

## Original Article

# The Effectiveness of Cognitive Behavior Emotion Regulation Training on Marital happiness and Cognitive Emotional Regulation of Women with Premenstrual Dysphoric Disorder

Shahnaz Nouhi<sup>1\*</sup>, Malake Naseryfadafan<sup>2</sup>, Roza Salehian<sup>3</sup>, Samira Saghari<sup>2</sup>

<sup>1</sup> Department of Psychology, Shahroud Branch, Islamic Azad University, Shahrood, Iran

<sup>2</sup> Shahroud Branch, Islamic Azad University, Shahrood, Iran

<sup>3</sup> Department of Psychology, Semnan Branch, Islamic Azad University, Semnan, Iran

Received: 27 October, 2021; Revised: 16 November, 2021; Accepted: 30 November, 2021

## Abstract

**Background and Aim:** Premenstrual dysphoric disorder (PMDD) is a new DSM-5 diagnosis characterized by the cyclical emergence of emotional and physical symptoms in the luteal phase of the menstrual cycle. The present study aimed to evaluate the effectiveness of cognitive-behavioral training of emotional regulation on marital contentment and cognitive emotional regulation of women with signs of premenstrual dysphoric disorder (PMDD).

**Materials and Methods:** The method of this research is semi-experimental by pre-test/post-test with experimental and control groups. The statistical population consisted of all women suffering from premenstrual dysphoric disorder referring to the clinic of the Bahar Hospital in Shahrood. A total of 30 women which were selected through purposive sampling among women whose scores in pre-menstrual symptoms screening questionnaire were higher than the mean, and were replaced in the experimental and control groups (15 women for each group). Then, both groups completed the Marital Happiness Questionnaire and the Cognitive Emotional Regulation Questionnaire and then the experimental group underwent cognitive-behavioral emotion regulation training in form of 90-minutes, 12 sessions once a week. After completion of training, both groups again completed the above questionnaires. Data were analyzed using SPSS software version 24 and one and multivariate analysis of covariance (MANCOVA).

**Results:** The results showed that cognitive-behavioral training of emotion regulation has a significant effect on marital happiness and cognitive emotion regulation ( $P < 0.05$ ).

**Conclusion:** It can be concluded that Cognitive behavioral emotion regulation training can increase cognitive emotion regulation and marital happiness in women with symptoms of premenstrual dysphoric disorder.

**Keywords:** Cognitive behavioral emotion regulation, Marital happiness, Premenstrual dysphoric disorder

**\*Corresponding Author:** Shahnaz Nouhi, Assistant Professor, Department of Psychology, Shahroud Branch, Islamic Azad University, Shahrood, Iran. Email: psynut.sh@gmail.com.

**ORCID:** 0000-0003-4569-8265

**Please cite this article as:** Nouhi Sh, Naseryfadafan M, Salehian R, Saghari S. The Effectiveness of Cognitive Behavior Emotion Regulation Training on Marital happiness and Cognitive Emotional Regulation of Women with Premenstrual Dysphoric Disorder. *Int. J. Appl. Behav. Sci.* 2021;8(4):11-8.

## Introduction

**P**remenstrual syndrome is one of the most common psychosomatic disorders affecting the quality of life among women. A combination of hormonal, psychological, environmental and nutritional factors have been proposed for its etiology (1). This syndrome should be distinguished from the premenstrual dysphoric disorder, which is common in women and is part of the depression disorders.. Premenstrual syndrome is called premenstrual dysphoric disorder (PMDD) if it leads to dysfunction in family relations, social or occupational activities. Approximately, three to five percent of women during their ovulation the symptoms are so severe that they can be diagnosed with premenstrual dysphoric disorder (2). PMDD is associated with obvious mood symptoms, in addition to physical symptoms. Type and severity of symptoms vary from person to person (3). Studies showed that emotional instability and emotional disorders have higher frequency among individuals with premenstrual dysphoric disorder (4). Emotion plays an important role in various aspects of life such as adaptation with changes in life and stressful events. In essence, emotions can be considered as biological reactions to situations that we evaluate as an important or challenging opportunity, and these biological reactions are accompanied by a response to those environmental events. Emotion regulation helps individuals to manage and regulate their emotions during threatening events and after experiencing disasters (5). Psychopathologists believe that that having successful performance in social interaction, aggression and impulsive violence and feelings of shame and guilt are also caused by inadequate regulation of emotional responses. Emotion regulation is considered as processes through which individuals consciously or unconsciously adjust their emotions to respond to environmental expectations (6). Emotion regulation involves all conscious and unconscious strategies used to increase, maintain, and reduce emotional, behavioral and cognitive components of an emotional response. The Grass emotion regulation model consisted of five stages and each stage included a set of adaptive and maladaptive strategies, particularly those with emotional problems mostly use maladaptive strategies

