Psychotherapy Research

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/tpsr20

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To cite this article: Hossein Shareh, Maryam Ghodsi & Samira Keramati (2021): Emotion-focused group therapy among women with premenstrual dysphoric disorder: A randomized clinical trial, Psychotherapy Research, DOI: 10.1080/10503307.2021.1980239

To link to this article: https://doi.org/10.1080/10503307.2021.1980239

Published online: 23 Sep 2021.

Psychotherapy Research, 2021
https://doi.org/10.1080/10503307.2021.1980239

EMPIRICAL PAPER

Emotion-focused group therapy among women with premenstrual dysphoric disorder: A randomized clinical trial

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(Received 1 April 2021; revised 1 September 2021; accepted 8 September 2021)

Abstract

Objective Premenstrual Dysphoric Disorder (PMDD) contributes to couple burnout, reduced quality of life, sexual dysfunction, and social isolation. The present study aimed to investigate the effectiveness of emotion-focused group therapy (EFGT) in pain perception, self-compassion, sexual function, and couple burnout in women with PMDD. **Method:** Among married females with PMDD, 72 participants were selected and randomly assigned to experimental and waitlist control groups. EFGT was performed in 10 sessions for the subjects in the experimental groups. The McGill Pain Questionnaire, Self-Compassion Scale, Female Sexual Function Index and Couple Burnout Measure were used to collect data in the pre-test and post-test. To analyze the data, an analysis of covariance test was applied. **Results:** The findings demonstrated that EFGT was effective in pain perception ($p < .001$, $\eta^2 = .80$), self-compassion ($p < .001$, $\eta^2 = .86$), sexual function ($p < .001$, $\eta^2 = .38$), and couple burnout ($p < .001$, $\eta^2 = .70$). Participants of EFGT improved well, were satisfied with treatment, and had a good therapeutic relationship. **Conclusion:** Implementing EFGT increased the components of self-compassion and sexual function, and reduced the components of pain perception and couple burnout. It seems that EFGT could be effective in women with PMDD.

Keywords: Emotion-focused therapy; pain perception; self-compassion; sexual function; couple burnout; Premenstrual dysphoric disorder

Clinical or methodological significance of this article: Premenstrual Dysphoric Disorder (PMDD) is a common disorder among young girls and women. PMDD contributes to pain perception, negative attitude toward oneself, couple burnout, reduced quality of life, sexual dysfunction, and social isolation in affected women. Greater ability to manage emotion is associated with relief from negative emotions such as burnout and pain perception. Emotion-focused therapy distinguishes between primary and secondary emotions, and enables one to identify, experience, accept, correct, manage and produce one's emotions. In this therapy, emotional responses can lead to the fulfillment of one's needs. This study demonstrated that group interventions of emotion-focused therapy can be used to increase self compassion and sexual function and decrease pain perception and couple burnout in women affected by PMDD.

Introduction

Premenstrual Dysphoric Disorder (PMDD) has, historically, come a long way to be named, recognized and established as a depressive disorder despite being a prevalent cognition in a good number of women. 1931 was the year that saw the publication of the first medical report on the so-called syndrome of premenstrual tension. The name itself has undergone changes through time. It was called PMDD as an appendix diagnosis in the DSM-IV. It was not

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until DSM-5 was released that PMDD finally became an official diagnosis in the depressive disorders chapter (Kepple et al., 2016). Up to 80% of females report having some symptoms prior to menstruation, 20% to 30% of females show moderate to severe symptoms and 3% to 8% of females have more severe symptoms and experience PMDD (Appleton, 2018).

PMDD can be recognized through a number of emotional and physical symptoms while giving rise to some harmful effects. PMDD is diagnosed through a variety of affective, behavioral and somatic symptoms and occurs constantly during the luteal phase of the menstrual cycle (American Psychiatric Association, 2013). The most common symptoms of PMDD include mood swings and extreme moodiness, depression or feelings of hopelessness, negative attitude toward oneself such as feeling worthless or guilty, marked irritability or intense anger and conflict with partner and other people, tension or anxiety, increased sensitivity to rejection, no interest in usual activities, trouble concentrating, lack of energy, fatigue, reduced sex drive, appetite changes such as overeating or having specific food cravings, feeling overwhelmed or out of control, sleep problems, cramps and bloating, breast tenderness or swelling, headaches, joint or muscle pain, and hot flashes. PMDD can cause severe emotional, professional, and personal harm to those who have it. Sufferers of PMDD report damaging and impulsive behaviors that may include suddenly leaving a job or a relationship. In some cases, it can also lead to suicidal thoughts and self-harm behaviors (Hantsoo & Epperson, 2015; Hao et al., 2019; Miyaoka et al., 2011; Stöppler, 2014).

Pain and stress, while not directly locked in a reason relationship with PMDD, they are meaningfully related to it (Verkaik et al., 2017). Psychological, cultural, social, and environmental variables are involved in people's perceptions of physical and emotional pains (McCracken & Velleman, 2010). Women, with high pain frequency, more frequently reported a passive coping style and catastrophizing thoughts (Hellström & Anderberg, 2003). Worry, negative attitude to menstruation and suggestibility can significantly change pain intensity perception in patients with PMDD (Roomaney & Lourens, 2020; Abazari et al., inpress). Research shows that psychological complications exacerbate pain perception; however, there is limited research on psychotherapeutic interventions in perceived pain, especially in women's with PMDD (Zambito Marsala et al., 2015; Zanini Voltolini, Gragnano, Fumagalli & Pagnini, 2018).

While PMDD cannot be completely eradicated, it can be alleviated to a good extent by a change in one's attitude. PMDD is associated with changes such as a negative attitude toward oneself and feeling of guilt that may contribute to pain perception. Therefore, strengthening self-compassion and having a fairer attitude towards oneself are especially important among those who suffer from PMDD. To Neff and Germer (2013), concept of self-compassion has three main components: kindness, common humanity and mindfulness. Happiness, optimism and life satisfaction as examples of psychological capabilities have been proved to be relevant to self-compassion (Hollis-Walker & Colosimo, 2011). Other examples of such psychological capabilities can be found in increased motivation, healthy behaviors, positive body image and adaptive coping strategies (Albertson et al., 2015; Allen et al., 2012). Self-compassionate people accept themselves as imperfect human beings, and are kind and caring toward themselves. They can view themselves kindly when confronting personal inadequacies or situational difficulties. Self-compassion is also associated with healthier romantic relationships and greater relational well-being and less interpersonal conflict and couple burnout (Neff & Beretvas, 2013). A study by Nery-Hurwit et al. (2018) indicates that self-compassion facilitates interpersonal relationships and people can better balance their needs for autonomy and communication in addition to creating healthy and intimate relationships.

Couple burnout is one of the most significant adverse results effects of PMDD. As mentioned earlier, PMDD as a predictable and debilitating discomfort is related to negative emotions and contributes significantly to marital and interpersonal conflict leading to couple burnout and the decline of emotional relationships (Shahraki Ghadimi et al., 2019), reduced quality of life, sexual dysfunction, and social isolation in affected women (Hwang & Sung, 2016; Montazeri et al., 2019). Couple burnout, in its extremity, can lead to breakdown of marital relationships and divorce. Couples' methods of communication and conflict resolution in addition to their problem-solving skills affect marital burnout; a higher proficiency rate in these areas equates a lower burnout rate (Halford, 2001). Couple burnout is associated with reduced emotional attachment, couple indifference, and the replacement of negative emotions with positive ones (Mikolajczak et al., 2018). Strengthening emotion regulation skills, increasing positive interactions, and breaking down negative cycles of interaction are the component of emotion-focused therapy (EFT) so, this treatment approach seems to be effective to reduce couple burnout in women's with PMDD.

One factor that links PMDD to couple burnout is sexual dissatisfaction. Some researchers believe that

the main reason for many of marital disputes and couple burnout is the sexual dissatisfaction of couples (Assali et al., 2015). Symptoms of PMDD include decreased libido in addition to sexual dysfunction. İlhan et al. (2017) showed that women with PMDD have sexual difficulties and a higher level of sexual distress. Martínez-Martínez et al. (2016) stated that the sexual relationships of females who saw sexual function as a negative behavior become stronger as emotional intimacy increases. EFT can increase emotional intimacy (Greenberg & Goldman, 2019), so it may improve sexual function.

Emotion-Focused Therapy

People are able to experience different emotions and can also feel emotions about emotions; these meta-experiences form the main focus of EFT. The aim of EFT is to rebuild the underlying needs and self-supporting reactions in interactions through helping individuals and couples access the main emotions and thus create new cycles of relationship involvement (Timulak & Keogh, 2020). Also, healthy sexual function during the healthy and timely expression of emotions can be an accessible capability for couples (Asadpour & Veisi, 2017).

