Received: 04/28/2025 **Accepted:** 08/26/2025

Open Access

https://doi.org/10.30473/ijohp.2026.77616.1449

Vol.8, No.4, Serial Number 26, pp.41-58, Autumn 2025

Iranian Journal of Health Psychology

Research Article

Effectiveness of Emotion-Focused Therapy on Psychological Hardiness and Fear of Pregnancy in Women Aged 20-30

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Abstract

Objective: The present study aimed to investigate the effectiveness of emotion-focused therapy on fear of pregnancy and psychological toughness in women aged 20 to 30 in Isfahan in the spring of 2025.

Method: From the statistical population that met the inclusion criteria, 30 married women were purposefully selected and randomly assigned to two experimental groups (emotion-focused therapy) and a control group. The instruments used included Kiamarsi et al.'s Psychological Toughness Questionnaire (1377) and Bayrampour's Fear of Pregnancy Questionnaire (2016). The experimental group underwent emotion-focused therapy in ten 60-minute sessions for two months. Then, the questionnaires were administered again in the post-test. Multivariate analysis of covariance was used to analyze the data using SPSS version 28.

Results: The results of multivariate analysis of covariance showed that emotion-focused therapy had a significant effect on increasing psychological hardiness and reducing fear of pregnancy ($p < 0/05$).

Conclusion: Therefore, emotion-focused therapy can be recommended as an effective psychotherapy method in promoting mental health and increasing psychological hardiness of women in the pre-pregnancy period or in the face of pregnancy-related concerns. This study's findings can serve as a practical guide for psychologists, counselors, and researchers in mental health and reproductive health.

Keywords: Emotion-Focused Therapy, Psychological Hardiness, Fear of Pregnancy, Mental Health, Health Psychology.

How to Cite

Memarzade, G. and Taghvaee, A. (2025). Effectiveness of Emotion-Focused Therapy on Psychological Hardiness and Fear of Pregnancy in Women Aged 20-30. Iranian Journal of Health Psychology, 8(4), 41-58. doi: 10.30473/ijohp.2026.77616.1449

https://ijohp.journals.pnu.ac.ir/?lang=fa

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Extended Abstract

Background and Objectives

Pregnancy is a complex and multifaceted experience that can significantly impact a woman's psychological well-being. Beyond the anticipated joys, this period is often accompanied by a range of challenges, including heightened fear of pregnancy, anxiety, depression, sleep disturbances, negative childbirth experiences, and even elective cesarean sections or delayed childbearing. This complex interplay of physical and emotional changes underscores the critical need for effective therapeutic interventions. Emerging research highlights psychological hardiness) a trait characterized by resilience, commitment, and a sense of control, as a crucial protective factor. Individuals possessing higher levels of hardiness are better equipped to navigate the inherent stressors of pregnancy and may experience reduced fear.

The rationale for employing emotion-focused therapy (EFT) in this context stems from the understanding that fears related to pregnancy can often be rooted in unresolved emotional conflicts, past traumas, and maladaptive emotional responses. EFT, with its emphasis on identifying, experiencing, and reconstructing emotions, offers a promising avenue for addressing these underlying issues. By facilitating a deeper understanding and processing of emotions, EFT aims to improve an individual's capacity for adaptation, thereby potentially mitigating the debilitating effects of fear and anxiety associated with pregnancy and childbirth. This approach is particularly relevant given the profound emotional transformations and vulnerabilities women may experience during this sensitive life stage.

The primary objective of this study was to rigorously investigate the effectiveness of emotion-focused therapy (EFT) on two key psychological constructs in women aged 20 to 30 experiencing fear of pregnancy: psychological hardiness and fear of pregnancy itself. The study aimed to determine whether EFT could significantly enhance psychological hardiness and concurrently reduce the multifaceted fears associated with pregnancy.

Material and Methods

This research employed a quasi-experimental, interventional, applied, pretest–posttest design with a control group. The study population comprised women aged 20 to 30 who were referred to a psychology clinic in Isfahan during the first half of 2025 and were experiencing fear of pregnancy. From this population, 30 eligible married women were purposefully selected and subsequently randomly assigned to either an experimental group (n=15) or a control group (n=15). The selection was guided by specific inclusion criteria and practical accessibility constraints.

To comprehensively assess the study's outcomes, two validated instruments were utilized:

1. Ahvaz Psychological Hardiness Questionnaire**:** This instrument, comprising 27 items on a 5-point Likert scale, measures psychological hardiness, with higher scores indicating greater resilience. The internal consistency in this study was reported with a Cronbach's alpha of 0.83.
2. Pregnancy Anxiety Questionnaire (Bayrampour et al., 2016): This questionnaire consists of 33 items across nine dimensions: fetal health, loss of fetus, childbirth, maternal health, body image, parenting and child care, healthcare, financial factors, and family/social support. Higher scores denote greater anxiety. The reliability of this questionnaire in the present study was found to be high, with a Cronbach's alpha of 0.89.
3. Emotion-Focused Therapy Package: The emotion-focused therapy intervention was based on the established principles of Greenberg et al. (2008) and adapted using relevant local resources. Participants in the experimental group received 10 weekly individual sessions, each lasting 60 minutes, over a period of two months. The core goals of the intervention included enhancing emotional awareness, fostering acceptance of feelings, analyzing

attachment patterns, reducing core fears, and improving overall emotional adaptation. The therapeutic process involved building a strong therapeutic alliance, differentiating between primary and secondary emotions, exploring attachment styles, utilizing techniques such as the empty-chair and two-chair dialogues, focusing on emotion regulation, promoting self-compassion, and concluding with integration and post-test assessments. The control group, meanwhile, received no intervention during the study period.