(such as obsessions, worry and avoidance) (7). The literature on the effects of the menstrual cycle and Neuroticism, in the regulation of women's emotions shown that in the period of women have more efforts to regulate their emotions, but they achieve less success in this field (8). On the other hand, premenstrual syndrome is effective not only on the individuals but also on their families, and causes changes in the behavior of women, including problems with spouse (9). Women in the premenstrual phase are faced with disorders that cannot satisfy their spouses' expectations and when women cannot meet their spouse's expectations for various reasons, their marital relationships damage. One of the symptoms of premenstrual syndrome is sexual desire reduction and adaptation in sexual relationship and proportion and balance in sexual desire in men and women is one of the most important causes of happiness and success of marital life. Some researchers believe that the main cause of marital conflicts is the sexual dissatisfaction of couples that causes disorder in the pre-menstrual phase of women. In the other hand, incompatibility in couples' relationships leads to dysfunction in social relationships, tendency to social deviations and decline of cultural values between couples (10). This syndrome has a significant effect not only on the individuals but also on their family and in severe cases as a disease can cause changes in women's behavior. The result of this change of behavior may affect the interactions between women and other family members and as women play a key role in the family, incidence of this syndrome can have an important effect on their performance, including incompatibility with spouse (11). Considering that women are known as the essential element of balance, calmness and excellence of family and society system, decreasing their activity and role leads to unbalance (12). Personal traits are one of the factors affecting the symptoms of pre-menstrual syndrome. So that, nervous and impulsive people experience symptoms more severe than others. One of the non-pharmaceutical treatments in premenstrual syndrome is the use of behavioral methods such as, relaxation, exercise, and psychotherapy along with counseling support and cognitive behavioral therapy (13). Cognitive theory is based on an essential link between components of thinking, feeling, and behavior. Therapists' objective is to increase awareness of the

signs of primary arousal aggression and to train self-control techniques in order to reduce the likelihood of aggressive behavior (14). The overall aim of cognitive-behavioral therapy is to replace cognitions, emotions, behaviors, and non-adaptive coping skills of patients with chronic back pain, with adaptive types for these patients (15). The cognitive-behavioral therapy of emotion regulation focuses on emotional schema processes that underlie the interpersonal and cognitive - behavioral biases of human behaviors and see emotional processing as the fundamental goal of its treatment (16). Some empirical evidence suggests that the use of emotion-oriented behavioral cognitive therapy approach can lead to greater use of positive cognitive strategies of emotion regulation and in contrast to reducing the use of negative cognitive regulation strategies (17). This treatment results in the development of emotional skills of individuals and forms an effective mental model in the individual; also, by giving credit to their emotions, it causes their emotions' regulation and clarification (18).

Hence, according to whatever has been told, the purpose of this study was to answer that if teaching the cognitive-behavioral emotion regulation has any effect on marital happiness and cognitive emotional regulation of women with symptoms of premenstrual syndrome or not.

## Methods

The method of this research is semi-experimental with pre-test and post-test with control and experimental groups. The statistical population of this study was women with premenstrual dysphoric disorder who went to the Bahar hospital clinic in Shahrood in 1398 and the sampling method was purposeful. While, among the women positively responded to the call of participation in the intervention, the pre-menstrual symptoms screening tool (PSST) and marital happiness questionnaire were distributed and 30 persons of those whose scores in premenstrual dysphoric disorder test were lower than the mean and lower in marital happiness questionnaire, were randomly selected and replaced by random sampling in two experimental and control groups (each group 15 persons). Then, after filling up the Granefeski cognitive emotional regulation questionnaire (pretest)

by both groups, the cognitive emotional regulation intervention program was performed on the experimental group in twelve 90 minutes' sessions once a week and the control group received no interventional or educational program.

