used. This questionnaire was developed by Ering et al. (2011) to assess recurring negative thoughts. The intervention program of positive thinking skills training was implemented in 10 an-hour sessions on the experimental group. The positive thinking skills training package was derived from Quilliam (2003) Positive Thinking and Applied Positiveness. Findings obtained from analysis of variance showed that there was a significant difference in reducing negative repetitive thoughts in the post-test phase between the experimental and control groups ($P < 0.05$). According to the research results, it seems that teaching positive thinking skills is effective in reducing negative repetitive thoughts among patients with obsessive-compulsive disorder.

Keywords: Corona, Obsession, Compulsion, Positive Thinking Therapy, Negative Repetitive Thoughts.

Introduction

Coronavirus 2019 (Covid-19) started as a pandemic in China in December 2019 and is spreading rapidly (Wu, China and Chen, 2020). Coronavirus is associated with respiratory symptoms, such as dry cough, fatigue, fever, and gastrointestinal symptoms. The Corona Virus endangers the physical health and lives of people and has caused widespread psychological and physical problems. The most important reasons for concern in most people are unpredictability, lack of definitive treatment, uncertainty about the timing of disease control and rapid human-to-human transmission (Huang, Wei, Hu, Wen & Chen, 2020). Although the focus is now more on the physical, medical, and economic effects of the disease, its role in the development of psychological symptoms is undeniable (Storch, Schneider, Gozick, & Goodman, 2020). Critical conditions and stress caused by Corona virus disease are among the detective factors of mental disorders. Due to the prevalence of this disease and its unknown dimensions, it seems that the incidence and prevalence of mental disorders in the Corona and post-corona period will increase significantly soon (Dalir, 2020). Based on guidelines set forth by epidemiologists and other health authorities, the best preventative measures for this viral disease include personal hygiene and social distancing. It follows that it could entail serious implications for those individuals who were already strictly adhering to rules of sanitation or those suffering from OCD. In the end, it is worth mentioning that this aspect has been overshadowed because of the spread and immediacy of these precautions (Seçer and Ulaş, 2020).

Obsessive- Disorder (OCD) was classified as Anxiety Disorders in the Fourth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), but this disorder is included in a separate diagnostic category in the new Guide (DSM-5) (American Psychiatric Association, 2013). Obsessive-compulsive disorder is one of the most common, debilitating and persistent psychological disorders (Abramovitz and Jacobi, 2014). Obsession disorder is a recurring thought, desire, or impulse that is experienced as disturbing or unwanted during a disorder and causes a certain amount of anxiety and distress in most people. Compulsion disorder is a recurring behavior or mental act that the sufferer feels compelled to respond to his or her obsessions or according to dry rules (Mazza, 2020). The prevalence of obsessive-compulsive disorder in the general population is reported to be about 2 to 3%, but its prevalence among outpatients in psychiatric offices and clinics is about 10%. Symptoms of obsessive-compulsive disorder have four main patterns: infection, morbid suspicion, disturbing thoughts, and symmetry. Among these cases, the most common pattern is obsessive-compulsive disorder (obsession of contamination), which causes frequent washing or avoidance of forcing the cheek of a person with an object or person who thinks he is infected (Sadock, sadock and Ruiz, 2015). In this disorder, people experience obsessions or compulsion with such severity that it is difficult for them to perform daily activities (Halgin, Whitburne, 2014). According to research, the average severity of obsessive-compulsive disorder before the corona epidemic was about 15.97 and after the outbreak of the corona epidemic reached 20.46 (Davide, Andrea, Martina, Andrea, Davide & Mario, 2020).

