

Effectiveness of Unified Transdiagnostic Therapy on Cognitive Emotion Regulation, Experimental Avoidance and Post-Traumatic Stress Disorder in Veterans

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ABSTRACT

Aims Surviving a war while other friends are dying or seriously injured is one of life's most painful experiences, which can lead to physical, cognitive, and emotional reactions. This study aimed to evaluate the effect of unified transdiagnostic therapy on cognitive emotion regulation, experimental avoidance, and diagnostic symptoms of post-traumatic stress disorder in veterans.

Materials & Methods This was a quasi-experimental study with a two-group design of experiments and controls with pre-test and post-test, which was carried out on all veterans with post-traumatic stress disorder in Mashhad city in 2020-2021. Thirty-two people were selected by convenience sampling method and randomly assigned to two 16-person experimental and control groups. The subjects filled out the cognitive emotion regulation, experimental avoidance, and post-traumatic stress disorder questionnaires before and after the intervention. The intervention was performed by the first author in twelve 90-minutes sessions on Tuesdays at the Rayan Mehr Golshan Clinic in Mashhad. Data were analyzed using SPSS 23 software through multivariate analysis of covariance.

Findings There was a significant difference between all components of cognitive emotion regulation, experimental avoidance, and diagnostic symptoms of post-traumatic stress disorder in experimental and control groups ($p < 0.05$).

Conclusion Transdiagnostic therapy is effective on cognitive regulation of emotion, experimental avoidance, and reduction of symptoms of post-traumatic stress disorder in veterans with a disability.

Keywords Integrated Transdiagnostic Therapy; Psychiatry and Psychology Category; Post-Traumatic Stress Disorder; Veterans

CITATION LINKS

[1] Experiential avoidance moderates the association ... [2] The comparison of experimental avoidance, mindfulness ... [3] Acceptance-based interventions in the treatment ... [4] Diagnostic and statistical manual of mental disorders ... [5] The relationship between dispositional mindfulness ... [6] Subjective well-being: A general ... [7] Cognitive emotion regulation ... [8] A randomized controlled trial comparing ... [9] Trauma-related cognitions and cognitive ... [10] Experiential avoidance as a mediator of the association ... [11] Emotion regulation in psychotherapy: a practitioner's ... [12] Relations among emotion regulation and DSM-5 symptom ... [13] Mindful attention moderating the effect of experiential ... [14] Enhanced exposure therapy for combat-related ... [15] The impact of prolonged exposure therapy ... [16] Unified protocol for the transdiagnostic ... [17] Conceptual background, development ... [18] The unified protocol for transdiagnostic treatment ... [19] A systematic review and meta-analysis of the ... [20] The effectiveness of transdiagnostic ... [21] The efficacy of integrated meta-diagnosis ... [22] Effectiveness of unified trans-diagnostic treatment ... [23] Cognitive coping strategies and symptoms of ... [24] A study on the reliability and of the short form ... [25] The role of cognitive emotion regulation strategies ... [26] Development of a measure of experiential avoidance ... [27] The PTSD checklist for DSM-5 ... [28] The effectiveness of acceptance and commitment ... [29] Unified protocol for transdiagnostic ... [30] Cognitive behavioral processes across psychological ... [31] A preliminary investigation of the long-term ... [32] The impact of intolerance of emotional ...

Introduction

Surviving a war while other friends are dying or seriously injured is one of life's most painful experiences, which can lead to physical, cognitive, and emotional reactions [1]. Post-Traumatic Stress Disorder (PTSD) was first introduced in the American Psychiatric Association Diagnostic Classification in 1980 [2]. It is estimated that 90% of people are exposed to traumatic events at least once in their lifetime. However, not everyone develops PTSD after a traumatic event [3]. In the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), PTSD symptoms include disturbing symptoms (formerly re-experienced), avoidance symptoms, and negative changes in cognition, mood, and arousal [4]. Each symptom has adverse effects on the individual, interpersonal, and social aspects.