## Materials

### The Pre-menstrual Symptoms Screening Tool (PSST)

The PSST questionnaire consisted of 19 questions which have two parts. The first part includes 14 moods, physical and behavioral signs, and the second part includes 5 questions which assess the effect of these signs on the individuals lives (19). For each question, the criteria of never, mild, moderate, and severe was mentioned that were scored from zero to three. To validate this tool in the study of Siyahbazi *et al.* (20), a sample of girl students living in dormitories of Tehran University were randomly selected and evaluated. The reliability of this instrument was obtained by Cronbach's alpha coefficient 0.92. Content validity ratio and content validity index are respectively 0.7 and 0.8 that show the content validity of this questionnaire.

### Marital Happiness Scale

This 10- items scale built by Azrin, Nuster and Jones (21). It's enumerating based on 10-points Likert scale from quite happy=10 to quite unhappy=1. Based on this method we can obtain subjects' opinion in 9 separate areas or accumulating the scores that subject gives to each item; and judge about his/her general marital happiness. The minimum accumulation of scores will 10 and the maximum will be 100. The total score of 10 to 20 shows low marital happiness, and the total score of 20 to 55 shows moderate marital happiness and the score upper than 55 proves high marital happiness (22). The reliability of this questionnaire was calculated by internal consistency method were obtained 0.93 in the study of Isanezhad in 1387 (22).

### Cognitive Emotional Regulation Questionnaire

Cognitive emotional regulation questionnaire (5) is a 18-items tool and assesses the cognitive regulation strategies in response to lifes' threatening events in 5 grades scale ranging from 1 (never) to 5 (always) in terms of 9 subscales including: self-blaming; focusing on thought/ ruminating; others blaming; catastrophizing; underestimating; acceptance; positive re-assessment; positive re-focus; re-focus on planning. The minimum and maximum score of each subscale is respectively 2 and 10; and the higher score indicates the more use of that cognitive strategy. The cognitive strategies of emotion regulation in cognitive emotional regulation questionnaire are divided into two categories of the adaptive strategies (adapted) and

non-adaptive strategies (maladaptive). The subscales such as underestimating, acceptance, positive re-assessment, positive re-focus and re-focus on planning are adaptive strategies and the subscales such as self-blaming, others blaming, focusing on thought/ ruminating and catastrophizing form maladaptive strategies (23).

### Cognitive Behavioral Emotion Regulation Training Program

The structure of the cognitive behavioral emotion regulating training sessions (translation and adaptation from Allen et al. (24), which included twelve 90-minutes sessions conducted by the researcher.

In order to observe the ethical principles of this study, by obtaining informed consent from the participants