All data were analyzed using IBM SPSS Statistics (version 28). Descriptive statistics, including means and standard deviations, were calculated for baseline comparisons. Inferential statistics, specifically univariate and multivariate analysis of covariance (ANCOVA and MANCOVA), were employed to examine the effectiveness of the intervention while controlling for pre-test scores. The assumptions for these analyses, including normality of data distribution (Shapiro–Wilk test), homogeneity of variances (Levene's test), and homogeneity of the covariances (Box's M test), were rigorously tested.

Results

The results unequivocally demonstrated that EFT had a significant positive effect on both psychological hardiness and fear of pregnancy in the experimental group compared to the control group.

- Psychological Hardiness: ANCOVA revealed a significant increase in psychological hardiness scores in the experimental group ($F = 91.60$, $p < 0.001$, $\eta^2 = 0.701$). The mean scores for hardiness were notably higher in the intervention group post-therapy, indicating a substantial enhancement in their capacity to cope with stressors.
- Fear of Pregnancy**:** Conversely, a significant reduction in the overall fear of pregnancy was observed in the experimental group ($F = 45.48$, $p < 0.001$, $\eta^2 = 0.636$). The mean scores for pregnancy-related fear decreased substantially after the intervention.

Further analysis of the individual components of pregnancy fear revealed significant reductions in several key areas: fetal health ($F = 13.51$, $p = 0.002$, $\eta^2 = 0.416$), loss of fetus ($F = 15.23$, $p < 0.001$, $\eta^2 = 0.445$), childbirth ($F = 11.64$, $p = 0.003$, $\eta^2 = 0.380$), maternal health ($F = 6.571$, $p = 0.019$, $\eta^2 = 0.257$), and parenting ($F = 12.132$, $p = 0.002$, $\eta^2 = 0.390$). The component of body image showed a borderline effect ($p = 0.051$), while fears related to healthcare, finances, and family/social support did not change significantly.

Discussion

The findings strongly support the effectiveness of EFT in addressing both psychological hardiness and fear of pregnancy. The observed increase in hardiness is attributed to EFT's ability to help women identify, experience, and reconstruct maladaptive emotions. This process likely enhances their capacity for emotion management, strengthens their sense of control, and improves their coping mechanisms for the inherent stresses of pregnancy. The significant reduction in fear of pregnancy, particularly in components like fetal health, childbirth, and maternal health, is seen as a direct outcome of this emotional processing and reconstruction within a safe, empathetic therapeutic environment. These results align with existing literature, which consistently demonstrates the positive impact of psychological interventions, especially emotion-focused approaches, on resilience, anxiety reduction, and improved adaptation to pregnancy-related challenges. The findings are consistent with prior studies highlighting the protective roles of resilience and social support in mitigating pregnancy fear and underscore the efficacy of EFT in transforming negative emotional states related to pregnancy.

Conclusion

In conclusion, this study demonstrated that emotion-focused therapy significantly enhanced psychological hardiness and markedly reduced fear of pregnancy in women aged 20 to 30. The results affirm that promoting emotional awareness, facilitating adaptive emotional processing, and reconstructing maladaptive emotions are crucial in equipping women with the ability to confront anxiety-provoking situations like pregnancy, fostering a sense of control and psychological competence. These findings are theoretically grounded in EFT's emphasis on core emotions in adaptation and practically significant for the field of women's mental and reproductive health.

From a practical standpoint, this research underscores the utility of EFT as an effective intervention within counseling and reproductive health centers. It offers a viable method for improving the mental health of young women, alleviating concerns associated with pregnancy, and potentially enhancing their overall quality of life and marital relationships. Furthermore, EFT can serve as a valuable component of educational and therapeutic programs designed to empower young women and equip them with effective coping strategies for managing the multifaceted demands of modern life, including career, education, and family planning.

Despite the significant findings, this study is subject to several limitations that warrant cautious interpretation of the results. The use of an available sampling method, coupled with a limited sample size and the absence of random sampling, restricts the generalizability of the findings to the wider population. The constrained time frame prevented the examination of long-term changes and a detailed explanation of causal relationships. Additionally, potentially influential variables such as socioeconomic status and spousal social support were not measured or controlled for, which could have impacted the outcomes. The reliance on self-report instruments also introduces the possibility of biases, notably social desirability bias. Finally, the study's focus on women aged 20 to 30 in Isfahan, within a specific cultural context, further limits generalizability to other age groups and geographical settings.