EFT, through three steps in the change process, is associated with relief from negative emotions such as burnout and pain perception, and has positive effects on reducing marital problems. These steps include reducing negative cycles, rebuilding interactive positions to establish secure relationships, and strengthening and consolidating the relationship (Greenberg & Goldman, 2019). Caregiving systems of partners are activated by using EFT interventions which in turn increases the open expression of a specific emotional need in addition to the attachment bond security. Consequently, the attachment caregiving system is naturally activated through EFT which results in the elicitation of compassion in most partners (Johnson, 2004). Emittance of signals pertaining to kindness and compassion from one partner, naturally activates the attachment process through invoking a feeling of being soothed and cared for by the other partner (Gillath et al., 2005). Furthermore, during the therapy process, women gain a better assessment in relation to the amount of the vulnerability of stressful events, such as premenstrual syndrome; therefore, they are better adapted to different situations and use more effective coping strategies.

A relatively novel therapy format is Emotion-focused group therapy which utilizes individual EFT work in a group setting to evoke and transform painful emotions. Group therapy achieves its aims both directly and vicariously. Emotion-focused group therapy has shown to result in reduced depression and anxiety symptoms, as well as significantly improved emotion regulation and self-criticism. Increased access to this type of care can be achieved through group therapy as the counter choice will be typically individual therapies through experiential therapies, which endeavor to transform painful emotions underlying symptoms (Lafrance et al., 2014; Thompson & Girz, 2020).

Shahar et al. (2012) in a one-session pilot study has examined the efficacy of an EFT technique called the two-chair dialogue. Significant changes in self-compassion, self-reassurance, and self-criticism were observed in this study. Developed from Emotion-focused therapy and previous programs cultivating compassion (Halamová et al., 2021), the efficacy of a novel intervention named "Emotion Focused Training for Self-Compassion and Self-Protection" was approved. This intervention aims to decrease self-criticism by increasing skills of self-compassion and protective anger. Sayadi et al. (2017) and Mohammadi et al. (2019), in their experimental researches, revealed the effectiveness of emotionally focused couple therapy in reducing couple burnout. Asadpour and Veisi (2017) have shown that emotionally focused training is effective in improving a couple's sexual relationships. In a case study Dillon et al. (2018) showed that EFT reduces the perception of emotional pain in depressed people. Halchuk (2012), Dalgleish et al. (2015) and Havaasi et al. (2017) showed in their researches that EFT reduces couple burnout and distress. In an experimental study, Mahmoudvandi-Baher et al. (2018) showed that EFGT increased the hope and reduced the negative self-efficacy among divorced women. The present study was the first study of EFGT for PMDD population.

Research Questions

PMDD is a severe and chronic medical condition that needs attention and treatment. This disorder can lead to the experience of pain and contribute to sexual dysfunction and couple burnout. EFT is associated with relief from negative emotions such as burnout and pain, and has positive effects on reducing marital problems. The present study that was an experimental study with a pre-test–post-test waitlist control group design investigates the effectiveness of EFGT in pain perception, self-compassion, sexual function, and couple burnout in women with PMDD.

Methods

Background of the Study

This study was conducted as an experimental research with a pre-test–post-test control group design, which has been approved by the code of IR.HSU.REC.1398.030 at the National Ethics Committee of Hakim Sabzevari University. The study was performed as a single blind clinical trial so that the participants were randomly divided into two groups while they were blind to which group they were allocated to (experimental or waitlist-controlled group). They only knew that two groups were participating in the study, with one group receiving treatment first and the second group having to wait for treatment to be available. Neither group knew that they were being compared with the other group while the person conducting the questionnaires was different from the person providing the treatment.

Inclusion and exclusion criteria. Among the inclusion criteria of the research were having at least a diploma, passage of at least one year from marriage, a score of at least 112 in the premenstrual syndrome questionnaire (PMSS) and informed signature of written consent to participate in the research. Exclusion criteria included current noticeable DSM-5 comorbidity, use of psychiatric and psychotropic drugs 3 months before the first session, receiving psychological and counseling services for marital issues in the last 3 months, suicide attempts in the beginning or through the treatment, mental disability, and failure to complete research. These inclusion and exclusion criteria were considered to control the effect of disturbing variables as much as possible and were assessed by a psychiatrist and a clinical psychologist (Ph.D) through clinical interview.

Participants and sample. The statistical population of the study included all married women who referred to Mashhad Health Centers in 2019. Of the women introduced to the researcher due to PMS or PMDD ($n = 103$), 12 women because of obtaining scores less than 112 in the PMSS, 9 women due to being married for less than a year, 7 women because of obvious psychological and personality disorders and 1 woman because of suicide attempt were excluded from the research and finally 74 women who met the inclusion criteria were selected and randomly assigned to two groups. Randomization was based on permutation block. The 74 women were randomly assigned to two groups where members from each group were also randomly matched to create 37, two-member blocks. Accordingly, each block was allocated one person from the intervention group and one person from the waitlist control group adding up to 37 blocks, 74 people. As thus, the 74 people were also simultaneously categorized under the experimental group of EFGT ($n = 37$) and the control group ($n = 37$). Consequently, each participant would belong to one of the two groups and one of the 37 blocks. During EFT sessions, one subject was not able to complete the sessions after 5th session due to husband's death (38-year-old married woman with 5-year history of PMDD). Also, one subject in the control group was excluded from the research due to psychiatric drug use after second session (29-year-old women with 1 year history of PMDD). Finally, the EFT group (with 36 subjects) and control group (with 36 subjects) were compared (Figure 1). A psychologist who was blind to the study objectives prepared the randomization.

The mean and standard deviation of the age of the subjects were 28.67 and 3.47, respectively, for the experimental group and 29.6 and 4.3 for the control group. The results of demographic characteristics showed that homogeneity between groups based on age, marriage age, educational levels, occupational status, insurance and mental history has been achieved ($p > .05$). (Table I).

Ethical considerations. This study respects and follows the provisions provided through the Declaration of Helsinki. Among the provisions we would like to note explaining study objectives, obtaining the participants' informed written consent, information confidentiality, voluntary participation in and the right to withdraw from the study, being aware of the potential dangers of the research and the discomforted associated with them (no physical or psychological harm to the participants), being open to questions, answering questions, and making results available if desired.

Procedure

PMSS was performed for screening all patients. Then, all participants responded to all primary outcome measures including the Female Sexual Function Index, Self-Compassion Scale-Long Form, Couple Burnout Measure and McGill Pain Questionnaire in the pre-test and post-test. Furthermore, Clinical Global Improvement Scale, Client Satisfaction Questionnaire and Working Alliance Inventory-Short Form were completed as secondary outcome measures at post-treatment by experimental

