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The effectiveness of emotion regulation training on behavioural and cognitive inhibition of teenagers with borderline personality disorder

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ABSTRACT

Background and purpose: Adolescence is one of the most important developmental periods. Difficulty in emotion regulation, and coping, and the presence of borderline personality symptoms can lead to suicidal thoughts and a lack of control of aggression. This research was conducted to determine the effect of emotion regulation training on behavioural and cognitive inhibition of teenagers with borderline personality disorder.
Research method: The current research is practical in terms of its purpose and terms of method, it is a semi-experimental study in which a pre-test-post-test design with a control group was used. The statistical population of this study consisted of juveniles from Mashhad Correctional Center with an age range of 14 to 18 years, who were suffering from borderline personality disorder, and 20 people were selected in an available manner and randomly replaced in experimental and control groups. The experimental group underwent 8 sessions of emotion regulation program and the control group did not receive any intervention. Before and after the intervention in the experimental group, both groups did the pre-test and post-test. SPSS-24 software and covariance analysis were used to analyze the data.
Findings: The findings showed that emotion regulation training has a direct and positive effect on the behavioural inhibition of teenagers suffering from borderline personality disorder. Based on the findings, emotion regulation training has an effective role in reducing the problems of borderline people.
Conclusion: Therefore, it is suggested that courses of self-regulation, emotional adaptation and emotion regulation be used as supplements to improve the conditions of this group.

1. Introduction

Adolescence is often associated with very important psychological and physiological changes. Changes caused by puberty can expose teenagers to many problems. One of the problems of this period, which if not paid attention to, can lead to disorder and disorder in the adolescent's personality is borderline personality disorder, which is a big problem for adolescents and can affect various aspects of their lives and even their social relationships. be negative (Selby and Joyner, 2013). Borderline personality disorder, which often begins after adolescence, has a pervasive pattern of instability in interpersonal relationships, self-image, and emotional regulation. The causes of this disorder are different and it is associated with features such as disturbances in emotional states, anxiety, anger, depression self-harming behaviours and substance abuse (Dijek, Lineskar, Kahn, Works and Botillar, 2012). The prevalence of this disorder is one to two percent and it is almost more common in women than in men. The main criterion for diagnosing borderline personality disorder is emotional instability, which leads to inappropriate anger, chronic feelings of emptiness, high-speed mood swings, and frequent and intense responses to emotional stimuli. This emotional instability causes the patient with borderline personality disorder to be emotionally agitated most of the time. The result of this high arousal is behavioural instability, poor control over emotions, intense physiological arousal, and disruption in interpersonal relationships (Tamir et al., 2020).

Since emotions are a fundamental part of every person's life, it is not surprising that disturbances in emotion regulation can cause psychological damage. In the diagnostic and statistical manual of mental disorders, one of the criteria for mental disorders is a disorder in the patient's emotions. Non-adaptive emotional regulation strategies such as rumination, self-blame and catastrophizing have a significant relationship with behavioural and cognitive inhibition. Zargrani (2012) compared the effectiveness of group emotion regulation training based on the Gross process model on clinical symptoms, regulation strategies and inhibitory activity of teenage girls with BPD and teenage girls with ADHD. The research findings showed that group emotion regulation training based on the Gross process model reduced the symptoms of insufficient cognitive inhibition activity and increased the use of the reappraisal strategy in patients with BPD. (Kisler and Olatunji, 2012). Also, Miri (2016) in research investigated the role of cognitive regulation of emotion, and theory of mind in predicting the destructive behaviours of female students of the first secondary level of District 1 in Kerman City and concluded that cognitive regulation of emotion in predicting the behaviours of Destructiveness of female students of the first secondary level of district 1 in Kerman city and the theory of mind plays a role in predicting the destructive behaviours of female students of the first secondary level of district 1 in Kerman city. The results showed that the theory of mind and cognitive regulation of emotions in destructive behaviours. Students play an important role.