Repetitive negative thoughts are a cognitive process that manifests itself in the form of repetitive, self-centered thinking (Segerstrom, Stanton, Alden & Shortridge, 2003). Other studies have shown the effect of repetitive negative thoughts on various disorders, including: Eating Disorder (Palmieri, Mansueto, Scaini, Caselli, Sapuppo, Spada, Sassaroli & Ruggiero, 2021), Depressive Disorders (Watkins, 2011), Anxiety Disorders such as Social Anxiety (Joormann, Dkane and Gotlib, 2006), Obsessive-Compulsive Disorder (Abramowitz, Whiteside, Kalsy and Tolin, 2003), Panic Disorder (Eccleston, Crombez, Aldrich and Stannard, 2001), Post Traumatic Stress Disorder (Clohessy and Ehlers, 1999). People who possess mental disorders report that they frequently think about their problems or negative experiences and they experience these thoughts in a way that is difficult to be controlled. (Topper, Molenaar, Emmelkamp and Ehring, 2014).

According to research conducted at home and abroad, positive thinking training can be useful in disorders in which repetitive negative thoughts play an important role. Positive thinking training reduces stress, anxiety and depression in patients with coronary heart disease (Ahangarzadeh Rezaei, Oladrostam, and Nematollahi, 2017). Positive thinking sessions reduce perceived stress and have an increasing effect on happiness in patients with thalassemia major. (Roodbari, Zare, Saeedi, Divsalar, and Eslamian, 2015). A 2016 study found that positive thinking is negatively correlated with depression, and according to this study, positive thinking is likely to be associated with improvement in major depressive disorder and panic disorder (Jung, Lim, Kim, Ha and Shin, 2016). Positive psychology is a new branch of psychology that considers the scientific study of human strength and happiness (Dastgheib, Alizadeh, and Farrokhi, 2012). In fact, the truth of everything originates from the thoughts and mind of man, that is, man is made and paid for by his own thoughts (Seligman and Csikszentmihalyi, 2014). Researchers believe that human thoughts and beliefs make up the quality of his life. Man always strives for survival and well-being, and in this direction, the most important issue is to benefit from positive thinking, and this effort brings man to the peace and comfort of body and soul (Seligman, 2007). Positive Thinking is the process by which a person's mind is positively focused on something constructive and good, and thus removes negative or destructive thoughts and emotions from the mind (Olan Simon and Gasselien, 2011).

In such situations, teaching positive thinking skills is very useful for people with obsessive-compulsive disorder to reduce repetitive negative thoughts. The aim of this study was to determine the effect of positive thinking therapy training on reducing recurrent negative thoughts in obsessive-compulsive patients.

Methods

The research method was quasi-experimental with pretest-posttest along-with a control group and experimental group. The statistical population of the study was obsessive-compulsive patients in Mahabad. 71 people were identified through Rajan Counseling and Psychotherapy Clinic in Mahabad in February 2021. Using the available sampling method, 30 patients were selected as the experimental group and 30 patients as the control

group, and the experimental group was exposed to positive thinking skills training. Each person in the experimental group and the control group were measured twice. The first measurement included performing a pre-test and the second measurement included performing a post-test. The experimental group was exposed to the independent variable (positive thinking skills training) and the control group was not exposed to the independent variable. In order to comply with research ethics, all individuals were obtained informed consent to participate in the research project and it was explained that research information is only available to researchers and is used only for research purposes.

Criteria for entering the research were: 1- Conscious consent to participate in the research; 2- Having a lot of stress based on the expressive statements of individuals; 3- Repetitive and disturbing obsessive thoughts or thoughts; And 4 - no coronary heart disease. Exclusion criteria were: 1- Absence for more than two sessions; And 2- suffering from physical diseases.

Data were analyzed by multivariate analysis of covariance using SPSS software.

The research tools were:

Perseverative Thinking Questionnaire (PTQ): This questionnaire was developed by Ehring et al. (2011) to assess repetitive negative thoughts. This scale is a self-report tool that contains 15 terms. According to the confirmatory factor analytical results, this test consists of a general scale of reference repetition and three subscales, the subscales of which are; 1- Scale the main features of repetitive negative thinking; 2- Perceived inefficiency subscale; And 3- subscale of capturing mental capacity (Ghaedi et al., 2016). Subscale main features of Repetitive negative thinking with questions 1, 2, 3, 6, 7, 8, 11, 12 and 13; Perceived inefficiencies are measured by questions 4, 9, and 14, and mental capacity capture is measured by questions 5, 10, and 15. The subject must express his / her agreement and disagreement in a 5-point Likert scale. High scores indicate a high volume of repetitive negative thoughts in the test (Never=0, rarely=1, Sometimes=2, Often= 3, Always=4). To get the score for each scale, the scores of all the expressions for the sub-scale are added together.