Future research should address these limitations by employing random sampling methods and recruiting larger, more diverse statistical populations across different age groups and geographical contexts to enhance generalizability. Longitudinal studies with extended follow-up periods are recommended to evaluate the long-term stability of treatment effects. Incorporating multiple measurement tools, such as clinical interviews, alongside qualitative methods would also help mitigate self-reporting biases. Furthermore, future studies should carefully control for intervening and background variables, including socioeconomic status, spousal social support, and personality characteristics, to provide a more nuanced understanding of EFT's effectiveness in this domain. In sum, the findings highlight the critical role of addressing emotional dimensions in women's mental health and position EFT as an efficient therapeutic solution for reducing pregnancy-related fears and bolstering psychological resilience.

Introduction

Pregnancy is a complex and multidimensional phenomenon influenced by physiological, individual, and social factors and, in addition to its positive outcomes, may be accompanied by negative psychological experiences such as fear of pregnancy and pregnancy (Sanjari et al., 2021). Today, declining fertility rates and the increasing tendency of women to delay childbearing have become major social and health concerns (Vio et al., 2024; Jalilvand et al., 2024). Although pregnancy is a natural process, it is accompanied by extensive psychological, social, and physical changes that can create either a positive or a negative experience for women

(Başkaya & İlçioğlu, 2023). In addition to fundamental physiological changes, pregnancy is also associated with psychological pressures and lifestyle changes, which may lead to intense experiences of anxiety and fear in some women. This fear, recognized as one of the most common and debilitating challenges during pregnancy, not only affects the mother's mental health but is also associated with adverse outcomes such as prolonged labor and reduced infant health (Heidari et al., 2019).

Fear of pregnancy encompasses a range of concerns, from mild to severe. In severe cases, known as tokophobia, this fear can affect women's decisions regarding pregnancy, the mode of delivery, and even the overall quality of the pregnancy experience (Mirjalili et al., 2014). Research has shown that 20% to 30% of women experience some degree of fear of pregnancy, and about 5% to 10% experience severe fear (Nilsson et al., 2018; Çubukçu & Ağapinar Şahin, 2025). In Iran, estimates indicate that between 5% and 20% of pregnant women experience severe fear of pregnancy (Mohammadi et al., 2011).

The consequences of fear of pregnancy are multidimensional and may include depression, anxiety, fatigue, sleep disturbances, and negative childbirth experiences (Kalok et al., 2025). This fear may increase the likelihood of elective cesarean section, avoidance of pregnancy, or even delayed childbearing (Rondung et al., 2022; Maluka et al., 2020). Individual, social, cultural, and economic factors, including past negative experiences, low social support, educational level, and economic circumstances, all play a role in the development of this fear (Yin et al., 2024; Lee & Kim, 2023).

Given the wide-ranging implications, it is important to identify protective factors against fear of pregnancy. Psychological hardiness, as an important personality trait, helps individuals cope with stress, adapt to change, and reframe challenging situations, and it can reduce the severity of fear of pregnancy (González et al., 2023). Research shows that people with higher levels of hardiness are better able to regulate emotions, manage stress, and use social support effectively, and therefore may have a better experience of pregnancy and childbirth (Zhang et al., 2024; Mirjalali et al., 2025).

In the field of psychological interventions, although cognitive-behavioral and supportive approaches have been effective, evidence suggests that the root of fear of pregnancy may lie in unresolved emotions and past psychological trauma (Goldman & Sharbanee, 2025). For this reason, treatments that directly facilitate the processing of painful emotions may be more effective. Emotion-focused therapy has strong potential to reduce pregnancy-related anxiety and fear by creating a safe emotional space and facilitating the reprocessing of negative experiences (Goldman & Sharbanee, 2025; İsbir, 2023).

This therapy is based on three main axes: (1) creating attachment bonds and promoting emotional awareness; (2) accessing, exploring, and reprocessing emotional experiences; and (3) transforming emotional patterns and achieving adaptive responses (İsbir, 2023). Interventions based on emotion-focused therapy have been studied less frequently in the context of fear of pregnancy; however, indirect evidence—such as its effectiveness for anxiety and post-traumatic stress disorder—suggests that this approach may also be effective in reducing fear of pregnancy (Greenberg, 2015; Özakkaş, 2017). By identifying and restructuring maladaptive emotions, this therapy helps women develop more adaptive responses to the childbirth experience and strengthens psychological resilience (Lyberg & Severinsson, 2010; Hajihatamloo et al., 2025).

In domestic studies, the effectiveness of emotion-focused therapy has been supported across a wide range of psychological disorders and outcomes. Amirshahi et al. (2024) showed that this approach improves sexual function and health-promoting behaviors in women with polycystic ovary syndrome. In addition, Torabiyan et al. (2024) and Yarmohammadi et al. (2024) found that this therapy improves self-efficacy and post-traumatic growth in patients with breast cancer and increases psychological safety in women who are victims of domestic violence. In the area of mood disorders, Alavi et al. (2022) reported sustained effects of this therapy in reducing emotional and cognitive symptoms of major depression. Regarding underlying personality-related variables, Omrani et al. (2021) found that emotion-focused therapy can significantly improve psychological resilience and sleep quality in individuals with a history of acute illnesses (e.g., COVID-19), suggesting the potential of this approach to rebuild psychological resilience resources.