One of the reasons that people suffer from psychological problems is emotional causes. It has been shown that people with PTSD have many difficulties in cognitive emotion regulation [5]. Emotion regulation refers to determining what emotion to experience and express at what time [6]. Cognitive emotion regulation refers to the processes of information and managing emotional reactions when facing negative events [7]. In other words, cognitive emotion regulation strategies are patterns of reaction to exciting events. A reaction can be conscious or unconscious, and its purpose is to modify or correct the intensity and type of emotional experience of a person [8]. Mclean *et al.* found that cognitive distortions and cognitive emotion regulation strategies are two important mediators in PTSD [9]. Also, dysfunctional emotional, cognitive regulation is associated with more severe PTSD symptoms. In another study, Kelly *et al.* showed that difficulty in emotionally cognitive regulation could predict PTSD symptoms in war survivors. The problems in regulating emotion could manifest as excessive aggravation or reduction of excitement and cause people to use inefficient methods such as obsessive rumination, catastrophizing, and overeating facing excitement [10]. These dysfunctional coping patterns may temporarily reduce arousal, making emotional coping more difficult [11].

Emotion regulation is conducted in different ways, whereas recent meta-analytic research shows that experiential avoidance is one of the main methods and is considered a strategy in PTSD psychiatric pathology [12]. Williams *et al.* stated that PTSD is associated with experiential avoidance, especially in people with high sensitivity to the behavioral inhibition system [1]. Experience avoidance is the process by which a person is reluctant to engage in painful experiences, hence seeking to control, suppress, and curb the thoughts, feelings, and behaviors related to the negative events [13]. This process can have the opposite effect on reducing

anxiety for people who experience a traumatic event. So, people with PTSD, instead of experiencing and reprocessing thoughts and feelings by avoiding them intensify and perpetuate the anxiety [2]. Evidence suggests that if PTSD is not treated, the sufferer is at risk for many psychiatric problems such as depression, neuropsychological disorders, memory impairment, emotion regulation, physical health problems, reduced resilience, and problems adapting to family and couples [14]. PTSD also leads to high costs for military personnel [15]. Therefore, the treatment of these people is important.

One of the effective treatments for these people is integrated transdiagnostic therapy. The initial version of unified transdiagnostic therapy was used by Ellard *et al.* [16] for a heterogeneous sample of emotional disorders. Transdiagnostic therapy treats emotional disorders by combining therapeutic components. Transdiagnostic therapy focuses specifically on improving emotion regulation skills [16]. In other words, the emphasis is on emotions' adaptive and functional nature in this treatment. It is mainly an attempt to modify non-adaptive efforts to regulate emotional experiences and facilitate appropriate processing [17]. García-Escalera *et al.*, in a study examining the effectiveness of an integrated protocol in emotional disorders in young people, concluded that transdiagnostic therapy has a significant effect on the reduction of emotional disorders [18]. Sawiris and Berl conducted 15 studies on 1,244 people. The results showed significant anxiety, depression, generalized anxiety disorder, obsessive-compulsive disorder, social anxiety, agoraphobia, and borderline personality disorder. They also showed that unified transdiagnostic therapy helps to improve emotion regulation strategies [19]. Basharpour *et al.* concluded that the effect of transdiagnostic therapy is significantly higher in people with the obsessive-compulsive disorder compared to exposure therapy and response prevention in improving experiential avoidance and cognitive emotion regulation [2]. Fadaei *et al.* concluded that Barlow's unified transdiagnostic therapy protocol increased differentiation in the experimental group compared to the control group and reduced the difficulty level of emotion regulation [21]. Osmani and Shukri stated that unified transdiagnostic therapy significantly affected students' cognitive emotion regulation and cognitive empathy with an externalized behavior disorder. The effect of unified transdiagnostic therapy was 72 and 67% on students' cognitive emotion regulation and cognitive empathy with an externalized behavior disorder, respectively [22]. Since few studies have investigated the effect of transdiagnostic therapy on the components of cognitive emotion regulation and experiential avoidance in patients with PTSD, this study aimed to evaluate the effectiveness of unified transdiagnostic therapy on cognitive emotion regulation,

experimental avoidance, and diagnostic symptoms of post-traumatic stress disorder in veterans.