The research results of Ering et al. indicate the desired internal consistency of the Reference Thinking Questionnaire. Cronbach's coefficient for test 0.95; for repetitive negative thinking subscale 0.94; For the perceived inefficiency subscale 0.83; And for the scale of conquest of mental capacity is reported 0.86. The reliability of the retest method at 4-week intervals is reported as follows: total test 0.69; Main Features subscale 0.66; Perceived inefficiency subscale 0.68; Psychological capacity capture subscale 0.69. Psychometric properties in Iran have been measured by Shabankareh and Ghaedi (2016) that the reliability coefficient by Cronbach's alpha method for repetitive negative thinking is 0.84; for perceived inefficiency is 0.78; for capturing mental capacity 0.73; and for the whole scale is 0.86 and was confirmed with correlation coefficients of 0.73 to 0.84.

Positive thinking skills were taught to the experimental group in 10 sessions of an-hour. Independent variable, positive thinking skills training package taken from Quilliam's book on positive thinking and applied positivism (2003), translated by Barati Sedeh and Sadeghi (2011).

Table1: A Brief Description of Positive: Thinking Training Sessions from Quilliam's book Positive Thinking and Applied Positiveness.

A brief description of the content of the meeting and introduction, statement of group rules and brief explanations about thinking	First session
Identify the signs and - Basic Concepts in Positive Thinking	second session
Analysis of individual perspective - symptoms of positive thinking	
Changing mental images - Fight negative thoughts	third session
thinking about new The - Use informative language and speech	fourth Session
Maintain positive behaviors beliefs-	
Internal enemies - Respect yourself - Love yourself	fifth meeting
Build - Create a happy head - Create optimism	Sixth Session
Targeting - confidence	
avoiding guilt, controlling anger,) Control of affects and feelings (coping with anxiety, avoiding jealousy, assertiveness	Seventh session
Control of life events. say no - Basic steps for assertiveness	Session 8
Maintaining health and its effect - Create a positive environment	The ninth session
Establish good relationships with others - on positivity	
Control of life events - Dealing with the problems of everyday life	The tenth session

Results

Table 2. Mean and standard deviation of research variables of experimental and control groups n two stages : pre-test, post.

dependent variables	Control group		Experimental group	
	Pre-test	Post-test	Pre-test	Post-test

Negative thinking	mean	13/10	12/93	14/30	12/43
	standard deviation	6/17	6/19	5/89	5/35
Perceived inefficiency	mean	4/63	5/34	5/40	4/07
	standard deviation	2/42	2/25	2/82	2/20
Mental capacity capture	mean	4/77	4/93	5/17	4/10
	standard deviation	2/34	2/13	2/15	2/02
Total score	mean	22/50	24/87	22/37	20/60
	standard deviation	9/65	9/57	9/28	7/88

Table 4.6: normal distribution of scores (normality) using skewness and kurtosis test.

Variable	Tests	skewness statistics	kurtosis statistics
Negative thinking	Pre-test	0/308	-0/433
	Post-test	0/209	-0/379
Perceived inefficiency	Pre-test	0/193	-0/708
	Post-test	0/111	-0/325
Mental capacity capture	Pre-test	0/109	-1/098
	Post-test	0/117	-0/913
Total score	Pre-test	0/122	-1/191
	Post-test	0/277	-0/414

Homogeneity of variance:

Levene's test was used to test this assumption. This test shows the homogeneity of variances in educational groups. The significance level obtained from this test must be higher than 0.05, otherwise the assumption of homogeneity of variances is not correct. With these interpretations, the results obtained from the data of this research in the table indicate that the variance of the groups is homogeneous and all values of the significant level are higher than 0.05, as a result of this assumption is also valid.

Table 4.7: Levene's test results on the default homogeneity of variance error.