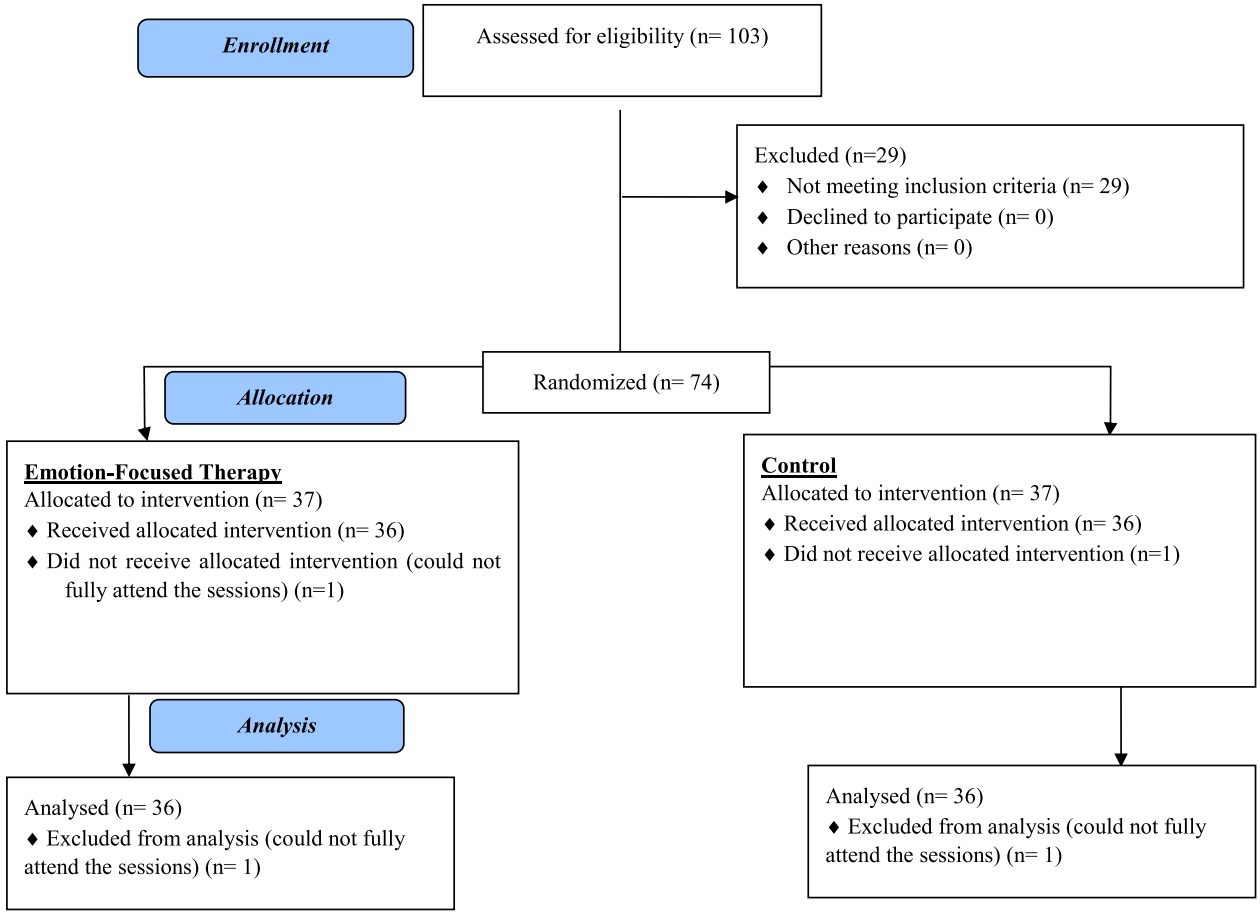

Figure 1. Consolidated Standards of Reporting Trials (CONSORT) diagram illustrating the flow of participants through the study.

group. Both in the pre-test and in the post-test, the questionnaires of all participants in the study were reviewed to be completed accurately and completely.

The subjects in the experimental groups took part in treatment sessions, but the control group did not receive this intervention until the end of the

Table I. Participant characteristics.

		Control Group (*N*=36)	Experimental Group (*N*=36)	*p*
Age	Mean ± SD	29.60 ± 4.30	28.67 ± 3.47	.73
Marriage age	Mean ± SD	20.61 ± 3.48	21.32 ± 4.50	.71
Education	Diploma	9 (25%)	11 (30.55%)	.60
	Higher Diploma	27 (75%)	25 (69.44%)	
Occupational Status	Employed	13 (36.11%)	12 (33.33%)	.85
	Unemployed	15 (41.66%)	13 (36.11%)	
	Retired	3 (8.33%)	5 (13.88%)	
	Student	5 (13.88%)	6 (16.66%)	
Insurance	With Insurance	27 (75%)	26 (72.22%)	.79
	Without Insurance	9 (25%)	10 (27.77%)	
History of Mood Disorders	Yes	8 (22.22%)	11 (30.55%)	.42
	No	28 (77.77%)	25 (69.44%)	
History of Anxiety Disorders	Yes	13 (36.11%)	12 (33.33%)	.80
	No	23 (63.88%)	24 (66.66%)	
History of Suicide Attempt	Yes	1 (2.77%)	3 (8.33%)	.30
	No	34 (94.44%)	33 (91.66%)	
History of Receiving Counseling and Psychotherapy	Yes	10 (27.77%)	8 (22.22%)	.58
	No	26 (72.22%)	28 (77.77%)	

treatment phase. On a weekly basis, subjects of the experimental group received emotion-focused group therapy during ten 90-minute sessions. In EFT, five experimental groups (each consisting of 7–8 people) received group therapy. The control group members were told that they should stay on a waiting list for approximately 3 months to receive EFT. After that, they could use this treatment service provided by the therapist if they were willing.

Instruments

Female Sexual Function Index (FSFI, Rosen et al., 2000): The FSFI is a 19-item self-report questionnaire that measures six dimensions of women's sexual functioning, namely, "sexual desire," "sexual wetness," "sexual arousal," "sexual satisfaction," "sexual orgasm" and "sexual pain." The first two items of this questionnaire are rated on a 5-point Likert scale (1–5) and the remaining items on a 6-point scale (0–5). The minimum score in this questionnaire is 2 and the maximum score is 95. The reliability of this scale has been reported to be 0.79–0.86 through the test-retest reliability in various studies and its Cronbach's alpha score was 0.82 (Vedovo et al., 2020). Bay et al. (2012) reported the reliability of the questionnaire to be 0.91. To evaluate the internal consistency reliability, Cronbach's alpha was calculated in this research to be 0.94 for the whole scale.

Self-Compassion Scale-Long Form (SCS-LF, Neff, 2003): This questionnaire includes 26 items and 6 components of self-kindness, self-judgment, common humanity, isolation, mindfulness and over-identification, and is scored on a 5-point Likert scale, ranging from completely disagree (1) to completely agree (5). The reliability of the total score is satisfactory ($\alpha = 0.91$). The reliability of the subscales was between 0.66 and 0.84 (Neff et al., 2020). In the factor analysis, six-factor and two-factor models showed the best fit for SCS-LF (Ursic et al., 2019). In the research by Khosravi et al. (2013b), the alpha coefficient for the scale overall score was 0.76. Cronbach's alpha coefficients for the subscales of self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification have been obtained to be 0.81, 0.79, 0.84, 0.85, 0.80 and 0.83, respectively. To obtain the internal consistency reliability, Cronbach's alpha was calculated in this research to be 0.81 for the whole scale.

Couple Burnout Measure (CBM, Pines, 1996): The CBM is a 21-item self-assessment tool to measure the degree of marital burnout among couples and includes three main components of physical exhaustion (e.g., fatigue, weakness and sleep disorders), emotional exhaustion (e.g., depression, disappointment and feeling trapped) and mental exhaustion (e.g., feeling worthless, frustration and anger toward spouse). All of these are answered on a 7-point scale (1 = never and 7 = always). A higher score represents greater burnout. The test-retest reliability coefficient was 0.89 for a one-month period, 0.76 for a two-month period and 0.66 for a four-month period. Internal consistency was measured for most subjects with a constant alpha coefficient, ranging from 0.91–0.93 (Pines & Nunes, 2003). In Iran (Navidi et al., 2007), Cronbach's alpha of this questionnaire was measured for 240 samples of 120 nurses and 120 teachers, which was calculated to be 0.86. To obtain the internal consistency reliability, Cronbach's alpha coefficients were obtained to be 0.78 in the present study for the whole scale.

McGill Pain Questionnaire (MPQ, Melzack, 1975): This questionnaire has 20 phrases and aims to measure people's perception of pain from different dimensions of pain (three subscales of sensory pain, affective pain and evaluative pain). Cronbach's alpha coefficient of the questionnaire was above 0.8 (Terkawi et al., 2017). In Iran, Cronbach's alpha coefficient of the questionnaire ($n = 84$) was calculated to be 0.85 for whole scale and above 0.8 in all areas (sensory, emotional evaluation and miscellaneous), and the internal correlation for subscales ranged from 0.73–0.90 (Khosravi et al., 2013a). To obtain the internal consistency reliability, Cronbach's alpha coefficients were obtained to be 0.90 in the present study for the whole scale.

Premenstrual Syndrome Scale (PMSS, Gençdoğan, 2006): The Premenstrual Syndrome Scale consists of 44 items on a 5-point Likert scale (1 = never, 5 = always) and nine subscales (depressive mood, anxiety, fatigue, irritability, depressive thoughts, pain, appetite changes, sleep changes, and swelling). The PMSS total score is obtained from the sum of all nine subscales. The minimum score on the scale is 44 and the highest score is 220. More than 50% of the total PMSS scores (>111) were classified as PMS positive. Higher PMSS scores indicate greater symptom severity during PMS. The Cronbach's alpha value of the scale has been calculated as 0.75 (Gençdoğan, 2006). In a study in Iran, the Cronbach's alpha coefficient and the test-retest reliability were 0.913 and 0.561, respectively (Hashemi et al., 2014). To obtain the internal consistency reliability, Cronbach's alpha coefficients were obtained to be 0.82 in the present study.

Client Satisfaction Questionnaire (CSQ, Larsen et al., 1979): This scale was developed by

Larsen et al. (1979) to measure client satisfaction with the services they received during treatment and has eight questions. Each question has four answers, each of which obtains a score between 4 and 1 (4- very positive, positive, negative, very negative-1) based on their positive or negative degree and accordingly, the minimum and maximum scores on this scale are 8 and 32. A higher score indicates greater satisfaction with treatment. Studies confirm the reliability and validity of this questionnaire (0.8) (Vázquez et al., 2019). One factor was obtained for this questionnaire in factor analysis. The internal consistency coefficient of this scale was excellent based on Cronbach's alpha and was between 0.83 and 0.94. Also, the convergence validity of this questionnaire was reported based on correlation with variables such as completing the therapy program for this questionnaire (Shirley et al., 2016). In Iran, content validity of this questionnaire was obtained by clinical psychologists and psychiatrists. The reliability coefficient of 0.93 was obtained in a sample of 23 through Cronbach's alpha. It was also reported to be 0.89 through the test-retest method with a one-week interval (Shareh, 2014). In order to investigate patients' satisfaction with treatment procedures and outcomes during post-treatment, they were asked to complete the CSQ. In the present study, the Cronbach's α was calculated to be 0.91.