It is important how a person is cognitively evaluated when faced with a negative event. People's mental health is the result of a two-way interaction between the use of certain types of strategies for the cognitive regulation of emotions and the correct evaluation of stressful situations (Garnefsky et al., 2003). Emotion refers to the cognitive manipulation of information input that evokes emotion (Ochsner & Gross, 2004). In other words, cognitive emotion regulation strategies refer to the way people think after a negative experience or traumatic event. According to Spielberger, anxiety is an unpleasant emotional state characterized by worry, tension and fear. Anxiety is an emotion that occurs in the daily life of every person and if this state is intense and long, people experience it. It does not adapt to the conditions, it deviates from the normal state and approaches the clinical disorder (Beauti and Janili, 2020). Anxiety can be divided into state anxiety and trait anxiety. Trait anxiety refers to relatively stable individual differences in anxiety readiness, which means that people tend to be in situations (Vitasari et al., 2011). Trait anxiety is caused by increased threats in life and personal life situations, increased demand from a person who sees the threat as valuable, and stressful events that destroy a person's self-confidence. People with this type of anxiety have physical symptoms. They experience and have psychological experiences. Cloninger and colleagues proposed a neurobiological model widely used in clinical research. This model includes four dimensions of nature and three dimensions of personality. Nature is the inherited basis of emotions and learning, which is acquired through emotional and automatic behaviors and is seen as observable habits early in a person's life and remains constant throughout life. Cloninger believes that behavioural systems in the brain have a functional organization of separate and independent systems for activating, maintaining and inhibiting behaviour in response to specific groups of stimuli. Cloninger introduced four dimensions to nature. Novelty seeking is defined as behavioural activation in response to new stimuli that lead to reward-seeking and punishment avoidance. Harm avoidance is behavioural inhibition in response to punitive stimuli or lack of reward. The dependent reward is the tendency to respond positively to reward cues that cause the response to persist or the behaviour to be resisted. In their research, Selby and Joyner (2013)

concluded that people with borderline personality disorder turn to maladaptive behaviours such as suicide to manage their negative emotions and get rid of these difficult emotions. Since adolescents with borderline personality disorder use extreme behaviour models, such as suicide, to adjust their negative emotions, and also have persistent thoughts of suicide, therefore, it seems necessary to teach emotional regulation skills to adjust such incompatible forms of behaviour and thoughts.

One of the most important pathological models of borderline personality disorder is the psycho-social model of Linehan (1993), which states that borderline personality disorder is the result of the interaction of biological factors related to emotional dysregulation and an invalidating social environment. According to this model, borderline personality disorder occurs due to the lack of close relationships with caregivers in childhood or their non-responsiveness, as a result of which a person's ability to effectively regulate emotions is destroyed. In borderline personality disorder, emotion regulation problems are a multifaceted construct and are manifested in the form of a lack of emotional awareness or acceptance, as well as a failure to access or use emotion regulation strategies (Linehan, 1993; cited by Ko, Correa, Metkafah and Fitzpatrick, 2015); In other words, people with borderline personality disorder are biologically vulnerable and have been brought up in environments that repeatedly invalidate a person's inner experiences and behaviours. Emotional vulnerability along with being brought up in an invalidating environment causes a person to face defects in ability, motivation and regulation of emotions and problems in his life (Hayes and Follett, 2004). This model believes that emotion is created in a repetitive sequence of situations, attention, evaluation and reaction when a person encounters a specific situation and pays attention to it in a specific way and over time on its intensity. adds. Experiments are interpreted to create a coordinated pattern of changes in behavioural and physiological systems. (Gross et al., 2011). In Gross's process model, the processes that either prevent the initiation of emotions from the beginning or prevent their expression after initiation are mentioned. Recently, the essential role of cognitive regulation strategies has been mentioned as one of the factors affecting this disorder (Gross, 2007). Cognitive emotion regulation strategies are an integral part of human life and make people control their feelings and emotions in stressful situations (Esley et al., 2008). Patients with borderline personality disorders have problems with emotional regulation and the activity level of the limbic system of their brain is higher (Sanagui et al., 2018), therefore, organizing awareness and increasing effective cognitive emotional regulation strategies reduces self-harm behaviours. Intentional transmission occurs in borderline patients (Klimanski et al., 2017). In this context, Taheri et al. (2018) also compared emotional-cognitive discipline in soldiers diagnosed with borderline personality disorder or traits with healthy soldiers. They stated that soldiers with a borderline personality disorder or traits compared to healthy soldiers had more than use negative emotional cognitive strategies. Also, compared to healthy soldiers, soldiers with borderline personality disorder use positive emotional cognitive strategies less. In research, Moradi (2018) studied the relationship between emotion regulation and anxiety and depression in patients with psoriasis: the mediating role of basic cognitive functions. The results of this study showed that emotion regulation in patients with psoriasis affects the anxiety and depression of patients by mediating basic cognitive functions. Also, in the study of Axelrod et al. (2018), who investigated emotion regulation and the frequency of substance abuse in women suffering from substance abuse and borderline personality disorder receiving dialectical behaviour therapy, they concluded that emotion regulation improved. Not only did it improve mood, but it was also related to reducing the frequency of substance abuse. The main issue of the current research is whether emotion regulation training affects the behavioural and cognitive inhibition of teenagers with borderline personality disorder.