**Table 1:** The structure of cognitive behavioral emotion regulation training sessions.

| Sessions' Title | Sessions' Content                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1st session     | 1-The introduction and familiarity with team members , 2- expression of group rules and objectives , 3- introduction of the period and the necessity of emotion regulation.<br>Task: Members of the group have written their goals to participate in the sessions.                                                                                                                                                                     |
| 2nd session     | 1- Educating and introducing the emotions, emotions 2- identifying, naming and tagging to feelings 3- distinction between different emotions, 4- recognition the emotion in the physical and psychological mode, implications 5- success factors in emotion regulation.<br>Task: Recognition the fullest extent of emotion and the emotions experienced in everyday relationships (pathogenic emotions and the necessity of treatment) |
| 3rd session     | 1- The cognitive implications of emotional reactions, 2- physiological consequences of emotional reactions, 3- behavioral outcomes of emotional reactions and the relationship between these three together.<br>Task: Fill up the self-analysis form (Title: Signs of emotional disorder and causes of emotional disorder)                                                                                                             |
| 4th session     | 1- Introducing somatic, behavioral and cognitive symptoms, 2- Introducing cognitive-behavioral therapy (CBT), 3- genetics and environment and the effects of individuals affection from these two.<br>Task: Fill up the self-analysis form (Title: Cognitive errors and emotion regulations' difficulties)                                                                                                                             |
| 5th session     | 1- Introducing two common cognitive errors 2- Introducing emotion and avoidance as emotional dysregulation indicators.<br>Task: Fill up the self-analysis form (Title: Story of emotional disorders)                                                                                                                                                                                                                                   |
| 6th session     | 1- Awareness of the relationship between emotions and behavior, emotion and thought, 2- Recognition and investigation of automatic thoughts.<br>Task: Fill up the self-analysis form (Title: interpretations)                                                                                                                                                                                                                          |
| 7th session     | 1- Awareness of the relationship between automatic thoughts, interpretations and behavior.<br>Task: Fill up the self-analysis form (Title: change and reform interpretations)                                                                                                                                                                                                                                                          |
| 8th session     | 1- Flexibility in interpreting and considering a range of possibilities.<br>Task: Fill up the self-analysis form (Title: emotional behaviors)                                                                                                                                                                                                                                                                                          |
| 9th session     | 1- Awareness of the consequences of emotional avoidance, 2 - Awareness and experience of emotion or emotion suppression.<br>Task: Fill up the self-analysis form (Title: 1- confrontation from inside, 2- confrontation with emotions)                                                                                                                                                                                                 |
| 10th session    | 1- Manifestations of emotion by focusing on physical sensations, 2- doing exposure and paying close attention to all barriers or avoidance behaviors 3- re-interpreting, 4- re-evaluating<br>Task: Fill up the self-analysis form (Title: assumptions, principles and core beliefs)                                                                                                                                                    |
| 11th session    | 1- The introduction of beliefs related to rejection 2- introducing beliefs related to helplessness, 3- Recognition of core beliefs.<br>Task: Fill up self-analysis forms.                                                                                                                                                                                                                                                              |
| 12th session    | 1- Breaking core beliefs and replacing new beliefs.<br>Task: Fill up self-analysis forms and post-test                                                                                                                                                                                                                                                                                                                                 |

and the confidentiality of subjects' information. In this research, SPSS statistical software version-24 has been used for descriptive and inferential analysis

## Results

The descriptive feature of the participants' age showed that a total of 30 human subjects (15 persons for experimental group and 15 persons for control group) were participated in this study with an average age of 35.19 years old and standard deviation of the age was 4.308.

In table 2, the mean scores of the experimental and control groups, before the training of cognitive behavioral training, were set. As indicated from the table, compared to the control group, the scores of experimental groups were improved in both marital happiness and cognitive emotion regulation variables. The results of the covariance analysis for each of the marital happiness and cognitive emotion regulation strategies variables show that there is a significant difference in all components between the two

experimental and control groups in pre - test and post - test results ( $P=0.001$ ).

## Discussion

The results of this study showed significant improvement in marital happiness in comparison with the beginning of the study ( $P<0.05$ ). The results of this study are consistent with the studies of Eggert, Witthoft, Hiller (25) and Bavojdani & Kaviyani (26). In explaining these findings, it can be said that because in cognitive-behavioral emotion regulation training, communication skills, problem solving and correct coping strategies against negative emotions and aggression are taught to individuals; due to training these skills, efficient cognitive-behavioral patterns such as the ability to communicate effectively, controlling impulse, the ability to change aggressive impulses through situation and environment, and assisting women to identify and replace more positive and desirable outcomes rather than aggressive behaviors in whom were under training. Moreover, women undergo training, applied

**Table 2:** Descriptive characteristics of subjects' age.

| Variable | Number | M     | SD    | Minimum | maximum |
|----------|--------|-------|-------|---------|---------|
| age      | 30     | 35.19 | 4.308 | 24      | 44      |