Client Clinical Global Index (CGI; Guy, 1976). This scale is the second subscale of the Clinical Global Impressions Scale designed by Guy (1976), and to measure the response to treatment, it is completed by the client at the end of treatment and follow-up. It includes one question rated on the Likert scale, according to which, the clients get a score between 1 and 7. Therefore, the minimum and maximum scores on this scale are 1 and 7, respectively, and higher scores indicate less improvement and lower scores suggest better improvement. This questionnaire was translated into Persian by Shareh through translation and retranslation, and the content validity of this scale has been confirmed by clinical psychologists and psychiatrists, and its reliability was obtained to be 0.91 in a sample of 23 patients with obsessive-compulsive disorder through the test-retest method with an interval of one week (Shareh, 2014). CGI ratings (from 1 = very much improved to 7 = very much worse) were used to determine treatment responder status at post-treatment. Ratings were done by patients. In the present study, the Cronbach's α was calculated to be 0.94.

Working Alliance Inventory- Short Form (WAI-S, Tracey & Kokotovic, 1989). The WAI-S is a 12-item instrument scored on a 7-point Likert scale (1 = never, and 7 = always). The average score ranges from 1 to 7 (1 to 3 = a poor or negative therapeutic relationship; 4 = a neutral position and 5 to 7 = a good or positive therapeutic relationship). Its reliability was obtained to be approximately 0.73 through test-retest reliability (Martin et al., 2000). Also it has strong internal consistency, ranging from 0.70–0.91 for the subscales and 0.90–0.95 for the total score (Busseri & Tyler, 2003; Tracey & Kokotovic, 1989). In the present study, the Cronbach's α was calculated to be 0.88.

Treatment and Therapists

Group therapy can increase the availability of treatment by being more cost-effective through allowing a larger number of patients to be treated at the same time (Tucker & Oei, 2007). An advantage of group therapy over individual treatment in this study was that it was more time efficient. The maximum number of participants in each group was $n = 8$, and the 90-minute group therapy sessions were conducted weekly for ten consecutive weeks by a psychologist. Therapeutic sessions were held in Rahyab Couple and Sex Therapy Clinic. The group therapist role was to establish a therapeutic alliance, provide information and instruction about group therapy and objectives of the therapy, guide the group process, provide structure, direct the contents of each session based on EFT therapeutic procedures and manage the group's responses.

The present study was conducted by applying admission requirements to its two groups of 37 patients. The patients in the experimental group attended ten 90-minute group sessions of EFT conducted by a family counselor. The family counselor was skilled in performing EFT, with extensive specialized training in group and EFT therapy models (with more than 4200 hrs. of academic training, including courses, theory, clinical practice for 10 years, and weekly supervisions). Another psychologist, an Associate Professor of Clinical Psychology, who specialized in EFT and group therapy would regularly supervise the therapist in order to monitor the accuracy of treatment implementation, fidelity of the intervention and to reduce therapeutic drift. The monitoring psychologist did not directly involve himself in the research, he would just check the records of each session and related activities with the patients and providing feedback to the therapists after each session throughout the study period.

The group advisor could visit more patients through group therapy as they did not need to spend hours of treatment each week on the individual between patients and which, multiplied by 8 (the

number of patients in the group) would make it almost impractical.

General guidelines about PMS treatments and emotional support for the patients' psychological suffering related to the PMS and its treatment were provided to the control group through group psychological consultation. The psychologist in charge of this process who was different from the one conducting the EFT was kept unaware of the study objectives and the patients' allocation. In order to guarantee the patients' right of assistance, this psychological care was provided whenever necessary during the 3-month period. No other type of psychological care was administered to the patients throughout the research period.

Organization of the EFT Program

The content of EFT sessions was taken from the Greenberg and Goldman (2019) emotion-focused group therapy (especially chapters 20–22). The summary of the content of the treatment sessions is given in Table II.

Data Analyses

Data were analyzed by Statistical Product and Service Solutions (SPSS) version 25. The results of Kolmogorov–Smirnov test showed that the distributions of all variables in our subjects were normal ($p < .05$). The differences between EFT and control groups were compared using one way analysis of covariance (ANCOVA). Since the effectiveness of the treatment may differ depending on pre-treatment severity, we used ANCOVA with the pre-treatment value as a covariate and the post-treatment values as dependent variables. Bonferroni-adjusted significance test was used to correct for multiple tests. To obtain a p-value for determining significance level in Bonferroni correction, the desired alpha-level must be divided by the number of comparisons. Partial eta squared (η^2) was provided to calculate the effect size ($\eta^2 = SS_{effect}/SS_{effect}+SS_{error}$). A general guideline for interpreting η^2 is as follows: small (0.01), medium (0.06) and large (0.14).

Results

In order to study the amount of satisfaction, feeling of improvement and therapeutic relationship in the members of the experimental group, CSQ, CGI and WAI-S were completed and the results have been presented in Table III. The results of CSQ indicate the subjects' great satisfaction with therapy with a mean of 24.8 and a standard deviation of 2.36. A score of 1 in the CGI indicates an improvement in subjects as a result of the treatment; as the score approaches 1, clients report more improvement, and as the score approaches 7, they report less improvement in the treatment. In this study, the mean overall improvement of clients was 2.33 and the standard deviation was 0.97. The mean WAI-S score was 5.72 (SD = 0.85) in the EFT group which indicates a good therapeutic relationship.

The mean and standard deviation of the main research variables are given in Table IV. The Kolmogorov–Smirnov test showed that the distribution of all variables in both groups was normal (all $p > .05$). The Levene's test demonstrated a homogeneity of variances in all outcome variables (all $p > .05$). Table V presents the results of covariance analysis to determine the effect of EFT on each of the variables of couple burnout, sexual function, self-compassion and pain perception.

Table V shows that EFT compared to control group leads to a decrease in couple burnout ($F = 180.36$, $p < .001$, effect size of 0.7), an increase in sexual function ($F = 42.3$, $p < .001$, effect size of 0.38), an increase in self-compassion ($F = 425.73$, $p < .001$, effect size of 0.86) and a decrease in pain perception ($F = 276.12$, $p < .001$, effect size of 0.8). To obtain the corrected p-values for determining significance level in Bonferroni correction, we simply multiply LSD p-values of .000 by 4, which equals .000. Since these values are less than .05, we would conclude that the differences in all outcome measures were significant. According to the results of Table IV, the mean of the experimental group after the implementation of EFT has changed in the components considered in couple burnout (from 5.05 to 4.025), pain perception (from 34.16 to 29.8), sexual function (from 30.5 to 34.27) and self-compassion (from 64.9 to 74.86).

Discussion

The results of CSQ and CGI indicate the subjects' great satisfaction with EFGT and noticable improvement as a result of the EFGT. Based on these results, it seems that this treatment has been well accepted by women with PMDD and has had good effects on them. In addition, The WAI-S score indicates a good therapeutic alliance. The joining of a client's reasonable side with a therapist's working or analyzing side can be defined as therapeutic alliance which is a strong predictor of psychotherapy or counseling client outcome (Ardito & Rabellino, 2011).

According to the main findings of the present study, the EFGT in women with PMDD has reduced the

Table II. Summary of EFT sessions (Greenberg & Goldman, 2019).