2. analysis method

The current research is practical in terms of its purpose, and in terms of its method, it is a semi-experimental study in which a pre-test-post-test design with a control group was used. The statistical population of this study consisted of juveniles from Mashhad Correctional Center with an age range of 14 to 18 years, who were suffering from borderline personality disorder, and 20 people were selected in an available manner and randomly replaced in experimental and control groups. The experimental group underwent 8 sessions of emotion regulation program and the control group did not receive any intervention. Before and after the intervention in the experimental group, both groups did the pre-test and post-test. Finally, after completing the training sessions; To analyze the data, the classic Stroop test was performed in two groups, and the raw data collected were compiled in Excel software, then the data was analyzed using the analysis of covariance statistical test using SPSS-24 software.

Research tool

Borderline Personality Questionnaire

It is a 53-item scale that includes borderline personality organization and IV-DSM diagnostic criteria. The

theoretical basis of this questionnaire is based on Kerenberg's theoretical research and it was done to measure borderline personality traits in clinical and non-clinical samples that can be answered yes/no. This scale integrates the patterns of categories and dimensions of BPD and not only plays an important role in identifying the factors of this disorder but is also considered a diagnostic tool and is suitable for screening. This questionnaire includes scales to measure identity confusion, primary defence mechanisms, traumatized reality tests, and fear of intimacy. In the study of Mohammadzadeh et al. (2009), concurrent validity with a coefficient of 0.70 and coefficients of 0.71-0.80 for subscales, the whole scale and its correlation with each other and three types of reliability, test-retest reliability, internal and external validity. Compatibility found. The Iranian population was obtained with coefficients of 0.80, 0.83 and 0.85, respectively.

Classic Stroop test

This test was developed by Ridley Stroop in 1935 to assess executive functions such as cognitive inhibition and interference control. After presenting the classic model of this test in 1935, various types of this test were also made and used until today. So in computer models, there are consonant words (the colour of the word is the same as the meaning of the word) and "dissonant words" (the colour of the word is not the same as the meaning of the word). It is presented randomly. The reaction time of the individual and the reaction time of the individual at a certain time The number of correct and incorrect answers when responding and the intervention score are calculated correctly. The effect of interference is to reduce the speed of the subjects' performance (Homak and Riso, 2004 Stroup, 1935, quoted by Mashhadi, Tabatabai, Azad Fallah and Soltani, 2008). the word, by pressing one of the four designated keys, the validity of this test has been reported in the range of 0.8 to 0.91 (Salehi Federdi and Ziaei, 2009). The research consisted of two parts practice and the main test, of which 63 were consonants and the rest were consonants.