Materials and Methods

This was a quasi-experimental study with a two-group design of experiments and controls with pre-test and post-test, which was carried out on all veterans with post-traumatic stress disorder in Mashhad in 2020-2021. Thirty-two people were selected using G.power software 3.1.9.4 (based on effect size: 0.25, confidence level: 0.05, statistical power: 0.8, and several dependent variables: 3 and groups: 2) and randomly assigned to two 16-person experimental and control groups. Inclusion criteria included age range 55-70 years, 50-70% disability rate (due to problems that people with 50-70% injury rate), diagnosis of PTSD by the relevant specialist and having at least a diploma and being married.

The measurement tools were as follows:

1- Cognitive Emotion Regulation Questionnaire developed by Garnefski *et al.* [23]; It is a self-reported multidimensional questionnaire with 36 items and special forms for adults and children. In this questionnaire, the person is asked to indicate his/her reaction in the face of threatening experiences and stressful events (by answering five questions that evaluate the strategy for controlling and regulating emotion) [7]. The questionnaire is scored on the 5-point Likert scale; never (1), rarely (2), sometimes (3), often (4), and always (5). This questionnaire comprises single positive focus/planning, positive evaluation/a broader perspective, self-blame, blaming others, rumination, catastrophizing, and acceptance. The alpha coefficient for subscales has been reported in 0.71 to 0.81 [23]. The Persian version of this questionnaire has been validated in Iran [24]. The convergent and divergent validity of this form was also examined by Issazadegan and Fatehabad in Iran [25].

In the present study, Cronbach's alpha for the subscales of self-blame, blame others, catastrophe, rumination, acceptance, positive focus, and positive evaluation were equal to 0.72, 0.74, 0.69, 0.75, 0.77, 0.82, and 0.77, respectively.

2- Experimental Avoidance Questionnaire developed by Gámez *et al.* The questionnaire included 62 items and evaluated six subscales of behavioral avoidance, incompatible distress, postponement, distraction/suppression, denial/suppression, and distress tolerance by 6-point Likert scale from strongly agree=5 to strongly disagree=0. Questions 23 and 30 are scored in reverse [26]. Gámez *et al.* reported Cronbach's alpha coefficients in different samples from 0.91 to 0.95 and the correlation of this instrument with the Commitment and Practice Questionnaire ($r=0.74$) as an indicator of appropriate validity. Cronbach's alpha coefficients

for the subscales of behavioral avoidance, incompatible distress, postponement, distraction/suppression, denial/suppression, and tolerance of disaster were 0.77, 0.70, 0.55, 0.80, 0.78, and 0.79, respectively. In the present study, Cronbach's alpha for the instrument was 0.82.

3- The post Traumatic Stress Disorder Questionnaire is a self-reported scale with 20 items developed by Weathers *et al.* for evaluation of PTSD diagnostic criteria in DSM-5. This questionnaire assesses four scales of harassment, avoidance, negative changes in mood and cognition, and excessive arousal, which 5, 2, 7, and 6 items are related to the signs of re-experiencing a traumatic event, avoidance, negative changes in cognition, and mood, and arousal, respectively. The scoring method of this questionnaire includes the sum of scores (0-80) obtained by the scores sum of 20 items based on a 5-point Likert scale. The cutting point is determined to be 38. Convergent validity in the English version of this questionnaire is reported to be 0.89 [27], and Talebigi has translated and standardized it and reported its reliability with Cronbach's alpha of 0.77 [28]. In the present study, Cronbach's alpha was 0.73.

4- An unified transdiagnostic therapy protocol has been developed by Barlow *et al.* and typically performs during 12 sessions [29].