Session	Aim	Content	Assignments
1	Evaluating and creating continuity	Introduction and communication (rapport), initial assessment of the nature of the problem, assessment of expectations and concerns of women with PMDD, conceptualization of the problem and presentation of therapy logic and familiarity with general therapy rules, pre-test implementation	Practicing key skills and communication, self-assessment, presenting and receiving feedback, paying attention to pleasant emotional states
2	Continuing the evaluation and identifying the cycle of negative interactions and determining the overall aims	Discovering problematic interactions and detecting the cycle of negative interactions, assessing problems and barriers to attachment, creating a therapeutic agreement	Identifying one's interaction cycle in different situations
3	Strengthening continuity and analyzing and changing emotions	Explanation of outstanding experiences related to attachment, acceptance of basic unconfirmed feelings, clarification of key emotional responses, acceptance of the cycle of interaction by clients	Identifying one's fears, practicing in the field of safe support and secure link development, expressing specific emotions and feelings, re-experiencing interactions and expressing pure emotions
4	Intensifying emotional experience	Expressing emotions, accepting emotions related to problems, deepening the engagement in emotional experience, improving interaction methods	Sharing one's coping behaviors with the spouse, encouraging clients to engage in emotional and affective interactions at home
5	Accepting emotions and identifying attachment needs, strengthening the interaction of group members	Reconstructing interactions and changing events, symbolizing dreams, discovering new solutions to old problems	Dedicating time to sharing behaviors, thoughts, and emotions with life partner
6	Creating new interactive patterns of emotion acquisition	Intimate engagement of clients with their spouses, acceptance of new situations, making a happy story of the relationship	Discovering one's main emotions, completing the table of how couples' emotions and behaviors affect each other
7	Creating emotional engagement, increasing the identification of attachment needs, facilitating the expression of needs and desires in sexual relationships	Emphasis on the importance of expressing sexual desires and needs using the technique of tracking and reflecting members' exposure to their attachment styles	Encouraging change in interactive patterns with the spouse, encouraging more accountability in responding to the spouse's needs, encouraging the expression of sexual needs and desires
8	Focus on oneself not the other, more self-compassion, re-establishing a framework for sexual relationships, deepening the couples' sexual engagements	Helping group members focus on themselves, identifying and encouraging the needs of group members, ways of self-compassion	Practicing empathetic listening to the spouse's needs understanding the spouse's underlying feelings and focusing on one's positive characteristics
9	Reconstructing sexual and non-sexual interactions of the spouse, promoting new methods of couple interaction	Orienting and designing interactions between couples, replacing the positive interaction cycle with the negative cycle, discovering new solutions for old problems	Encouraging new adaptive responses between couples, supporting new and responsive behaviors
10	Strengthening new situations and responses, supporting constructive interactive patterns, closing sessions	Providing a summary and review of the contents of the sessions by the members, establishing interactive, intimate and constructive conversations, returning the changes to the members	Discussing the strengths and weaknesses of therapy, reviewing the achievements of each client during therapy sessions, performing the post-test

Table III. Patient's CSQ, CGI and WAI-S scores after EFT.

Improvement rate	Lowest score	Highest score	Mean	Standard deviation
Clients' satisfaction (CSQ)	21	29	24.80	2.36
Overall improvement of clients (CGI)	1	4	2.33	.97
Therapeutic relationship (WAI-S)	5	7	5.72	.85

Table IV. Mean and standard deviation of research variables in the pre-test and post-test for each group.

Group variable	Group	Pre-test		Post-test	
		Mean	Standard deviation	Mean	Standard deviation
Couple burnout	Experimental	5.05	.49	4.025	.36
	Control	5.07	.54	5.23	.58
Sexual function	Experimental	30.50	5.40	34.27	5.60
	Control	32.70	4.30	33.22	4.80
Self-compassion	Experimental	64.90	7.30	74.86	5.64
	Control	58.90	6.50	57.70	6.44
Pain perception	Experimental	34.16	2.25	29.80	1.70
	Control	32.75	2.06	32.78	2.08

Table V. Univariate analysis of covariance results to examine intergroup differences in emotion-focused therapy and control groups.

Variables	SS	MS	F	*P*	Effect size (η^2)
Couple burnout	25.56	25.56	180.36	.000	.70
Sexual function	174.80	174.80	42.30	.000	.38
Self-compassion	2277.90	2277.90	425.73	.000	.86
Pain perception	265.40	265.40	276.12	.000	.80

pain perception and couple burnout and increased self-compassion and sexual function. The results of this study on pain perception are partially consistent with the findings of Dillon et al. (2018). In a case study, Dillon et al. (2018) showed the positive effects of EFT on reducing pain perception. No other study has examined the effectiveness of emotion-focused therapy on pain or pain perception. The results of our study on self-compassion are somewhat consistent with the findings of Tie and Poulsen (2013) study which showed that EFT re-establishes couple's shared emotional structure and increases self-compassion. However, in their study emotionally focused couple therapy was performed on couples dealing with terminal illness, while in our study EFGT was performed on women with PMDD.

Several studies have examined the effectiveness of EFT on couple burnout, couple relationship or marital satisfaction, but almost all of them have used the couple format while our study used a group format of EFT. For example, Dalgleish et al. (2015) in a study on 32 couples showed that 21 emotionally focused couple therapy sessions increase marital satisfaction. Our results on couple burnout are consistent with the results of the study performed by Sayadi et al. (2017). In an experimental study on 30 infertile couples ($n = 15$ for EFT and $n = 15$ for control group) they concluded that emotionally focused couple therapy significantly increase marital commitment and decrease couple burnout. In another experimental research (10 couples per experimental and control group), Mohammadi et al. (2019) showed that training of the emotionally-focused approach has been able to be effective on reducing couple burnout and tendency to divorce in couples. Our results are also consistent with the results derived from Davarniya et al. (2015) research that in their study on 24 women ($n = 15$ for experimental and $n = 15$ for control group), EFGT was effective in reducing couple burnout. However, we performed EFGT on PMDD population while the sample of Davarniya et al. was couples without any mental disorders.

The results of the present study on sexual function are consistent with the findings of McPhee, Johnson, and van der Veer (1995), Elliott et al. (2014), Asadpour and Veisi (2017) and Ahmadi Bajestani et al. (2018). However, the sample in these studies is completely different from our study sample. McPhee et al. (1995) has conducted a study on 49 couples by separating them in two groups: one with women assigned to receive emotionally focused couple therapy in 12 sessions, and the other with the wait list control group. In the study, all participants were females that experienced inhibited sexual desire in their relationship with their partners. The results showed that the former group had higher sexual desire and lower depressive symptoms than the latter at posttherapy. Another study by Elliott et al. (2014) found that sexual satisfaction among couples tends to increase with continued improvements across a 2-year follow-up from pre- to

posttherapy by examining 32 couples' sexual satisfaction trajectories while receiving emotionally focused couple therapy. According to the findings of Asadpour and Veisi (2017), nine sessions of emotionally focused couple therapy was effective on sexual self-esteem and sexual function in women with multiple sclerosis. In another study on women with type 2 diabetes performed by Ahmadi Bajestani et al. (2018), results showed that 8 sessions of EFGT can improve emotional expressiveness and sexual functioning.

EFGT for Pain Perception

Pain as one of the physical symptoms of PMDD includes sensory stimuli and an unpleasant emotional component with damage that affects a person's efficiency (Zambito Marsala et al., 2015). Perception of pain is a mental and emotional process and paying attention to emotional dimensions is effective in reducing it (Sakson-Obada, 2017). Perception of pain includes the expectations that patients have about the actions, behaviors, and beliefs associated with pain experiences; changing expectations through stress relief and acceptation, expression and reconstruction of negative emotions reduce pain perception (McCracken & Velleman, 2010). In EFT, clients are taught to accept their emotions without defense mechanisms and, regardless of the exaggerated evaluation of internal experiences, continue their other valuable cognitive and behavioral tasks. They gradually will be able to adjust their emotions in stressful situations in an appropriate way to reduce the amount of psychological pressure and thus decrease the severity of the pain experience. This has been described as a positive result of EFT (Greenberg & Goldman, 2019). Sharma et al. (2011) revealed that people who have less pain perception have used adaptive responses to pain and seek more social support or more support from their spouse. All of these are part of the EFT treatment process.

EFGT for Self-compassion

In self-compassion, mindfulness leads to awareness of current experiences, and causes the painful aspects of an experience, such as painful menstruation, not to be ignored on one hand and not to occupy the mind repeatedly on the other hand. Individuals with high self-compassion act better in satisfying emotional needs and controlling anger, which is one of the symptoms of PMDD, resulting in the strengthening of intimacy and mutual support between couples (Neff & Beretvas, 2013). Probably in the treatment sessions of the present study, clients accepted and experienced basic anger towards others including their partner, and expressed and experienced the unmet need for love. It seems that, the state of self-compassion appeared in the form of self-soothing. Clients, with the help of the empty chair technique, were presumably able to stand up against the criticizing self and focus on creating self-compassion and self-praise.

Acceptance and self-compassion that occur as a result of EFT are the key concepts in changing the story of one's life because they create a bridge between the problematic past and a change in the present time. Clients, through expressing and repeating the desired story, make it possible to identify, change and consolidate the narrative (Fernández-Navarro et al., 2018).

EFGT for Couple Burnout

As a result of the couple's disregard for each other and their needs, couple burnout is created. When couples have irrational and unrealistic expectations, couple burnout develops (Pines et al., 2011). EFT reduces couple burnout and distress by modifying insecure attachments, exposing negative emotions, strengthening emotion regulation skills, increasing positive interactions, and breaking down negative cycles of interaction (Dalgleish et al., 2015; Halchuk, 2012; Havaasi et al., 2017; & Mohammadi et al., 2019). In explaining the results, it can be said that the emotion-focused group approach has the ability to help the person change his interpersonal relationships, the most important of which is the relationship with the spouse, and have more control over them by increasing emotional awareness, emotional symbolism, awareness of agency in experience and change in processing. In this approach, attempts are made to identify emotions and turn them into perceptible messages and constructive behaviors. Furthermore, in this approach, emotional skills that are defined as the ability to recognize and express emotions and empathize with others, increase intimacy and a sense of security and enhance positive criticism-taking in the individual are essential in maintaining and continuing a successful marriage (Greenberg & Goldman, 2019; Timulak & Keogh, 2020).