Emotion regulation protocol

In this research, Gross's emotion regulation treatment protocol was used in 8 60-minute sessions, the description of the training sessions is described below (Gross, 2000, quoted by Moradi, 2015):

Table 1. Therapeutic protocol of emotion regulation training

Target	Description of the activity	meetings
Familiarization of the members with each other and class rules as well as pre-examination	Familiarizing group members with each other, explaining the logic and steps of the intervention and the framework and rules of participation in the group - pre-test	First session
Knowing the types of emotions and explaining their impact on mental health	Teaching emotion recognition and arousing situations, discussing and investigating the difference in the performance of emotions and the short-term and long-term effects of emotions on mental health.	Second Session
The purpose of this session is to evaluate emotional skills and explain their vulnerability	Reviewing the contents of the previous session and answering the students' questions and giving guidance on recognizing emotions and stimulating situations Evaluation of vulnerability and emotional skills of members by the researcher	Third Session
Explanation and training of inhibition skills	Reviewing the contents of the previous session, question and answer with the students Investigating changes in the excitement-provoking situation in students and teaching inhibition skills by the researcher	Fourth Session
Emotional reappraisal and identification of thoughts that provoke negative emotions	Reviewing the contents of the previous session and answering the students' questions A brief description of the role of cognitive evaluations in changing emotional responses, teaching emotional reappraisal and identifying thoughts that cause negative emotions.	Fifth Meeting
Identifying methods of emotional	Reviewing the contents of the previous session and	The Sixth

release	answering the students' questions Teaching and practising emotional release tool and practice to modify behaviour by changing environmental reinforcers by the researcher	Session
Identify focus strategies	Teaching different concentration strategies including paying conscious attention to emotions without judging them and focusing on the cause, meaning and consequences of emotions	The Seventh Session
Examining the success rate of patients in seeking order	Summary of sessions and evaluation of each patient's success rate in regulating problematic emotions - post-test	The Eighth Session

3. Findings

Table No. 2: Mean and standard deviation of pre-test and post-test research variables

control group		examination Group			Variable
post-test	pre-exam	post-test	pre-exam		
(standard deviation) mean	(standard deviation) mean	(standard deviation) mean	(standard deviation) mean		
1088.98(48.39)	1089.22(47.11)	984.11(37.01)	1093.84(48.11)	Reaction time of consonant words	Behavioural inhibition
1100.29(52.17)	1102.99(50.43)	911.13(47.21.)	1114.08(52.27)	Reaction time of discordant words	
22.61(8.52)	22.88(8.43)	17.69(3.46)	24.17(5.49)	interference	
67.18(9.56)	67.84(9.29)	42.23(5.88)	68.16(9.69)	Number of error responses	Cognitive inhibition

The average scores of the reaction time subscale of consonant words in the experimental group in the pre-test and post-test are 1093.84 and 984.11, respectively, and in the control group in the pre-test and post-test, 1089.22 and 1088.98, respectively. According to the findings, the reaction time of consonant words in the experimental group decreased by 109.73 after the test, while the control group decreased by less than 1 point.

The average scores of the dissonant words reaction time subscale in the pre-test and post-test are 1114.08 and 911.13, respectively, and in the control group, in the pre-test and post-test, 1102.99 and 1100.29, respectively. According to the findings, the reaction time of dissonant words in the experimental group decreased by 202.95 in the post-test, while the control group decreased by 2.70.

The average scores of the interference subscale in the pre-test and post-test are 24.17 and 17.69, respectively, and in the control group, in the pre-test and post-test, they are 22.88 and 22.61, respectively. According to the findings, interference in the experimental group decreased by 6.48 in the post-test, while the control group decreased by 0.27.

The average scores of the error response in cognitive inhibition in the experimental group in the pre-test and post-test are 68.16 and 42.23, respectively, and in the control group in the pre-test and post-test, respectively, 67.84 and 67.18. Based on the findings, the response error in cognitive inhibition decreased by 25.93 after the test, while the control group decreased by 0.66.