Recent international research has also focused on the high prevalence of psychological challenges during pregnancy and the emerging potential of emotion-focused therapies. He et al. (2025), in a large-scale study, reported an 80% prevalence of fear of pregnancy and identified clinical and obstetric factors as contributors to its severity. In a similar vein, Mijalevich-Soker and Taubman (2025) emphasized the vital role of resilience and social support in moderating fear of pregnancy, particularly under critical conditions. In the domain of therapeutic interventions, Goldman and Sharbanee (2024) and Pascual-Leone and Nardone (2024), in reviews of recent advances in emotion-focused therapy, concluded that this approach is effective in treating complex disorders such as generalized anxiety disorder and eating disorders. Furthermore, Foroughe et al. (2024) provided preliminary evidence for the effectiveness of this model in improving emotion regulation and reducing depression among young people. Specifically, in the field of childbirth, İsbir (2023), by presenting a conceptual framework, argued that transforming maladaptive emotional schemas into adaptive ones, through attachment-based and mindfulness-informed approaches within emotion-focused therapy, can serve as a key strategy for addressing fear of pregnancy and improving women's birth experiences.

Thus, national and international studies indicate that fear of pregnancy is influenced by individual, psychological, social, and cultural factors, and that supportive interventions, prenatal education, and psychotherapy can be effective in reducing it (Abdelaziz et al., 2025; Mortazavi et al., 2021; Rouhe et al., 2015; Wang et al., 2025). Despite this, there remains a research gap regarding the effectiveness of emotion-focused therapy in reducing fear of pregnancy and enhancing psychological hardiness in young women.

Given the high prevalence of fear of pregnancy and its wide-ranging consequences for women's mental and physical health, the quality of childbirth experiences, and even fertility rates in society, identifying and implementing effective interventions to reduce this fear is of great importance. In this context, psychological hardiness can serve as a protective factor by playing a key role in strengthening women's resilience. Nevertheless, previous research has rarely examined fear of pregnancy and psychological hardiness simultaneously in young women, and sufficient evidence regarding the effectiveness of emotion-focused therapies in this area is lacking. Therefore, the present study can not only help fill an important gap in the scientific literature but also has clinical value, as its findings can inform the design of novel intervention programs to promote the mental health of women of reproductive age and, by reducing fear of pregnancy and increasing psychological hardiness, provide women with a healthier and more positive pregnancy experience.

Method

This study was a quasi-experimental, interventional, and applied investigation conducted using a pretest–posttest design with a control group. The study aimed to examine the effectiveness of emotion-focused therapy on psychological hardiness and fear of pregnancy in young women. The statistical population consisted of all women aged 20 to 30 years who were referred to a psychology clinic in Isfahan during the first half of 2025 (2025 in the Persian calendar) and were experiencing fear of pregnancy. From this population, based on the inclusion criteria and accessibility limitations, 30 eligible women were selected and randomly assigned to two groups, an experimental group and a control group, each consisting of 15 participants.

The inclusion criteria were informed consent to participate in the study, age between 20 and 30 years, a diagnosis of fear of pregnancy based on a clinical interview, and the ability to attend therapy sessions regularly for ten weeks. The exclusion criteria were the presence of psychotic disorders, substance or alcohol use, use of psychiatric medication, concurrent receipt of other psychological treatment services, and absence from more than two therapy sessions.

Ethical Statements

All ethical principles related to research involving human participants were observed. After official approval was obtained from the Ethics Committee (Code: IR.IAU.KHUISF.REC.2025.505), informed consent was obtained from all participants. Confidentiality of the information was maintained, participation was voluntary, and participants were referred for supplementary psychotherapy services if needed. The control group was also given the opportunity to receive similar therapeutic services after the completion of the study.

Measures

The instruments used in this study included two questionnaires and an emotion-focused therapy protocol.

Psychological hardiness was defined as the score obtained from the Ahvaz Psychological Hardiness Questionnaire. This questionnaire consists of 27 items scored on a 5-point Likert scale ranging from “Never” to “Always.” Accordingly, the total score ranges from 27 to 135, with items 6, 7, 10, 13, 17, and 21 being reverse-scored. Higher scores indicate greater psychological hardiness. The reliability of this instrument has been confirmed using Cronbach’s alpha coefficient, which was reported as 0.76; in the present study, it was 0.83. The validity of this scale has been established in previous studies through concurrent validity with measures of anxiety, depression, and self-actualization (Kiamarthi, 1998). Additionally, in the present study, the face validity of the instrument was reviewed and confirmed by three professors from the Department of Psychology.