The main factors in EFT that may contribute the participants' ability to rebuild their relationship and decrease their marital burnout are identifying basic emotions, emotional openness and its occurrence in a positive way, expressing new experiences and the associated emotions in marital life, eliminating negative interactive cycles by modifying insecure

attachments, emphasizing on providing support for each other, and forming new and healthy interactions in the relationship. This treatment attempts to reveal vulnerable emotions in each couple and facilitate their ability to create those emotions in safe and affectionate ways. It is believed that the processing of these emotions in a safe group context creates healthier and newer interactive patterns which reduce the level of distress and increase love, intimacy and satisfactory communication (Dalgleish et al., 2015; Greenberg & Goldman, 2019).

EFGT for Sexual Function

In the premenstrual phase, sexual dissatisfaction exacerbates marital disputes. One of the effective interventions in reducing the difference in sexual desire and can be used to solve the couple's emotional and sexual problems is EFT (John et al., 2016). The emphasis of EFT is on adaptive attachments through care, support and mutual attention to the needs of oneself and one's spouse, and it is believed that marital distress is created and continues by negative emotions and attachment injuries (Greenberg et al., 2010). The emotion-focused therapy does not merely emphasize the expression of positive emotions, but pays special attention to the occurrence of emotions that may not seem positive, such as anger, sadness and resentment, and their importance in creating a positive or negative sexual performance for couples. Healthy sexual function can probably be an achievable capability for couples when expressing emotions in a healthy way and based on showing emotions in a timely manner. Therefore, it seems logical that the EFT and EFGT can affect the emotional expression and sexual function of women with PMDD.

Reduction in attachment avoidance in EFT as a significant predictor of improved sexual satisfaction was found by Elliott et al. (2014). It is noteworthy that while sexual functioning is not the focus of EFT as part of the general therapy model, creating a more secure attachment between partners is a focal point which, in turn, has been associated with better sexual functioning in the literature (Birnbaum et al., 2006).

Limitation

Non-use of random sampling and the low number of subjects limit the generalizability of the results while due to the lack of follow-up, it is not clear that the results will remain stable over time. Also, the present research sample included women with PMDD who are a special group socio-culturally. Therefore, the extension of the results to the general population and other clinical populations is limited. Another limitation of the present study was the use of the samples, referring or referred to the health center, who were willing to cooperate with the researchers. Hence, generalizing the results to other women with PMDD who did not refer or lacked the opportunity to cooperate and participate in the research or were not willing to participate in the research is limited. In addition, the effect of environmental and cultural factors on these women's understanding of the therapy and other problems of the subjects that can affect the effectiveness of this treatment can also be among the limitations of the present study. Furthermore, although clinical interviews were used to diagnose PMDD, the PMSS score was used as an inclusion criteria while it is a tool for diagnosing PMS not PMDD. PMDD is different and more severe than PMS. Also, while the evaluation of PMSS scores can be considered as one of the main outcomes to evaluate the effect of EFGT on PMDD, in this study, PMSS scores were not analyzed. Doing research on more extensive samples, follow-up of the therapeutic effects, use of stronger research schemes, and more precise control of nuisance variables and comparison of EFT with other therapies can help to generalize the results and confirm the stability of the findings over time compared to other therapeutic approaches.

Conclusion

Based on the results of the present study, EFGT can reduce pain perception and couple burnout and increase self-compassion and sexual function in women with PMDD. The EFGT presumably helped the members of the experimental group share their problems in the group, receive effective exposure strategies from group members, validate their emotions and try to re-frame them. Moreover, it probably helps relieve stress and rebuild and strengthen the benefits gained by individuals.

In the emotion-focused approach performed in this study, women with PMDD learned to understand others' feelings and emotions, talk to them about their positive and negative emotions, and be a good listener for them. EFGT focus on the interpersonal and couple's emotional relationship to solve the relational problems. Therefore, marital conflicts created based on emotional problems, incorrect communication and insecure attachment of couples can be eliminated with the help of this approach (Dalgleish et al., 2015). In the first stage, EFT aims for stress relief; the therapist helps clients to consciously observe their negative cycle,

and to see the rejection created by this negative cycle as the enemy in front of them. In the second stage, it aims for reconstruction; clients try to discover and share the fears and demands of their attachment, and gradually find ways to clearly express these demands in a way that facilitates emotional access and responsiveness of a safer bond. Individuals can then enter the third stage, which is to consolidate the benefits gained in therapy. When the negative cycle is disrupted and the responses begin to change, a more positive cycle emerges which helps the person move towards a safer bond (Timulak & Keogh, 2020).

According to the research findings, the results obtained from working with couples, families and women with PMDD can probably be used in health and counseling centers, welfare centers and pre-divorce counseling centers in the judiciary. Besides, the results of this study can help the individuals and couples who refer while suffering from couple burnout, sexual dysfunction and sexual dissatisfaction.

Acknowledgement

Hereby, we express our great appreciation to the respected manager of Rahyab Couple and Sex Therapy Clinic, who cooperated with the researchers in choosing the sample and holding therapy sessions.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Funding

The author(s) reported there is no funding associated with the work featured in this article.

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References

Abazari, N, Heydarinasab, L, Yaghubi, H, & Farahani, H. (inpress). *Efficacy of hypnotherapy on pain intensity and psychological distress among women with premenstrual dysphoric disorder, applicability of suggestions focused on cognitive flexibility and ego strength*. https://doi.org/10.21203/rs.3.rs-835578/v1

Ahmadi Bajestani, S., Asghari EbrahimAbad, M., Kimiyayi, S., & Asghari EbrahiAbad, M. (2018). The effectiveness of emotionally-focused group therapy on improving emotional expressiveness and sexual functioning of women with type 2 diabetes. *Thoughts and Behavior in Clinical Psychology*, *13*(50), 47–56. https://jtbcp.riau.ac.ir/article_1473_4994ab38c60f950d84d48d34944d1951.pdf.

Albertson, E. R., Neff, K. D., & Dill-Shackleford, K. E. (2015). Self-compassion and body dissatisfaction in women: A randomized controlled trial of a brief meditation intervention. *Mindfulness*, *6*(3), 444–454. https://doi.org/10.1007/s12671-014-0277-3

Allen, A. B., Goldwasser, E. R., & Leary, M. R. (2012). Self-compassion and well-being among older adults. *Self and Identity*, *11*(4), 428–453. https://doi.org/10.1080/15298868.2011.595082

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). p. 625.4. Code: 625.4 (N94.3).

Appleton, S. M. (2018). Premenstrual syndrome: Evidence-based evaluation and treatment. *Clinical Obstetrics and Gynecology*, *61*(1), 52–61. https://doi.org/10.1097/GRF.0000000000000339

Ardito, R. B., & Rabellino, D. (2011). Therapeutic alliance and outcome of psychotherapy: Historical excursus, measurements, and prospects for research. *Frontiers in Psychology*, *2*, 270. https://doi.org/10.3389/fpsyg.2011.00270

Asadpour, E., & Veisi, S. (2017). The effectiveness of emotionally focused couple therapy on sexual self-esteem and sexual function in women with multiple sclerosis. *Journal of Arak University of Medical Science*, *20*(7), 1–12. http://jams.arakmu.ac.ir/article-1-5174-en.html.

Assali, R., Jalal Marvi, F., Ansari, F., & Lashkardost, H. (2015). Premenstrual syndrome and the marital relationship. *Journal of North Khorasan University of Medical Sciences*, *7*(2), 465–473. https://doi.org/10.29252/jnkums.7.2.465

Bay, F., Bahrami, F., Fatehizadeh, M., Ahmadi, S. A., & Etemadi, A. (2012). The role of assertiveness and self-awareness in prediction of sexual function of women. *Journal of Thoughts and Behavior in Clinical Psychology*, *7*(25), 7–16. https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=372688.

Birnbaum, G. E., Reis, H. T., Mikulincer, M., Gillath, O., & Orpaz, A. (2006). When sex is more than just sex: Attachment orientations, sexual experience, and relationship quality. *Journal of Personality and Social Psychology*, *91*(5), 929–943. https://doi.org/10.1037/0022-3514.91.5.929

Busseri, M. A., & Tyler, J. D. (2003). Interchangeability of the Working alliance inventory and working Alliance inventory, short form. *Psychological Assessment*, *15*(2), 193–197. https://doi.org/10.1037/1040-3590.15.2.193

Dalgleish, T. L., Johnson, S. M., Burgess Moser, M., Wiebe, S. A., & Tasca, G. A. (2015). Predicting key change events in emotionally focused couple therapy. *Journal of Marital and Family Therapy*, *41*(3), 260–275. https://doi.org/10.1111/jmft.12101

Davarniya, R., Zahrakar, K., Moayeri, N., & Shakarami, M. (2015). Assessing the performance of emotionally-focused group couples therapy (EFCT) on reducing couple burnout in women. *Medical Sciences*, *25*(2), 132–140. http://tmuj.iautmu.ac.ir/article-1-942-fa.html.