Table No. 3: Shapiro-Wilk test

meaningful	Number		Component
0.589	20	Reaction time of consonant words	Behavioral inhibition
0.551	20	Reaction time of discordant words	
0.419	20	interference	
0.610	20	Correct answer reaction time	Cognitive inhibition
0.556	20	Error response reaction time	
0.574	20	Number of error responses	

Considering the significance above 0.05, the null hypothesis is rejected and the distribution of the sample is normal and the possibility of performing the parametric test is unimpeded.

Emotion regulation training has a direct and positive effect on the behavioural and cognitive inhibition of teenagers with borderline personality disorder.

Table 4: Covariance analysis of variables

Eta	Sig.	F	MS	df	SS	Diffraction source	component
0/64	0/01	41/89	258901/628	1	258901/628	Experimental conditions	Reaction time of consonant words
				37	348922.00	error	
0/66	0/001	44/18	278115/546	1	278115/546	Experimental conditions	Reaction time of discordant words
				37	379821/585	error	
0/61	0/01	38/26	1819/27	1	1819/27	Experimental conditions	interference
				37	2056/29	error	

The findings of covariance analysis showed the following results:

The desired intervention approach has been effective with 99.9% confidence on the reaction time of consonant words, the reaction time of non-consonant words and interference, and the training, respectively, 64; 66 and 61% of variance changes in post-test scores predict the reaction time of consonant words, the reaction time of non-consonant words and interference. The prediction model of the intervention variable was explained based on the statistics obtained from Etai Sahmi.

Emotion regulation training has a direct and positive effect on the cognitive inhibition of teenagers suffering from borderline personality disorder.

Table 5: Covariance analysis of variables

Eta	Sig.	F	MS	df	SS	Diffraction source	component
0/58	0/01	28/75	7892/23	1	7892/23	Diffraction source	Correct answer reaction time
				37	10852.19	Experimental conditions	
0/61	0/001	33.72	419.29	1	419.26	error	Error response reaction time
				37	379821/585	Experimental conditions	
0/60	0/01	32/17	8619.24	1	8619.24	error	Number of error responses
				37	14181/16	Experimental conditions	

The findings of covariance analysis showed the following results:

The desired intervention approach has been effective with 99.9% confidence on the reaction time of the correct answer, the reaction time of the wrong answer and the number of wrong answers, and the training is 58 respectively; 61 and 60 percent of the variance changes in the post-test scores predict the reaction time of the correct answer, the reaction time of the wrong answer and the number of wrong answers. The prediction model of the intervention variable was explained based on the statistics obtained from Etai Sahmi.