Dependent variables	F statistic	df 1	df 2	sig
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Negative thinking	3/377	1	58	0/071
Perceived inefficiencies	2/398	1	58	0/139
Conquest psychological capacity	0/358	1	58	0/552
Total score	3/096	1	58	0/084

Table 4-7 shows the results of Levene's test and since the obtained significance level is greater than 0.05, so the condition of homogeneity of variance of errors is observed.

Homogeneity of variance-covariance matrices:

Table 4-8: M-Box's test results based on homogeneity of variance-covariance matrices

Dependent variables	M-Box's test Statistics	F test Statistics	sig
Repetitive negative thinking	2/505	0/394	0/883

Based on the data in Table 4-8, the results of this test show that because the obtained significance level is greater than 0.05, so the research data did not question the assumption of equality of variance-covariance matrices. Therefore, this presupposition has also been observed.

Homogeneity of Regression Line Slope:

To prove the homogeneity of the regression slope, we must calculate the value of F between the covariate and the independent variable in all groups, If this index is not significant ($P > .05$), the sixth default is observed.

Table4-9: Regression line slope homogeneity results.

research variables	source of change	F - test statistic	sig
negative thinking	pre - test group*	0/221	0/655
perceived inefficiency	pre - test group*	0/198	0/198
capture mental capacity	pre - test group*	1/521	1/521
total score	pre - test group*	2/263	0/138

Table4-10: Results of variable covariance after repeated negative thoughts test

dependent variables	sum of squares	df	F	sig	Impact factor
Repetitive negative thinking	215/863	1	49/351	0/000	0/464

As can be seen in Table 4-10, there is a significant difference between the mean post-test score of repetitive negative thoughts and controlling the pre-test effect. In other words, it can be said that the use of positive thinking training has significantly reduced the overall score of repetitive negative thoughts] ($P < 0.05$ and $F = 49.351$) in the post-test stage.

Test of sub-hypotheses:

1- Teaching therapy based on positive thinking has a significant effect on reducing patients' negative thinking.

2- Positive thinking therapy training has a significant effect on reducing patients' perceived inefficiency.

3- Positive thinking therapy training has a significant effect on reducing the mental capacity of patients.

Table 4-11: Summary of Multivariate Post-Test Repeated Negative Thought Tests

Tests	values	F	sig	Impact factor
Pillai's Trace	0/609	40/631	0/000	0/609
Wilk's Lambda	0/428	40/631	0/000	0/609
Hotelling's Trace	1/477	40/631	0/000	0/609
Roy's Largest Root	1/477	40/631	0/000	0/609

Table 4-11 Summary of post-test multivariate tests shows the dimensions of repetitive negative thoughts that Wilk's Lambda is significant at the level of 0.99%] ($P < 0.01$ and 268.768 [F. Because the Wilk's Lambda test is significant and the repetitive negative thoughts are affected by the independent variable (positive thinking training), then after this, it should be examined whether each of the dependent variables is affected separately from the independent variable. For this purpose, multivariate analysis of covariance (MANCOVA) was used, the results of which are presented in Table 4-12.

Table4-12: Multivariate covariance results after repeated negative thoughts dimension test

Dependent variables	sum of squares	df	F	sig	Impact factor
negative thinking	41/320	1	22/892	0/000	0/294
perceived inefficiency	14/261	1	9/974	0/003	0/154
capture mental capacity	17/276	1	10/348	0/002	0/158

As can be seen in Table 4-12, there is a significant difference between the mean post-test score of the dimensions of repetitive negative thoughts and controlling the pre-test effect. In other words, it can be said that the use of positive thinking training significantly reduces negative thinking] ($P < 0.05$ and $22 = 892$. [F, reduced perceived inefficiency]) ($P < 0.05$ and 9.974 [F And reduction of mental capacity capture $P < 0.05$ and [F = 10.348] in the post-test stage.