In the present study, pregnancy anxiety was defined as the score obtained by participants on the standard Pregnancy Anxiety Questionnaire developed by Bayrampour et al. (2016). This instrument is a 33-item scale that measures pregnancy-specific anxiety across nine dimensions: “fetal health,” “loss of the fetus,” “childbirth,” “maternal health,” “body image,” “parenting and child care,” “healthcare,” “financial factors,” and “family and social support.” Items are rated on a 5-point Likert scale ranging from 1 (very low) to 5 (very high). The total score of the questionnaire ranges from 33 to 165, with higher scores indicating a higher level of pregnancy anxiety. Based on the cutoff points, scores of 66 and below indicate low anxiety, scores from 67

to 132 indicate moderate anxiety, and scores of 133 and above indicate severe pregnancy anxiety. The content validity of this scale was confirmed by the developer (Bayrampour, 2016) through consultation with experts in women's health and psychology. In addition, Bayrampour examined construct validity using factor analysis, and the results indicated significant factor loadings ranging from 0.61 to 0.96 for all items. The average variance extracted (AVE) also showed satisfactory values between 0.67 and 0.87 across all nine dimensions, indicating good model fit. Furthermore, the reliability of the instrument has been supported by Cronbach's alpha coefficients ranging from 0.86 to 0.96 across the dimensions and by composite reliability values above 0.89 (Bayrampour, 2016). In the present study, the Cronbach's alpha coefficient for this instrument was 0.89. Additionally, to ensure face validity, the questionnaire was reviewed by three professors from the Department of Psychology, who confirmed the appropriateness of the translation and wording.

The main intervention in the study was emotion-focused therapy, which was designed based on the standard model proposed by Greenberg et al. (2008) and local sources, including Ramezani et al. (2020) and Dartaaj (2021), and was adapted to the cultural context and subject of the study. This intervention consisted of 10 weekly individual sessions, each lasting 60 minutes, conducted at a psychology counseling center in Isfahan. It aimed to increase emotional awareness, promote acceptance of feelings, analyze dysfunctional attachment patterns, reduce core fears, and enhance emotional adaptation. The main themes of the sessions included establishing a therapeutic alliance, identifying and processing primary and secondary emotions, modifying attachment styles, applying the empty-chair technique to resolve internal conflicts, and teaching emotion regulation techniques. The control group received no intervention during this period. After completion of the therapy, posttest assessments were administered to both groups to evaluate possible changes in the dependent variables. A summary of the session contents is presented below.

Sessions	Topic
Session 1	Getting to know the client, establishing therapeutic relationship, explaining treatment goals and principles of the EFT approach, administering the pre-test
Session 2	Building therapeutic alliance, identifying key emotional events related to fear of pregnancy and past traumas
Session 3	Examining attachment style, teaching the distinction between primary emotions (basic fear) and secondary emotions (anger and guilt), labeling feelings
Session 4	Implementing the "empty chair" technique to confront repressed emotions and internal conflicts
Session 5	Teaching emotion regulation techniques, including mind-body relaxation when facing pregnancy-related anxiety
Session 6	Reviewing emotional communication symbols and signs in the individual's life, analyzing significant emotional memories
Session 7	Expressing inner voices and states, working on wounded feelings (shame and helplessness), and practicing self-compassion
Session 8	Facilitating dialogue between the client's "anxious" and "hardy" parts using the two-chair technique, reconstructing emotional identity.
Session 9	Consolidating emotional achievements, identifying and strengthening internal coping resources
Session 10	Integrating therapeutic experiences, enhancing emotional insight, administering the post-test, and terminating therapy

Data analysis was performed using IBM SPSS Statistics (version 28). In addition to descriptive statistics, including mean and standard deviation, inferential statistical methods, specifically univariate and multivariate analysis of covariance (ANCOVA and MANCOVA), were employed to test the research hypotheses.

Results

This study investigated the effect of emotion-focused therapy on psychological hardiness and fear of pregnancy in young women. The data collected from pretest and posttest assessments indicated that the experimental group exhibited significant improvement in the target variables compared to the control group.

In the experimental group, the mean psychological hardiness scores increased after the intervention, indicating an enhanced ability to cope with psychological pressure and stress. Conversely, the mean scores for fear of pregnancy in the experimental group decreased, reflecting a reduction in anxiety and concerns related to pregnancy and childbirth. The control group, which received no intervention, showed no significant changes in these variables.

Table 1. Mean and standard deviation of research variables by group and time point

Variable	Group	Pre-test		Post-test	
		Mean	StandardDeviation	Mean	Standard Deviation
PsychologicalHardiness	Control	39.466	4.159	39.667	4.630
	Experimental	39.626	4.083	49.713	5.914
Fear of Pregnancy	Control	133.601	11.743	133.853	12.894
	Experimental	133.164	13.174	99.185	14.673

\The results of the data analysis showed that emotion-focused therapy had a significant effect on psychological hardiness and fear of pregnancy in women. Assessment of the statistical assumptions indicated that the normality of the data distribution and the homogeneity of variances were satisfied, as confirmed by the Shapiro–Wilk and Levene's tests. The multivariate Wilks' Lambda test also confirmed the presence of at least one significant between-group effect ($P < 0.001$, $\eta^2 = 0.818$).