4 .Discussion and conclusion

This research was conducted to determine the effect of emotion regulation training on behavioural and cognitive inhibition of teenagers suffering from borderline personality disorder. Emotion regulation training affects the behavioral and cognitive inhibition of teenagers suffering from borderline personality disorder. Based on the findings of the descriptive-analytical changes, the average scores of the reaction time subscale of consonant words in the experimental group in the pre-test and post-test are 1093.84 and 984.11 respectively, and in the control group in the pre-test and post-test it is 1089.22 respectively. and it was 1088/98. According to the findings, the reaction time of consonant words in the experimental group has decreased by 109.73 after the test, while the control group decreased by less than 1 point. The reaction time of dissonant words in the experimental group decreased by 202.95 in the post-test, while the control group decreased by 2.70. Interference in the experimental group has decreased by 6.48 in the post-test, while the control group has decreased by 0.27. The error response in cognitive inhibition has decreased by 25.93 in the post-test, while the control group decreased by 0.66. These results are in line with various researches such as Bidari and Haj Alizadeh (2018), who in a study titled the effectiveness of schema therapy on the cognitive strategies of emotion, Distress Tolerance and aphasia in patients with borderline personality disorder, 15 people from two experimental and control groups with They investigated the use of dependent t analysis and concluded that schema therapy is beneficial. In emotion regulation, distress tolerance and dyslexia were effective in patients with borderline personality disorder, and Zargrani (2012) compared the effectiveness of group training for emotion regulation based on the Gross process model in a study. Clinical symptoms, regulatory strategies and inhibitory activity of adolescent girls with borderline personality disorder were compared with adolescent girls with BPD and ADHD, and the research findings showed that group emotion regulation training based on the Gross process model reduces the symptoms of cognitive inhibition of underactivity. and increased the use of reappraisal strategy in the node with BPD, while only the use of depression and hyperactivity in the ADHD group decreased behavioural inhibition. And researches such as Saka et al. (2018) and... are aligned and in the same direction and express the issue that borderline personality disorder is characterized by the instability of emotional states, creating behaviour and interpersonal relationships. It is among the disorders that have been introduced with the foundation of response inhibition problems. A brief look at the pattern of BPD symptoms shows how inhibitory control affects the behaviors, emotions, and cognitions of sufferers. Since the identification of executive actions is surprisingly related to emotion and personality development, identifying the inhibitory capacities of affected people provides comprehensive information on social behaviors, emotion regulation, and problem solving ability. It is believed that the emotional instability in BPD, especially the symptoms related to impulsivity, is rooted in the weakness of the response inhibition mechanism, which leads to childhood behavioral disorders, inappropriate interpersonal relationships, and a range of negative social-related experiences. It is possible that in the end, such signs in adolescence and adulthood call for all kinds of personality disorders. Seeking emotional order by creating a balance and emotional analysis is the basis for the correct use of emotions and self-regulation derived from it in a specific and correct context, which causes the context of measured, logical and analytical features in the structure based on it, and this The problem can be generalized and applied in borderline people as well, and it can be expanded by adapting and training a model of emotional discipline and measured response, which was confirmed by this research.

Emotion regulation training has a direct and positive effect on the behavioral inhibition of teenagers suffering from borderline personality disorder. The findings after observing the assumptions of this statistical method showed that there was a significant difference between the pre-test and the post-test of the experimental and control groups in terms of behavioral inhibition variables, so it can be said that there is a significant difference between the two groups in at least one of the dependent variables. had. In order to understand this difference, several covariance analyzes were performed in the text of "Mankwa". The covariance analysis showed that the desired intervention approach was effective with 99.9% confidence on the reaction time of consonant words, the reaction time of non-consonant words and interference, and emotion regulation was 64, respectively; 66 and 61% of variance changes in post-test scores predict the reaction time of consonant words, the reaction time of non-consonant words and interference. These results are in agreement with the research of Kagan et al. (2017) who showed in their research that students who have more anti-social behaviors have more difficulty in emotional regulation and are at a greater risk of facing drug abuse and the problem of emotions in inhibition.

Behavior plays a role, as well as the research of Johnson et al. (2013) who showed in their research that the behavioral inhibition system is related to anxiety and failure and the behavioral activation system is related to the hope of relief, and Sezaz et al. (2011) in a study that investigated the effectiveness The training of emotion regulation strategies focused on the tendency to smoke, attention bias and negative emotions. They concluded that people who used more inhibition strategies had less temptation, less negative emotions (excitement) and less attention bias. Smoking symptoms and emotions play a role in this context, the findings suggest that there is congruence and congruence, and potential transferences and, in particular, deficits in behavioral control can cause impaired behavioral inhibitions. Behavioral inhibition is a basic and biological structure of personality. Behavioral inhibition is triggered by conditioned cues of punishment and lack of reward, as well as new stimuli with high-intensity and internal fear stimuli that cause behavioral inhibition. There is an increase in arousal and focus of attention. Research has shown that excessive inhibitory activity leads to personal anxiety traits, heightened sensitivity to threatening stimuli, and anxiety-related behaviors and rumination. Behavioral inhibition theory suggests that this trait variable should have a variety of negative consequences, including a high degree of emotional reactivity and dysfunctional adjustment styles. Based on this, the presence of behavioral inhibition forms a problematic structure in the occurrence of correct behavior and reaction in the situation, which is rooted in emotional interferences and inconsistencies. Emotional correction and regulation and training in this field creates a coping structure and is efficient in improving the situation, and this approach was operationally approved.