Dillon, A., Timulak, L., & Greenberg, L. S. (2018). Transforming core emotional pain in a course of emotion-focused therapy for depression: A case study. *Psychotherapy Research: Journal of the Society for Psychotherapy Research*, *28*(3), 406–422. https://doi.org/10.1080/10503307.2016.1233364

Elliott, C., Wiebe, S. A., Johnson, S. M., Burgess Moser, M., Dalgleish, T. L., & Tasca, G. A. (2014). Attachment &sexual satisfaction in Emotionally Focused Couple Therapy. Manuscript in preparation.

Fernández-Navarro, P., Rosa, C., Sousa, I., Moutinho, V., Antunes, A., Magalhães, C., Ribeiro, A. P., & Gonçalves, M. M. (2018). Reconceptualization innovative moments as a predictor of symptomatology improvement in treatment for depression. *Clinical Psychology & Psychotherapy*, *25*(6), 765–773. https://doi.org/10.1002/cpp.2306

Gençdoğan, B. (2006). A new scale for premenstrual syndrome. *Turk Psikiyatri Dergisi*, *8*(2), 82–87. http://psikiyatridizini.net/viewarticle.aspx?articleid=5131.

Gillath, O., Shaver, P. R., & Mikulincer, M. (2005). *An attachmenttheoretical approach to compassion and altruism*. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 121–147). Routledge.

Greenberg, L., Warwar, S., & Malcolm, W. (2010). Emotion-focused couples therapy and the facilitation of forgiveness. *Journal of Marital and Family Therapy*, *36*(1), 28–42. https://doi.org/10.1111/j.1752-0606.2009.00185.x

Greenberg, L. S., & Goldman, R. N. (2019). *Clinical handbook of emotion-focused therapy*. American Psychological Association.

Guy, W. (1976). *ECDEU assessment manual for psychopharmacology, (revised)*. US Department of Health, Education, and Welfare Publication (ADM), National Institute of Mental Health. 76-338.

Halamová, J., Kanovský, M., Varšová, K., & Kupeli, N. (2021). Randomised controlled trial of the new short-term online emotion focused training for self-compassion and self-protection in a nonclinical sample. *Current Psychology*, *40*(1), 333–343. https://doi.org/10.1007/s12144-018-9933-4

Halchuk, R. (2012). *Functional and structural neural effects of emotionally focused therapy for couples*. PhD thesis. Canada: University of Ottawa.

Halford, W. (2001). *Brief couple therapy: Helping partners help themselves*. Guilford Press.

Hantsoo, L., & Epperson, C. N. (2015). Premenstrual dysphoric disorder: Epidemiology and treatment. *Current Psychiatry Reports*, *17*(11), 1–16. https://doi.org/10.1007/s11920-015-0628-3.

Hao, W., Gong, L., & Xue, F. (2019). The efficacy and safety of modified Xiaoyao San for perimenopausal syndrome (PMS): A systematic review and meta-analysis. *Journal of Biosciences and Medicines*, *7*(4), 60–72. https://doi.org/10.4236/jbm.2019.74007

Hashemi, Y., Talepasand, S., & Alavi, K. (2014). Psychometric properties of premenstrual symptoms screening tool among female students of semnan university. *Hayat*, *20*(2), 82–96. http://hayat.tums.ac.ir/article-1-820-fa.html.

Havaasi, N., Zahra Kaar, K., & Mohsen Zadeh, F. (2017). Compare the efficacy of emotion focused couple therapy and gottman couple therapy method in marital burnout and changing conflict resolution styles. *Journal of Fundamentals of Mental Health*, *20*(1), 14–22. https://doi.org/10.22038/JFMH.2017.10034

Hellström, B., & Anderberg, U. M. (2003). Pain perception across the menstrual cycle phases in women with chronic pain. *Perceptual and Motor Skills*, *96*(1), 201–211. https://doi.org/10.2466/pms.2003.96.1.201

Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non-meditators: A theoretical and empirical examination. *Personality and Individual Differences*, *50*(2), 222–227. https://doi.org/10.1016/j.paid.2010.09.033

Hwang, J. H., & Sung, M. H. (2016). Impacts of menstrual attitudes, premenstrual syndrome and stress on burnout among clinical nurses. *Korean Journal of Women Health Nursing*, *22*(4), 233–240. https://doi.org/10.4069/kjwhn.2016.22.4.233

İlhan, G., Verda Verit Atmaca, F., Kurek Eken, M., & Akyol, H. (2017). Premenstrual syndrome is associated with a higher frequency of female sexual difficulty and sexual distress. *Journal of Sex & Marital Therapy*, *43*(8), 811–821. https://doi.org/10.1080/0092623X.2017.1305030

John, N. A., Seme, A., & Tsui, A. O. (2016). Partner relationships and health: Marital quality and health among peri-urban Ethiopian couples. *Journal of Relationships Research*, *7*, Article e12. https://doi.org/10.1017/jrr.2016.13

Johnson, S. M. (2004). *The practice of emotionally focused couple therapy: Creating connection*. BrunnerRoutledge.

Kepple, A. L., Lee, E. E., Haq, N., Rubinow, D. R., & Schmidt, P. J. (2016). History of postpartum depression in a clinic-based sample of women with premenstrual dysphoric disorder. *The Journal of Clinical Psychiatry*, *77*(4), e415–e420. https://doi.org/10.4088/JCP.15m09779

Khosravi, M., Sadighi, S., Moradi, S., & Zendehdel, K. (2013a). Persian-McGill pain questionnaire translation, adaptation and reliability in cancer patients: A brief report. *Tehran University Medical Journal*, *71*(1), 53–58. http://tumj.tums.ac.ir/article-1-38-fa.html.

Khosravi, S., Sadeghi, M., & Yavandeh, M. R. (2013b). Psychometric properties of self-compassion scale(SCS). *Journal of Psychological Models and Methods*, *4*(13), 47–58. http://jpmm.miau.ac.ir/article_339.html.

Lafrance, R. A., McCague, E. A., & & Whissell, C. (2014). That chair work thing was great: A pilot study of group-based emotion-focused therapy for anxiety and depression. *Person-Centered & Experiential Psychotherapies*, *13*(4), 263–277. https://doi.org/10.1080/14779757.2014.910131

Larsen, D. L., Attkisson, C. C., Hargreaves, W. A., & Nguyen, T. D. (1979). Assessment of client/patient satisfaction: Development of a general scale. *Evaluation and Program Planning*, *2*(3), 197–207. https://doi.org/10.1016/0149-7189(79)90094-6

Mahmoudvandi-Baher, E., Flasafiejad, M. R., & Khodabakhshi-Koolaee, A. (2018). The effectiveness of emotion-focused group therapy on hope and negative automatic thoughts among divorced women. *Journal of Social Determinants of Health*, *5*(1), 67–76. https://doi.org/10.22037/ch.v5i1.19218

Martin, D. J., Garske, J. P., & Davis, M. K. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *68*(3), 438–450. https://doi.org/10.1037/0022-006X.68.3.438

Martínez-Martínez, A., Arnau, J., Salmerón, J. A., Velandrino, A. P., & Martínez, M. E. (2016). The sexual function of women during puerperium: A qualitative study. *Sexual and Relationship Therapy*, *32*(2), 181–194. https://doi.org/10.1080/14681994.2016.1263389

McCracken, L. M., & Velleman, S. C. (2010). Psychological flexibility in adults with chronic pain: A study of acceptance, mindfulness, and values-based action in primary care. *Pain*, *148*(1), 141–147. https://doi.org/10.1016/j.pain.2009.10.034

Melzack, R. (1975). The McGill Pain Questionnaire: major properties and scoring methods. *Pain*, *1*(3), 277–299. https://doi.org/10.1016/0304-3959(75)90044-5

Mikolajczak, M., Brianda, M. E., Avalosse, H., & Roskam, I. (2018). Consequences of parental burnout: Its specific effect on child neglect and violence. *Child Abuse & Neglect*, *80*, 134–145. https://doi.org/10.1016/j.chiabu.2018.03.025

Miyaoka, Y., Akimoto, Y., Ueda, K., Ujiie, Y., Kametani, M., Uchiide, Y., & Kamo, T. (2011). Fulfillment of the premenstrual dysphoric disorder criteria confirmed using a self-rating questionnaire among Japanese women with depressive disorders. *BioPsychoSocial Medicine*, *5*(1), 1–8. https://doi.org/10.1186/1751-0759-5-5.