**Table 3:** Descriptive characteristics of variation in sub-scales of research variables by separating two groups.

| Variable                 | Experimental group |     |           |      | Control group |     |           |      |
|--------------------------|--------------------|-----|-----------|------|---------------|-----|-----------|------|
|                          | Pre-test           |     | Post-test |      | Pre-test      |     | Post-test |      |
|                          | Mean               | SD  | Mean      | SD   | Mean          | SD  | Mean      | SD   |
| Marital Happiness        | 34.4               | 5.6 | 44.7      | 6.8  | 33.1          | 5.3 | 34.6      | 5.4  |
| Self-blame               | 3.3                | 0.6 | 2.1       | 0.56 | 3.8           | 0.7 | 3.5       | 0.63 |
| Acceptance               | 2.3                | 0.6 | 3.2       | 0.7  | 3.4           | 0.8 | 3.6       | 0.7  |
| Rumination               | 3.9                | 0.9 | 3.1       | 0.8  | 3.8           | 0.7 | 3.6       | 0.6  |
| Positive refocusing      | 2.8                | 0.6 | 3.7       | 1.1  | 3.5           | 0.7 | 3.4       | 0.8  |
| Refocusing on planning   | 1.9                | 0.5 | 2.7       | 0.7  | 2.1           | 0.6 | 2.3       | 0.7  |
| Positive reappraisal     | 1.8                | 0.6 | 2.8       | 0.8  | 1.5           | 0.4 | 1.6       | 0.5  |
| Putting into perspective | 2.1                | 0.7 | 3.4       | 0.9  | 2.5           | 0.7 | 2.7       | 0.8  |
| Catastrophizing          | 3.4                | 0.8 | 2.6       | 0.6  | 3.3           | 0.7 | 3.4       | 0.5  |
| Other-blame              | 2.8                | 0.7 | 1.7       | 0.5  | 2.5           | 0.6 | 2.4       | 0.6  |

**Table 4:** Covariance analysis of research subscales.

| Variable                 | Sum of Squares | Mean Square | F    | df  | p     | Eta Square |
|--------------------------|----------------|-------------|------|-----|-------|------------|
| Marital Happiness        | 28.67          | 28.67       | 13.5 | 1   | 0.001 | 0.47       |
| Self-blame               | 5.8            | 5.8         | 3.3  | 1   | 0.002 | 0.21       |
| Acceptance               | 6.9            | 6.9         | 4.1  | 1   | 0.001 | 0.2        |
| Rumination               | 7.5            | 7.5         | 5.2  | 1   | 0.001 | 0.31       |
| Positive refocusing      | 6.3            | 6.3         | 3.7  | 1   | 0.001 | 0.33       |
| Refocusing on planning   | 9.3            | 9.3         | 10.2 | 1   | 0.001 | 0.44       |
| Positive reappraisal     | 7.7            | 7.7         | 9.3  | 1   | 0.001 | 0.37       |
| Putting into perspective | 8.2            | 8.2         | 4.7  | 1   | 0.001 | 0.38       |
| Catastrophizing          | 2.4            | 1.03        | 5.5  | 2.3 | 0.024 | 0.13       |
| Other-blame              |                |             |      |     |       |            |

interventions, and change in their dysfunctional behavior is due to changes in emotional management skills and ability to control their impulses. Therefore, it seems reasonable that teaching emotion regulation skills can reduce women's' inefficient verbal and non-verbal behaviors to others members. Also, as the reduction of undesirable behavior helps the improvement of communication patterns, conditions are facilitated to build relationships between spouses and the emergence of feelings and emotions, which may be encouraged spouses to form new behavioral patterns together (27). Aggressive reactions can be part of a solution to cope with life demands, such as work pressures or family issues. Such reasons for these problems in the common life are the existence of unsolved conflicts and non-expressed anger that arise as a lack of companionship, sabotage, passive reactions and hostility. These factors make couples couldn't have appropriate consent with each other. Teaching emotion regulation skills helps couples to use effective and efficient ways to resolve their conflicts in other to express emotional reactions (27). Also, the results of covariance analysis in table 3. showed a significant improvement in cognitive emotion regulation scores and its subscales in comparison with the beginning of the study. The results of this research are in line with the studies of Miles, Thompson & Stanley (28). In explaining this

result, it can be suggested that learning the emotional regulation skills creates skills that will help the person to be more aware of their emotions and to exhibit better responses in different situations. Be aware of self-features leads to insight; that this prominent causes to self-regulation and self-control. Both of these skills help one to control their emotions more logically. If a person can use his/her creativity, it is easier to find an appropriate coping style with unpleasant emotions. Instead, a person is being controlled by his/her emotion; emotion must be used as an opportunity to achieve new and creative experiences. The more the individual is calm, the more he/she can control the situation. In general, it can be stated that most of the studies on the efficacy of treatment and effectiveness of interventions in the field of emotional control are acknowledged and believed that the incidence of unpleasant emotions is a controllable phenomenon and by increasing individuals' awareness about it and training methods and effective strategies, it can be controlled and balanced. People who cannot adjust their emotional responses to daily events experience greater turbulence, which can turn into depression and anxiety disorders. Emotion regulation plays an important role in coping with life's stressful events. Therefore, the management of emotions through the training of stress and anxiety control leads to the individual's emotions regulation (29).