Emotion regulation training has a direct and positive effect on the cognitive inhibition of teenagers suffering from borderline personality disorder.

Covariance analysis was used to investigate this hypothesis. The findings obtained after observing the assumptions of this statistical method showed that there is a significant difference between the pre-test and post-test of the experimental and control groups in terms of cognitive inhibition variables, so it can be said that there is a significant difference. There was a difference between the two groups in at least one of the dependent variables. In order to understand this difference, various covariance analyzes were performed on the Mankwa text. The findings showed that the desired intervention approach was effective on the response time to the correct answer, the response time to the wrong answer and the number of incorrect answers with 99.9% confidence and the training was 58 cases. Between 61 and 60% of variance changes in post-test scores predict correct answer reaction time, wrong answer reaction time, and number of wrong answers. These results are based on the research findings of Axelrod et al. (2018) who investigated emotion regulation and substance use frequency in women with substance abuse and borderline personality disorder receiving dialectical behavior therapy and concluded that emotion regulation in emotion it is affect. regulation. Not only did it improve mood, but it was also linked to reduced frequency of substance abuse and research by Vera and Moon (2017), whose research examined difficulty regulating low emotions among Hispanics. Having said this, the results of this research indicate that the difficulty in regulating low emotions has a significant effect on various types of criminal behavior, including delinquent behavior and alcohol addiction, and also the study of Dimf and Koerner (2007) on emotion management is more important than control. It is an assessment. And changing responses are internal and external processes that are responsible for a person's emotional needs to achieve goals, and any form or defect in the regulation of emotions can make a person vulnerable. Consistency has been achieved in psychological disorders and other existing research in this field, and it is not surprising that impairment and emotion regulation are harmful, because cognitive emotion regulation strategies have an important place in every person's life. In the diagnostic and statistical manual of mental disorders, one of the criteria for mental disorders is disorder in the patients' emotions. Non-adaptive emotional regulation strategies such as rumination, self-blame and catastrophizing have a significant relationship with behavioral and cognitive inhibition. When studying issues related to various disorders such as borderline individuals, emotion regulation is a natural aspect of emotional response tendencies. In fact, emotion regulation refers to actions that are used to change or regulate an emotional state. This model believes and interprets that emotion is created and its intensity over time through a repeated sequence of situations, attention, evaluation and reaction when a person encounters a certain situation and pays attention to it in a certain way. slow, increases. in such a way that the pattern of coordination of changes in experimental, behavioral and physiological systems is created. Cognitive emotion regulation strategies are an integral part of human life and make people control their feelings and emotions in stressful situations. The existence and training of this model forms the structure of analysis and adaptation and creates measured reactions. And it is a situation that is caused based on the mastery of emotions, so the recognition of emotions and its management in borderline people is accompanied by logical reactions and this problem is possible with emotional discipline training.

Ethical Considerations: After the necessary approvals and obtaining permission from the university, in order to complete the questionnaires, the goals and working methods were explained to all the people participating in

the study, and their consent was obtained and they were assured that the results of the research will be available to them if they wish. They will be placed. Also, people were assured that they are free to participate or not participate in the research, and in case of non-participation and cooperation, their treatment or care will not be effective and will be followed up as usual. People were assured that they can decide to withdraw from the research at any stage of the research and this will not have any negative consequences for them.

Limitations of the research: Like other researches, this research had limitations, and one of these limitations was the mental and emotional state of the patients when answering the questions, which may affect the correctness and accuracy of their answers, and this limitation was uncontrollable.

Conflict of interest: The authors hereby declare that this work is the result of an independent research and does not have any conflict of interest with other organizations and persons.

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