Mohammadi, M., Ejei, J., & Gholamali lavasani, M. (2019). The effectiveness of training of emotionally-focused approach on couple burnout and couples tendency for divorce. *Journal of*

Psychology, *22*(4), 362–378. https://www.sid.ir/en/journal/ViewPaper.aspx?ID=741694.

Montazeri, A., Taghizadeh, Z., Taheri, S., Siahbazi, S., & Masoomi, R. (2019). Domination of premenstrual syndrome on women's quality of life: A qualitative study. *Payesh*, *18*(1), 53–66. http://payeshjournal.ir/article-1-982-en.html.

Navidi, F., Adibrad, N., & Sabaghian, Z. (2007). The relationship between couple burnout and organizational climate among nurses. *Journal of Psychology*, *11*(3), 275–287. https://www.sid.ir/fa/journal/ViewPaper.aspx?id=93911.

Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity*, *2*(3), 223–250. https://doi.org/10.1080/15298860309027

Neff, K. D., & Beretvas, S. N. (2013). The role of self-compassion in romantic relationships. *Self and Identity*, *12*(1), 78–98. https://doi.org/10.1080/15298868.2011.639548

Neff, K. D., Bluth, K., Toth-Kiraly, I., Davidson, O., Knox, M. C., Williamson, Z., & Costigan, A. (2020). Development and validation of the Self-Compassion Scale for youth. *Journal of Personality Assessment*, *103*(1), 92–105. https://doi.org/10.1080/00223891.2020.1729774.

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, *69*(1), 28–44. https://doi.org/10.1002/jclp.21923

Nery-Hurwit, M., Yun, J., & Ebbeck, V. (2018). Examining the roles of self-compassion and resilience on health-related quality of life for individuals with multiple sclerosis. *Disability and Health Journal*, *11*(2), 256–261. https://doi.org/10.1016/j.dhjo.2017.10.010

Pines, A. (1996). *Couple burnout: Causes and cures*. Routledge.

Pines, A. M., Neal, M. B., Hammer, L. B., & Icekson, T. (2011). Job burnout and couple burnout in dual-earner couples in the sandwiched generation. *Social Psychology Quarterly*, *74*(4), 361–386. https://doi.org/10.1177/0190272511422452

Pines, A. M., & Nunes, R. (2003). The relationship between career and couple burnout: Implications for career and couple counseling. *Journal of Employment Counseling*, *40*(2), 50–64. https://doi.org/10.1002/j.2161-1920.2003.tb00856.x

Roomaney, R., & Lourens, A. (2020). Correlates of premenstrual dysphoric disorder among female university students. *Cogent Psychology*, *7*(1), 1823608. https://doi.org/10.1080/23311908.2020.1823608

Rosen, R., Brown, C., Heiman, J., Leiblum, S., Meston, C., Shabsigh, R., Ferguson, D., & D'Agostino, R. (2000). The Female Sexual Function Index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. *Journal of Sex & Marital Therapy*, *26*(2), 191–208. https://doi.org/10.1080/009262300278597

Sakson-Obada, O. (2017). Pain perception in people diagnosed with schizophrenia: Where we are and where we are going. *Psychosis*, *9*(4), 358–366. https://doi.org/10.1080/17522439.2017.1344294

Sayadi, M., Shahhosseini tazik, S., Madani, Y., & Gholamali lavasani, M. (2017). Effectiveness of emotionally focused couple therapy on marital commitment and couple burnout in infertile couples. *Journal of Education and Community Health*, *4*(3), 26–37. http://jech.umsha.ac.ir/article-1-307-fa.html. https://doi.org/10.21859/jech.4.3.26

Shahar, B., Carlin, E. R., Engle, D. E., Hegde, J., Szepsenwol, O., & Arkowitz, H. (2012). A pilot investigation of emotion-focused two-chair dialogue intervention for self-criticism. *Clinical Psychology & Psychotherapy*, *19*(6), 496–507. https://doi.org/10.1002/cpp.762

Shahraki Ghadimi, S., Khajevand Khoshli, A., & & Asadi, J. (2019). Effectiveness of drama therapy on premenstrual symptoms and marital burnout in women. *Iranian Journal of Rehabilitation Research in Nursing*, *5*(2), 18–24. http://ijrn.ir/article-1-392-en.html.

Shareh, H. (2014). *Validation and investigating the psychometric properties of the client satisfaction questionnaire and client clinical global index in a sample of patients with obsessive-compulsive disorder*. Unpublished Manuscript.

Sharma, P., Sandhu, J., & Shenoy, S. (2011). Variation in the response to pain between athletes and non-athletes. *Ibnosina Journal of Medicine and Biomedical Sciences*, *3*(5), 165–171. https://doi.org/10.4103/1947-489X.210889

Shirley, E., Josephson, G., & Sanders, J. (2016). Fundamentals of patient satisfaction measurement. *Physician Leadership Journal*, *3*(1), 12–17. http://search.proquest.com/openview/pq-orgsite=gscholar&cbl=2037550.

Stöppler, M. C. (2014). *Premenstrual Syndrome (PMS)*. https://www.medicine net.co m/premenstrual syndrome/article.html.

Terkawi, A. S., Tsang, S., Abolkhair, A., Alsharif, M., Alswiti, M., Alsadoun, A., AlZoraigi, U. S., Aldhahri, S. F., Alzhahrani, T., & Altirkawi, K. A. (2017). Development and validation of Arabic version of the short-form McGill pain questionnaire. *Saudi Journal of Anaesthesia*, *11*(Suppl 1), S2–S10. https://doi.org/10.4103/sja.SJA_42_17

Thompson, S., & Girz, L. (2020). Overcoming shame and aloneness: Emotion-focused group therapy for self-criticism. *Person-Centered & Experiential Psychotherapies*, *19*(1), 1–11. https://doi.org/10.1080/14779757.2019.1618370

Tie, S., & Poulsen, S. (2013). Emotionally focused couple therapy with couples facing terminal illness. *Contemporary Family Therapy*, *35*(3), 557–567. https://doi.org/10.1007/s10591-013-9238-6

Timulak, L., & Keogh, D. (2020). Emotion-focused therapy: A transdiagnostic formulation. *Journal of Contemporary Psychotherapy*, *50*(1), 1–13. https://doi.org/10.1007/s10879-019-09426-7

Tracey, T. J., & Kokotovic, A. M. (1989). Factor structure of the working alliance inventory. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, *1*(3), 207–210. https://doi.org/10.1037/1040-3590.1.3.207

Tucker, M., & Oei, T. P. (2007). Is group more cost effective than individual cognitive behavior therapy? The evidence is not solid yet. *Behavioral and Cognitive Psychotherapy*, *35*(1), 77–91. https://doi.org/10.1017/S1352465806003134

Ursic, N., Kocjancic, D., & Zvelc, G. (2019). Psychometric properties of the Slovenian long and short version of the self-compassion scale. *Psihologija*, *52*(2), 107–125. https://doi.org/10.2298/psi180408029u

Vázquez, F. L., Torres, Á, Otero, P., Blanco, V., & Attkisson, C. C. (2019). Psychometric properties of the Castilian Spanish Version of the Client Satisfaction Questionnaire (CSQ-8). *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*, *38*(3), 829–835. https://doi.org/10.1007/s12144-017-9659-8

Vedovo, F., Di Blas, L., Perin, C., Pavan, N., Zatta, M., Bucci, S., Morelli, G., Cocci, A., Delle Rose, A., Caroassai Grisanti, S., Gentile, G., Colombo, F., Rolle, L., Timpano, M., Verze, P., Spirito, L., Schiralli, F., Bettocchi, C., Garaffa, G., … Trombetta, C. (2020). Operated male-to-female sexual function index: Validity of the first questionnaire developed to assess sexual function after male-to-female gender affirming surgery. *The Journal of Urology*, *204*(1), 115–120. https://doi.org/10.1097/JU.0000000000000791

Verkaik, S., Kamperman, A. M., van Westrhenen, R., & Schulte, P. (2017). The treatment of premenstrual syndrome with preparations of Vitex agnus castus: A systematic review and meta-analysis. *American Journal of Obstetrics and Gynecology*, *217*(2), 150–166. https://doi.org/10.1016/j.ajog.2017.02.028

Zambito Marsala, S., Pistacchi, M., Tocco, P., Gioulis, M., Fabris, F., Brigo, F., & Tinazzi, M. (2015). Pain perception in major depressive disorder: A neurophysiological case-control study. *Journal of the Neurological Sciences*, *357*(1-2), 19–21. https://doi.org/10.1016/j.jns.2015.06.051

Zanini, S., Voltolini, A., Gragnano, G., Fumagalli, E., & Pagnini, F. (2018). Changes in pain perception following psychotherapy: The mediating role of psychological components. *Pain Research & Management*, *2018*, 8713084. https://doi.org/10.1155/2018/8713084