Discussion

The aim of this study was to determine the effect of positive thinking therapy on reducing recurrent negative thoughts in patients with obsessive-compulsive disorder. Interpretations derived from findings suggest that it is highly possible that psychological health of those affected by OCD is more strongly hit by COVID-19 (Jassi, Shahriyarmolki, Taylor, Peile, Challacombe, Clark, & Veale, 2020). In addition, negative thought patterns have a direct correlation with OCD (Wahl, Ehring, Kley, Lieb, Meyer, Kordon, Carlotta, Heinzel, Mazanec & Schönfeld, 2019). In such cases, treatment based on positive thinking could cause a considerable reduction in negative thoughts, which, in turn, will lead to them adapting better. Therefore, treatment based on positive thinking to reduce negative thoughts for those affected by OCD was deemed proper, and the scores obtained from this test are indicative of a high reduction in repetitive negative thinking in the experiment group by comparison to the control group.

In discussing the alignment of the findings of this study, we can refer to the research results, Ahangarzadeh Rezaei, Olad Rostam, Nematollahi (2017); Roodbari, Zare, Saeedi, Divsalar, and Eslamian (2015); Zhang, Lim, Kim, Ha and shin (2016) pointed out.

Positive thinking emphasizes that change occurs when a person is able to relate his inner private events to an increase in fault. Eventually, the fault decreases negative thoughts and reactions and psychological acceptance increases, and this process reduces the relationship between negative thoughts and behavior. Increasing awareness of thoughts and actions helps the individual to observe the negative relationships between their reactions and to decide not to act according to their old avoidant and conflicting patterns (Peterson & et al., 2009).

The reason that positive thinking therapy is effective in increasing people's adaptation can be considered as creating agreement between people and teaching ways to adapt to unbearable aspects of life instead of trying to manage conflicts and conflicting factors. On the other hand, this method emphasizes discovering one's values and how to create a meaningful life for oneself and others by creating personal values, and in this case, one pays attention to all one's life experiences to find more efficient ways to live. This treatment helps people improve their relationships by treating emotional avoidance, improving reactions, identifying values, and building commitment to behavioral changes. In addition, by applying the skills of this approach, people, especially in treatment

sessions, were able to deal directly with their unpleasant feelings and instead of controlling and challenging the unpleasant thoughts and feelings, experience them, and thus the thoughts and they fully experienced their feelings and gave others the opportunity to have such an experience. As a result, it increases the exchange of positive feels between people.

By using faulting skills, people can communicate with their inner experiences, unpleasant thoughts and feelings, and to avoid them, they do not engage in negative communication and behavioral patterns, and thus avoid creating double negative feelings, because in fact many negative and unpleasant feelings are caused by people trying to avoid unpleasant feelings, thoughts and experiences. In addition, this approach introduces people to a different concept of happiness. In this approach, people learn to focus on discovering individual values instead of trying to maintain pleasant feelings and avoid unpleasant ones.

Explaining these findings based on the views of Day and Thorn (2017), it can be said that cognitive therapy based on positive thinking is a different way of dealing with emotions and distress. Not having a relationship with negative thinking and not engaging with it prevents a person from engaging with negative referential thinking. In positive thinking exercises, people become aware of the connection between thoughts, feelings, and bodily sensations, and individuals learn through effective positive thinking mechanisms such as coping, cognitive change, self-management, relaxation, and acceptance that instantly relate to physical states, be aware of your feelings and thoughts. Also, during repeated exercises, they can identify their defective physical and mental states and, instead of retreating and controlling, accept them and use the strategies learned in cognitive therapy sessions based on positive thinking to deal with them. These factors initially reduce the negative current and eventually reduce the negative referential thinking.

According to the positive results of positive thinking therapy, it is suggested that in the days of Corona and post-corona, this therapeutic approach be used by specialists to reduce recurrent negative thoughts in obsessive-compulsive patients to reduce recurrent negative thoughts in the recovery process, take an effective step with obsessive-compulsive disorder. One of the limitations of the present study is the lack of follow-up period. Deeper evaluation of the effectiveness of positive thinking therapy on reducing recurrent negative thoughts in obsessive-compulsive patients requires future research to examine behavioral changes in these individuals over a longer period after treatment termination.

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