The Ethical permission was obtained from the Postgraduate Education Council of the Faculty of Psychology of Semnan University. The implementation method was that the researcher referred to the Martyr Foundation of Mashhad. After justifying and presenting the questionnaires, the researcher was introduced to the support departments of each Martyr Foundation in the areas of Mashhad city. Then, the questionnaires were provided to the subjects with the cooperation of the support department, and it was decided that everyone who was referred to this ward would be given a post-traumatic stress disorder questionnaire for initial diagnosis and screening for PTSD. Then, those who were eligible were selected. After obtaining the subject's consent to participate in the treatment, 32 people were selected by available sampling and were randomly divided into experimental and control groups. The intervention was performed by the first author in twelve 90-minutes sessions on Tuesdays at the Ryan Mehr Golshan Clinic in Mashhad. The intervention procedure lasted three months. The pre-test was performed after screening in the first intervention session, and the post-test was performed in the last session. Also, due to the prevalence of the Covid-19 virus, interventions were performed in person and following health protocols. Also, all ethical principles were observed, including confidentiality and obtaining

a consent form. To control the effect of the intervention, the experimental and control groups did not interact during the intervention. After data collection, data were analyzed at two

descriptive (mean, standard deviation, frequency, and percentage) and at the inferential levels (multivariate analysis of covariance) using SPSS 23 software.

Table 1) Unified transdiagnostic therapy protocol of Barlow *et al.* [29]

Session	Session description
1: Motivational interview to motivate and strengthen patients' motivation for change; providing goals and logic of the treatment	In this session, the therapist encourages and motivates the patients. Also tries to make self-efficacy and believe in the ability to change and successful treatment in the patients. Using the scales worksheet, the authorities try to assess the profit and loss of changing or staying in the current situation. The therapist and patients also determine therapeutic goals by the treatment goal setting sheet and the practical steps to achieve the goals.
2: Recognize the formation and continuation of emotions through education	During this session, some key assumptions are presented to the patient, including the emotional nature, the emotional experience, and the concept of the learned and safety reactions. It is expected that patients can be adequately trained by reviewing dominant emotional response patterns to events, triggers, adaptive functioning, and severe persistence factors.
3 and 4: Accepting and awareness of emotions by teaching emotional awareness and learning to observe emotional experiences (emotions and reaction to emotions) by mindfulness	During these two sessions, the clients are provided insights on recognizing and reacting to emotions to gain awareness without judgment and evaluation by focusing on the present moment. These skills are developed through mindfulness exercises through the forms of "conscious attention to the present moment without judgment", "emphasis on the present moment", and "reconsider the emotions and behaviors resulting from an emotion at the moment".
5: evaluation; Cognitive re-evaluation as well as creating insight into the impact of the interaction between thoughts and emotions	During this session, clients are trained to evaluate thoughts and their interaction with emotions and identify automatic thoughts and common cognitive distortions such as negative prediction and catastrophizing. Clients also learn to increase their flexibility and correct negative thoughts in different situations by considering negative spontaneous thoughts. At the end of this session, the clients are expected to gain a deeper insight into the evaluation and interpretation of situations. The tools used in this session are the downward arrow technique and identifying and measuring negative spontaneous thoughts.
6: Familiarity with strategies to avoid emotions and the effects of these strategies	During this session, the focus is on the behavioral reactions resulting from emotional experiences. The client identifies avoidance patterns with the therapist's help and then tries to correct the avoidance reaction and replace it with a more appropriate response. A worksheet of emotion avoidance strategy will be used in this session.
7: Recognize emotion-related behaviors	The answers resulting from the emotional experience will be followed in this session. These responses, which may have value and functional implications, are carefully evaluated. Clients are also trained in identifying the defective cycle of experience. Attempts are made to teach clients how to recognize emotion-related behaviors.
8: Increase awareness and tolerance of physical emotions	At this stage of treatment, an attempt is made to make the client aware of the importance of physical emotions in various experiences. After identifying provocative situations, the therapist tries to design situations similar to reality, motivate physical emotions in the client, and encourage the client to confront them. The goal is to raise the threshold of emotion tolerance and create an atmosphere the patient understands the interaction of emotions and thoughts.
9, 10, and 11: Dealing with emotions in the situation and presenting the logic of confrontation; learning to compile a list of hierarchy of stressful situations and design coping exercises	Considering the importance of shared emotions in the etiology and persistence of emotional disorder, special emphasis is placed on confronting the triggers, stimulating internal and external excitement during these sessions. Once the client and therapist have compiled a list of excitement-provoking situations and identified the hierarchy of fear in each situation, the client will gradually confront the situations. Depending on the anxiety scale, these encrustations can be visual or reality during or outside the session. Before the confrontation, the therapist explains the logic of the encounter and its barriers to the client; this allows the client to respond to emotions more efficiently while anticipating possible events. During these sessions, clients are helped to apply the skills learned during treatment, such as relaxation exercises and mindfulness, to facilitate the treatment process and remove obstacles.
12: Prevention of recurrence	In the final session, clients are taught strategies to anticipate potential problems and thus perpetuate the benefits of treatment; general concepts are reviewed, and therapeutic progress is discussed and summarized.