Between-group analyses using ANCOVA revealed that, compared to the control group, the experimental group showed a significant increase in psychological hardiness ($F = 91.60$, $P < 0.001$, $\eta^2 = 0.701$) and a significant decrease in fear of pregnancy ($F = 45.48$, $P < 0.001$, $\eta^2 = 0.636$). Based on these findings, the intervention enhanced women's emotional functioning and psychological resilience. The ANCOVA between-group effects table provides the primary statistical evidence supporting the research hypothesis.

Table 2. Tests of Between-Subjects Effects for Mean Scores of Variables

Variable	Source	Degrees of Freedom	Mean Square	F	Significance	Effect Size (η^2)
Psychological Hardiness	Constant	1	8.813	0.734	0.399	0.027
	Group	1	731.219	60.911	< 0.001	0.701
	Error	25	12.005			
Fear of Pregnancy	Constant	1	1217.791	6.195	0.020	0.192
	Group	1	8940.050	45.477	< 0.001	0.636
	Error	25	196.584			

The statistical assumptions for multivariate analysis of covariance were examined. First, the normality of the distribution of data related to the components of fear of pregnancy in the experimental and control groups at pre-test and post-test was confirmed using the Shapiro-Wilk test, such that none of the significance values were below 0.05; therefore, the normality of the data distribution could be assumed. Next, the equality of covariance matrices between groups was examined using Box's M test. The results indicated that the matrices were statistically equivalent, with no significant differences. Furthermore, Levene's test for equality of error variances showed that the variances were equal between groups, and the assumptions for between-subjects analysis were met.

The results of Levene's test for assessing the equality of variances are presented in Table 3.

Table 3. Levene's Test for Equality of Error Variances

Post-test	F	df1	df2	Significance
Fetal Health	1.113	1	28	0.271
Loss of Fetus	1.194	1	28	0.284
Childbirth	0.902	1	28	0.350
Maternal Health	1.256	1	28	0.272
Body Image	0.369	1	28	0.549
Parenting	1.296	1	28	0.265
Healthcare	1.468	1	28	0.236
Financial	0.309	1	28	0.548
Family and Social Support	0.038	1	28	0.847

On the other hand, examination of the descriptive data of the fear of pregnancy components showed that the mean scores in the experimental group decreased significantly in most components after the intervention, whereas only slight changes were observed in the control group, with scores remaining almost stable. This pattern indicates the effectiveness of the emotion-focused therapy intervention in reducing fear of pregnancy in the experimental group and the relative stability of the condition in the control group.

To examine the effectiveness of emotion-focused therapy on fear of pregnancy, the results of the between-group analysis (Table 4-16) showed that the intervention had a significant effect on the key components of fear of pregnancy. Specifically, the comparison between the experimental and control groups revealed that the mean scores of the components "fetal health" ($F = 13.51$, $p = 0.002$, $\eta^2 = 0.416$), "loss of fetus" ($F = 15.23$, $p < 0.001$, $\eta^2 = 0.445$), "childbirth" ($F = 11.64$, $p = 0.003$, $\eta^2 = 0.380$), and "parenting" ($F = 12.13$, $p = 0.002$, $\eta^2 = 0.390$) decreased significantly in the experimental group, indicating a strong effect of the intervention on reducing psychological fears related to pregnancy. Furthermore, the component "maternal health" showed a moderate decrease with a significance level of $p = 0.019$ and an effect size of $\eta^2 = 0.257$, while the "body image" component was at the borderline of significance ($p = 0.051$), and the components "healthcare," "financial," and "family and social support" did not show significant changes.

Table 4. Tests of Between-Subjects Effects for Mean Scores of Fear of Childbirth Components

Component	Source	Degrees of Freedom	Mean Square	F	Significance	Effect Size (η^2)

Fetal Health	Constant	1	32.909	2.426	0.136	0.113
	Group	1	183.342	13.514	0.002	0.416
	Error	19	13.567			
Loss of Fetus	Constant	1	9.332	1.037	0.321	0.052
	Group	1	137.009	15.228	< 0.001	0.445
	Error	19	8.997			
Childbirth	Constant	1	8.079	0.488	0.493	0.025
	Group	1	192.889	11.640	0.003	0.380
	Error	19	16.572			
Maternal Health	Constant	1	72.020	2.754	0.114	0.126
	Group	1	172.405	6.571	0.019	0.257
	Error	19	26.390			
Body Image	Constant	1	4.544	0.182	0.675	0.009
	Group	1	108.679	4.347	0.051	0.186
	Error	19	25.000			
Parenting	Constant	1	44.838	2.541	0.127	0.118
	Group	1	214.058	12.132	0.002	0.390
	Error	19	17.645			
Healthcare	Constant	1	55.640	0.885	0.359	0.044
	Group	1	93.468	1.486	0.238	0.073
	Error	19	62.889			
Financial	Constant	1	0.758	0.054	0.818	0.003
	Group	1	49.021	3.516	0.076	0.156
	Error	19	13.943			
Family and Social Support	Constant	1	11.494	0.300	0.590	0.016
	Group	1	9.640	0.251	0.622	0.013
	Error	19	38.363			

Thus, the findings conclusively demonstrate that emotion-focused therapy has a significant and considerable effect on reducing fear of pregnancy in women aged 20 to 30 years, particularly on the more psychological components related to pregnancy, while its impact on social and economic components is more limited.