On the other hand, cognitive-behavioral therapy based on emotion regulation restores thoughts and recognizes dysfunctional behaviors in people. According to the results, it can be concluded that CBT has a positive effect on the symptoms of this syndrome. Anger and aggression is also a type of behavior that can be learned through observation and is also related to the type of thinking and beliefs of individuals, so emotion management probably responds better to education and psychological therapies.

The study sample consisted of women who referred to ShahroodBahar hospital's clinic to receive services. Therefore, generalization of results to other groups such as those who is not volunteer to receive these services, men and etc is not easily possible and should be treated with caution. Also, the absence of follow-up sessions is another limitation of this research; Therefore, it is suggested that the next researchers consider follow-up sessions to measure the long-term effect of intervention.

## Conclusion

According to the results of the present study, it can be concluded that in women with premenstrual syndrome, due to changes in cognitive emotion regulation that occur during this period and can lead to problems such as marital problems, cognitive-behavioral emotion regulation training can Both increase cognitive emotion regulation scores and increase marital happiness.

## Acknowledgment

None.

## Conflict of Interest

The authors declare that they have no conflict of interest.

## References

1. Cerqueira RO, Frey BN, Leclerc E, Brietzke E. Vitexagnuscastus for premenstrual syndrome and premenstrual dysphoric disorder: a systematic review. *Arch Womens Ment*

*Health*. 2017;20(6):713-9.

2. Henz A, Ferreira CF, Oderich CL, Gallon CW, de Castro JRS, Conzatti M, et al. Premenstrual syndrome diagnosis: a comparative study between the daily record of severity of problems (drsp) and the premenstrual symptoms screening tool (psst). *Rev Bras GinecolObstet*. 2018;40(01):20-5.

3. Biggs WS, Demuth RH. Premenstrual syndrome and premenstrual dysphoric disorder. *Am Fam Physician*. 2011; 84(8): 918-24

4. Dastbaz M, Ebrahimimoghaddam H. The comparison of emotion regulation and metacognition beliefs between girls with premenstrual syndrome and normal girls, 3rd International Conference on Psychology, Educational science, and Lifestyle. 2016

5. Garnefski N, Kraaij V. The cognitive emotion regulation questionnaire. *European J Psychological Assessment*. 2007;23(3):141-9.

6. Aldo A, Nolen-Hoeksema S, &Schweizer S. Emotional regulation strategies across psychopathology. *Clinical Psychology Review*. 2010;30:217-37.

7. McDermott MJ, Tull MT, Gratz KL, Daughters SB, Lejuez C. The role of anxiety sensitivity and difficulties in emotion regulation in posttraumatic stress disorder among crack/cocaine dependent patients in residential substance abuse treatment. *J anxiety disorders*. 2009;29(5):531-3.

8. Mengying W, Renlai Z, Yamei H. Effect of menstrual cycle and neuroticism on femaleemotion regulation. *International Journal of Psychophysiology*. 2014;39:351-7.

9. Asali R, Jalal marvi F, Ansaripour F, Lashkardoust H. Relationship between premenstrual syndrome and marital relationships of women employees in health centers. *Journal of North Khorasan University of Medical Sciences*. 2016;7(2):465-73.

10. NooraniSh, Dadigiushad R, Esmaili H, Separishamloo Z. Study of the Impact of Life skills training on the intensity of symptoms of pre-menstrual syndrome. *Iranian Journal of Obstetrics, Gynecology and Infertility*. 2013;16(68):1-11

11. Amirfarahani L, Heydari H, Narenji F, AsghariJafarabadi M, Shirazi V. Relationship between Pre Menstrual Syndrome with Body Mass Index among University Students. *Journal of School of Nursing and Midwifery, Tehran University of Medical Sciences*. 2011;17(4):83-94.

12. Sheykholeslami R, Nejati E, Ahmadi S. Predicting the components of happiness of married women through self-esteem and marital relationships. *Woman in culture and art*. 2011;3(1):39-54.