Findings

The mean age of the experimental and control groups were 54.68 ± 4.18 and 56.18 ± 3.88 , respectively. There wasn't a significant difference between the average age of the two groups ($p < 0.05$). In the experimental group, 5, 8, and 3 subjects had a diploma and high school (31.30%), master (50%), and (18.70%) bachelor's degrees.

In the control group, 5, 5, and 6 subjects had a diploma, high school (31.30%), master (31.30%), and (37.40%) bachelor's degrees, respectively. Unified transdiagnostic therapy in the experimental group reduced self-blame, rumination, blaming others, catastrophizing, and increased acceptance and positive refocus. Positive re-evaluation compared to the control group who did not use this method. Also, in the experimental group, this therapy method reduced behavioral avoidance, incompatibility anxiety, postponements, distraction, and denial, and increased anxiety tolerance compared to the control group who did not use this method.

The therapy in the experimental group was able to reduce harassment, avoidance, negative mood changes, and extreme arousal compared to the control group who did not use this method (Table 2).

Before testing the hypotheses, the statistical hypotheses of multivariate and univariate analysis of covariance were examined. The results of Box's M test showed the homogeneity assumption of the variance-covariance matrix ($p < 0.19$, $F = 9.75$), which showed that the covariance matrices of the dependent variable are equal for the levels of the independent variable. Bartlett's sphericity test also showed that the correlation between dependent variables is sufficient to continue the analysis ($p < 0.001$, $\text{Chi-square} = 15.48$).

Based on the Leuven test, the homogeneity of variances in the total score of positive cognitive emotion regulation ($p < 0.23$, $F = 0.12$), negative cognitive regulation ($p < 0.96$, $F = 0.08$), and behavioral avoidance ($p < 0.080$, $F = 0.06$) were Observed, but in PTSD ($p < 0.01$, $F = 6.74$) the homogeneity assumption of variances was not observed. Also, the results of Lambda Wilkes and T. Hotline showed a significant difference in the linear composition of the research variables between the experimental and control groups in the post-test stage.

There was a significant difference between all components of cognitive emotion regulation, experimental avoidance, and diagnostic symptoms of PTSD in the experimental and control groups (Table 3).

Table 2) Mean \pm SD of the variables of control and experimental groups in veterans with 50-70% disability rating in Mashhad city (n=32)