To examine the effect of emotion-focused therapy on psychological hardiness in women aged 20 to 30 years, the assumptions of univariate analysis of covariance were first examined. The results showed that the distribution of hardiness scores in the experimental and control groups was normal. Furthermore, Levene's test for equality of variances indicated that the variances were equal between groups, and the assumption for between-subject analysis was met ($F = 3.440$, $P = 0.06$). After confirming the assumptions, univariate analysis of covariance was performed, and the results of the between-group analysis showed that the difference in mean hardiness scores between the experimental and control groups was significant ($F = 62.944$, $P < 0.001$, $\eta^2 = 0.602$). These findings indicate a strong effect of emotion-focused therapy in increasing psychological hardiness in the experimental group, and the sub-hypothesis of the study was confirmed.

Table 5. Results of One-Way Analysis of Variance (ANOVA) for Comparing Mean Psychological Hardiness in Experimental and Control Groups (Post-test)

Variable	Source	Degrees of Freedom	Mean Square	F	Significance	Effect Size (η^2)
Psychological Hardiness	Constant	1	7.977	0.685	0.415	0.025
	Group	1	732.803	62.944	< 0.001	0.602
	Error	27	11.642			

The results of Table 5 show that the mean scores of the hardiness variable were obtained as ($F = 62.944$, $P < 0.001$) with an effect size of 0.602, indicating that there was a significant difference between the experimental and control groups.

Discussion

The findings of the present study showed that emotion-focused therapy significantly increased psychological hardiness and reduced fear of pregnancy in women aged 20 to 30. Multivariate analysis of covariance yielded significant results, indicating a strong and stable effect of the intervention. These findings suggest that emotion-focused therapy can be used as an effective intervention in the field of women's mental health, especially during the sensitive period of pregnancy and childbirth.

Psychological hardiness plays a protective role as an important resource for coping with psychological pressure and stress related to pregnancy. Emotion-focused therapy, by providing a context for identifying, experiencing, and reconstructing maladaptive emotions, increases women's ability to manage emotions and psychological pressure and strengthens the components of hardiness, including commitment, control, and challenge. Reducing fear of pregnancy, as one of the maladaptive emotions, is also a direct result of the process of emotional reconstruction.

These findings are consistent with the studies by Shahidi et al. (2021) and Mobasher et al. (2022), which showed that emotional interventions can increase psychological hardiness and resilience. In addition, studies by Hosseini et al. (2018) and Sandvik et al. (2020) showed that effective emotion regulation strategies are directly associated with increased resilience and hardiness.

The results also showed that emotion-focused therapy had a significant effect on increasing psychological hardiness in women, and the mean hardiness scores in the treatment group were significantly higher than those in the control group. This finding is consistent with the four-component theory of hardiness proposed by Kloof et al. (2025), which states that hardiness includes the components of commitment, control, challenge, and self-confidence and is related to an individual's ability to cope with stress and psychological pressure. Studies by Huizink et al. (2002), Sarani et al. (2015), and Mohammadi (2011) also showed that increasing resilience can reduce the negative effects of psychological stress and facilitate adaptation to stressful situations.

The findings of thThis study are also consistent with the results of Omrani et al. (2021), who showed that emotion-focused intervention significantly improved psychological resilience and sleep quality. This result also aligns with the findings of Torabian et al. (2024), who emphasized the role of this treatment in promoting self-efficacy and growth after psychological trauma.

It seems that emotion-focused therapy strengthens the three components of hardiness- commitment, control,

and challenge- by reducing emotional avoidance and enhancing the sense of control over internal conditions. It also helps individuals evaluate the pregnancy situation not as an absolute threat, but as a manageable experience.

The results of the data analysis showed that the mean scores of various components of fear of pregnancy in the experimental group decreased significantly after the intervention, especially for the components of "fetal health," "fetal loss," "childbirth," and "childrearing," for which effect sizes were greater than 0.25, indicating strong intervention effectiveness. The "maternal health" component also showed a significant decrease, although the magnitude of the effect was moderate. For the "body image" component, the effect was at the threshold of significance. Other components, such as health care, finances, and social support, did not change significantly.

These findings are consistent with domestic and international studies (Isbir et al., 2022; Hajihatamloo et al., 2025; Chen et al., 2021; Gonzalez et al., 2022), which show that psychological interventions, especially emotion-focused therapies, can significantly reduce fear and anxiety related to pregnancy.

Specifically, fear related to fetal health and fetal loss, which is often accompanied by intense anxiety and intrusive thoughts about the child's future, was significantly reduced through the safe space of emotion-focused therapy and via the identification, processing, and reconstruction of related emotions (Gonzalez et al., 2022). Similarly, fear of childbirth, which is rooted in concerns about pain and physical complications, was moderated through training in practical emotion-management skills and goal-directed coping techniques (Amini & Alavi, 2024).