13. Weise C, Kaiser G, Kleinstäuber M. Reply to "Questioning the Beneficial Effects of Internet-Based Cognitive Behavioral Therapy on Premenstrual Dysphoric Disorder. *PsychotherPsychosom*. 2019;88(4):237.

14. ReillyPatrick M, Shopshire,Michael S. Anger management for substance abuse and mental health clients: A cognitive behavioral therapy manual. U.S. Department of Health and Human Service. 2002.

15. Brotto L, Bergeron S, Zdaniuk B, Driscoll M, Grabovac A, Sadownik L, Smith K. A Comparison of Mindfulness-Based Cognitive Therapy Vs Cognitive Behavioral Therapy for the Treatment of Provoked Vestibulodynia in a Hospital Clinic Setting. *J Sex Med*. 2019;16:909-23

16. Watson JC, Greenberg LS. Emotion-focused therapy for generalized anxiety: American Psychological Association; 2017.

17. Johnson SM, Bradley B, Furrow JL, Lee A, Palmer G, Tilley D, et al. Becoming an emotionally focused couple therapist: The workbook: Routledge; 2013.

18. Johnson SM. The practice of emotionally focused couple therapy: Creating connection: Routledge; 2012.

19. Steiner M, Macdougall, Brown E. The premenstrual symptoms screening tool (PSST) for clinicians. *Archives of Women's Mental Health*. 2003;6:203-9.

20. SiahBaziSh, Hariri Z, Montazeri A, MoghaddamBenayem L.

Standard Stasi Premenstrual Symptom Screening Questionnaire PSST: Translation and Psychometrics of Iranian Species. Monitoring. 2011;10(4):421-7.

21. Azrin N. H, Naster B. J, & Jones R. Reciprocity counseling: A rapid learning-based procedure for marital counseling. Behavioral Research and Therapy. 1977;11(4):365-82.

22. Isanezhad O, Ahmadi SA, Bahrani, F, Baghban, I, Shojaheydari M. The Effect of Relationship Enhancement Training on Marital Happiness and Optimism. Journal of Pazhoheshhayeravanshenakhtienovin. 2011;6(21):129-49.

23. Hasani J. Reliability and validity of Persian of the cognitive emotion regulation questionnaire (CERQ). Journal of clinical psychology. 2010; 24:139-52. (Persian).

24. Allen A, & Mintrom M. Responsibility and School Governance. Educational Policy. 2010;24(3):439-64

25. Eggert L, Witthoft M, Hiller W. Emotion Regulation in Women with Premenstrual Syndrome (PMS): Explicit and Implicit Assessments. Cognitive Therapy and Research. 2016;40:747-63.

26. Bavojdan M, Bavojdan M, Kaviani N, Noohi S. The Effectiveness of the Cognitive Emotion Regulation Group Training on Mental Health of Adolescent Girls with Symptoms of Premenstrual Syndrome. International Journal of Psychology. 2016;10(2):1-16.

27. NaseriFadafan, M. The effectiveness of training management of anger with the cognitive-behavioral approach on emotional stability, dominance and quality of marital relationships in married men 's with drug abuse (followed one month) . MA thesis, faculty of humanities, Islamic azad university of shahrood branch; 2017.

28. Miles S. R, Thompson K. E., Stanley M. A, & Kent T. A. Single-session emotion regulation skills training to reduce aggression in combat veterans: A clinical innovation case study. Psychological Services. 2016;13(2):170-7.

29. Mirabi M, MehrabizadehHonarmand M. The effectiveness of anger management training on aggression and social adjustment of high school girl students in Ahvaz . International Conference of Management, Economics and Humanities. 2015.

© **Shahnaz Nouhi, Malake Naseryfadafan, Roza Salehian, Samira Saghari**. Originally published in the International Journal of Applied Behavioral Sciences (<https://journals.sbm.ac.ir/ijabs/index>), 18.12.2021. This article is an open-access article under the terms of Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>); the license permits unlimited use, distribution, and reproduction in any medium, provided the original work is properly cited in the International Journal of Applied Behavioral Sciences. The complete bibliographic information, a link to the original publication on <https://journals.sbm.ac.ir/ijabs/index>, as well as this copyright and license information must be included.