Variable	Control group		Experimental group	
	Pre-test	Post-test	Pre-test	Post-test
Cognitive emotion regulation				
Self-blame	9.87 \pm 3.11	11.50 \pm 2.58	9.75 \pm 2.26	6.00 \pm 1.03
Acceptance	12.56 \pm 3.99	13.56 \pm 3.63	12.75 \pm 4.15	18.12 \pm 1.92
Rumination	14.93 \pm 5.02	15.43 \pm 4.27	16.31 \pm 4.67	9.25 \pm 3.49
Positive focus	32.37 \pm 8.21	30.06 \pm 7.80	26.50 \pm 9.45	36.06 \pm 7.49
Positive evaluation	17.62 \pm 7.15	17.26 \pm 6.63	18.68 \pm 5.09	26.28 \pm 4.51
Blaming others	11.12 \pm 3.22	11.50 \pm 2.87	10.12 \pm 2.75	5.62 \pm 0.88
Catastrophizing	13.37 \pm 3.72	13.12 \pm 3.48	13.12 \pm 3.40	7.56 \pm 2.55
Behavioral avoidance				
Behavioral avoidance	39.06 \pm 12.54	36.12 \pm 13.27	39.12 \pm 12.91	27.50 \pm 12.93
Anxiety/ incompatibility	46.75 \pm 12.80	62.45 \pm 13.27	49.87 \pm 15.72	38.06 \pm 14.93
Postponement	21.50 \pm 6.87	21.00 \pm 7.34	23.31 \pm 5.78	14.06 \pm 5.22
Distractions	25.06 \pm 6.84	24.31 \pm 6.37	27.56 \pm 8.39	18.68 \pm 6.87
Denial	40.87 \pm 14.91	36.25 \pm 15.51	47.12 \pm 15.51	37.56 \pm 15.06
Distress tolerance	40.93 \pm 11.12	39.56 \pm 10.68	38.68 \pm 12.31	46.81 \pm 11.71
Post-traumatic stress disorder				
Harassment	15.87 \pm 4.04	15.18 \pm 3.83	16.68 \pm 4.98	9.75 \pm 2.84
Avoidance	6.68 \pm 25.27	5.87 \pm 2.02	7.06 \pm 1.91	3.18 \pm 1.37
Negative mood changes	21.25 \pm 6.89	21.50 \pm 7.92	24.62 \pm 7.62	16.62 \pm 4.93
Extreme arousal	17.43 \pm 5.21	18.18 \pm 5.76	20.31 \pm 4.48	13.06 \pm 4.32

Table 3) Results of multivariate analysis of variance to investigate the differences between the experimental and control groups concerning the components of cognitive emotion regulation, experimental avoidance, and PTSD in veterans with 50-70% disability rating in Mashhad city (n=32)

Subscale	Mean squares	F	Sig.	Partial Eta Squared	Statistical power
Cognitive emotion regulation					
Self-blame	187.75	44.23	0.001	0.65	1.00
Acceptance	150.05	32.89	0.001	0.58	1.00
Rumination	355.12	51.74	0.001	0.69	1.00
Positive focus	654.95	57.46	0.001	0.71	1.00
Positive evaluation	436.22	48.31	0.001	0.67	1.00
Blaming others	236.56	128.49	0.001	0.84	1.00
Catastrophizing	177.29	72.73	0.001	0.76	1.00
Behavioral avoidance					
Behavioral avoidance	600.91	31.58	0.001	0.56	1.00
Anxiety/ incompatibility	690.47	17.84	0.001	0.42	0.98
Postponement	610.64	69.38	0.001	0.74	1.00
Distractions	443.28	38.59	0.001	0.61	1.00
Denial	227.66	4.97	0.03	0.17	0.57
Distress tolerance	603.12	50.02	0.001	0.67	1.00
Post-traumatic stress disorder					
Harassment	224.81	36.29	0.001	0.58	1.00
Avoidance	64.56	27.58	0.001	0.51	0.99
Negative mood changes	385.94	27.91	0.001	0.51	0.99
Extreme arousal	288.73	15.72	0.01	0.37	0.96

Discussion

This study aimed to evaluate the effectiveness of unified transdiagnostic therapy on veterans' cognitive emotion regulation, experimental avoidance, and diagnostic symptoms of PTSD. The results showed that in the cognitive regulation of emotion, the experimental group scored lower than the control group in their components of self-blame, rumination, blaming others, and catastrophizing. The experimental group scored higher than the control group in the components of acceptance, positive refocus, and positive re-evaluation. Thus, unified transdiagnostic therapy reduced self-blame, rumination, blaming others, and catastrophizing in the experimental group, and increased acceptance, positive refocus, and positive re-evaluation. These findings follow several studies [19, 21, 31].

Emotion regulation is by which people consciously determine what emotion to experience and express at what time. Emotion regulation is consciously determining what emotion to experience and express at what time and how information is processed, and the individual responds facing a traumatic event, affecting people's reactions. In other words, cognitive emotion regulation strategies are patterns of responding to exciting events. The response can be conscious or unconscious, and its purpose is to modify or correct the intensity and type of emotional experience of the individual. These dysfunctional coping patterns may temporarily reduce arousal, but it makes emotional coping more difficult [7].

The results showed that the experimental group had lower scores in the components of behavioral avoidance, anxiety, incompatibility, postponement,

distraction, and denial than the control group and higher scores in anxiety tolerance. Indeed, unified transdiagnostic therapy in the experimental group reduced behavioral avoidance, incompatibility anxiety, postponement, distraction, and denial and increased anxiety tolerance compared to the control group. Also, in the diagnostic symptoms of PTSD, the experimental group scored lower than the control group in the components of harassment, avoidance, negative mood changes, and extreme arousal. This result means that unified transdiagnostic therapy in the experimental group was able to reduce harassment, avoidance, negative mood changes, and extreme arousal compared to the control group who did not use this method, and these results are consistent with the results of several studies [16, 18, 20, 22]. In explaining the obtained results, it can be said that PTSD is associated with a high level of the functional defect and has a significant impact on the quality of life after trauma. Cognitive avoidance is considered a strategy in PTSD psychiatric pathology. PTSD is associated with experiential avoidance, especially in people with high levels of behavioral inhibition. As a strategy to reduce anxiety coping traumatic events, this process has the opposite effect. In this way, people with PTSD, instead of experiencing and reprocessing thoughts and feelings, aggravate and perpetuate anxiety by avoiding emotions.

On the other hand, unified transdiagnostic therapy can effectively improve cognitive regulation of emotion and cognitive avoidance in these individuals. Transdiagnostic therapy focuses specifically on improving emotion regulation skills. In other words, the emphasis of this therapy is on

the adaptive and functional nature of emotions. It is mainly an attempt to modify non-adaptive efforts to regulate emotional experiences and facilitate appropriate processing. In transdiagnostic approaches, emotional experience and reaction are among the basic processes in psychological trauma, especially in emotional disorders^[17].

The present study was carried out on veterans; war survivors show higher rates of trauma and PTSD^[32], which may be due to their experience in war operations. In studies to identify the effects of war, the findings suggest that people with PTSD have problems developing social relationships and expressing emotions^[14]. They also differ in impulse control, aggression, and marital problems from the general population. These problems prevent sufferers from playing their roles properly as parents, spouses, and heads of families^[15]. In this regard, unified transdiagnostic therapy can be helpful for these people. Indeed, this approach's flexibility for using and integrating specific treatment interventions is one of its advantages. Based on a transdiagnostic point of view, it is understandable that people may be influenced by negative thoughts and emotions and some physiological arousals after traumatic events. Efforts to prevent remembering memories, suppression of thoughts and emotions, and other inconsistent strategies for regulating problematic emotions have a role in PTSD development rather than consistent responsiveness [8]. Thus, adaptive emotion-regulating skills using an integrated protocol can counteract the avoidance and other emotion-oriented behaviors that play a role in reinforcing and maintaining PTSD symptoms.

Based on the results, it is suggested to investigate such interventions on other psychological issues related to veterans, such as marital quality, using different methods such as a follow-up test. As a result, such interventions are recommended for people who have difficulty cognitively regulating emotion, experiential avoidance, and the diagnostic symptoms of PTSD. This treatment helps clients establish avoidance and develop adaptive emotion regulation skills coping with unpleasant emotions. Considering that unified transdiagnostic therapy targets transdiagnostic factors, it significantly affects veterans' recovery process and adaptation. Therefore, this treatment will effectively improve cognitive emotion regulation, experiential avoidance and reduce the diagnostic symptoms of PTSD.

Conclusion

Transdiagnostic therapy is effective on cognitive regulation of emotion, experiential avoidance, and reduction of PTSD symptoms in veterans with 50-70% disability in Mashhad city.

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Ethical Permissions: The present research has been approved in terms of content and ethics by the Postgraduate Education Council of the Faculty of Psychology of Semnan University on 11/20/98, No. 34801.

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