Overall, the present findings indicate a strong impact of the intervention on the emotion-based components of pregnancy-related fear. They align well with existing research on the effectiveness of emotion-focused therapies and underscore the central role of emotion processing in reducing fears during this sensitive period of women's lives (Bargue et al., 2024).

These findings are also consistent with studies (Isbir et al., 2023; Hajihatamlou et al., 2025) showing that psychological interventions and emotion-focused therapies can reduce fear and anxiety related to pregnancy. In particular, Isbir (2023) emphasized that emotion therapies aimed at regulating women's psycho-emotional reactions to pregnancy-related conditions reduce fears related to fetal health, childbirth, and parenting.

Regarding fear of pregnancy, the high prevalence of this phenomenon, confirmed in recent studies, including Hay et al. (2025), who reported a rate of 80% in large samples, doubles the need for therapeutic interventions. The results of the present study showed that reducing fear of pregnancy is possible through an emotion-focused approach. This finding is consistent with the study by Mijalovic and Taubman (2025), who showed that resilience and social support are key protective factors in reducing fear of pregnancy.

Because emotion-focused therapy develops individuals' emotion-regulation skills, individuals are better able to explore their fears in a therapeutic context characterized by acceptance and empathy. This is consistent with the findings of Amirshahi et al. (2024), who emphasized the effectiveness of this therapy in improving health-promoting behaviors. In addition, the reduction in emotional problems and depression resulting from emotion-focused therapy, also reported by Forough et al. (2024), may indirectly reduce fear of pregnancy. When individuals' maladaptive emotions and core anxieties are processed with the help of a therapist, their "mental image of pregnancy" changes. In fact, this therapy provides the psychological foundation for reducing fears related to childbirth and pregnancy by transforming unpleasant emotions into more adaptive emotions.

The mechanisms of action of emotion-focused therapy can be explained from several perspectives. First, providing opportunities to identify and process negative emotions strengthens resilience and reduces anxiety. Second, creating a safe and empathetic space facilitates the experience and reconstruction of fear- and anxiety-related emotions associated with pregnancy. Strengthening emotion-regulation skills also increases women's ability to cope with psychological pressure and reduces pregnancy-related fears. In addition, cognitive and emotional reconstruction of women's attitudes toward pregnancy, from a threat to an opportunity for growth and motherhood, may increase resilience and self-confidence.

Conclusion

The present study was conducted to investigate the effectiveness of emotion-focused therapy on psychological toughness and fear of pregnancy in women aged 20 to 30 years. The results showed that implementing this therapeutic approach led to a significant increase in psychological toughness and a significant decrease in fear of pregnancy in the experimental group. These findings indicate that promoting emotional awareness, facilitating adaptive emotional processing, and reconstructing maladaptive emotions can enhance women's ability to cope with anxiety-provoking conditions (especially pregnancy) and can foster a sense of control and psychological competence.

These results are consistent with the theoretical foundations of emotion-focused therapy, which emphasize the role of core emotions in shaping individual adaptation, and they also align with previous research supporting the effectiveness of emotion-oriented interventions in promoting resilience and reducing anxiety. From a practical perspective, the present findings suggest that emotion-focused therapy can be used as an effective intervention in counseling and reproductive health centers to improve the mental health of young women, reduce pregnancy-related concerns, and potentially enhance quality of life and marital relationships.

However, the results should be interpreted with caution because limitations such as the small sample size, the restricted age range, the focus on a single geographic area, and the use of self-report measures may limit the generalizability of the findings. Therefore, future research should use larger and more diverse samples, multi-source measures, and longitudinal designs, and should evaluate the effectiveness of this treatment in comparison with other psychotherapy approaches, such as cognitive-behavioral therapy. In sum, the findings of this study underscore the importance of addressing emotional dimensions in improving women's mental health and suggest that emotion-focused therapy may be an effective approach for reducing fear of pregnancy and strengthening resilience-related resources such as psychological toughness.

Overall, emotion-focused therapy may increase women's psychological resilience, flexibility, and self-confidence by enhancing psychological hardiness and reducing pregnancy-related emotional fears. These findings suggest that emotion-focused interventions not only improve women's mental health but can also be used as part of educational and therapeutic programs to empower young Iranian women and help them manage multiple life roles, including education, employment, and preparation for family life.

Research Limitations

The present study had several limitations that should be considered when interpreting the results.

First, the sampling method used (available sampling) and the lack of random sampling, combined with a limited sample size, necessitate caution when generalizing the findings to the broader population. Second,

due to the nature of the study and the limited time frame, it was not possible to examine long-term changes or fully elucidate causal relationships. Furthermore, this research did not measure and control for potentially influential variables, such as socioeconomic status and the level of spousal social support, which could affect the outcomes. Additionally, the reliance on self-report instruments may introduce biases, such as social desirability bias. Finally, the restriction of the statistical population to women aged 20 to 30 in Isfahan, along with specific cultural considerations, limits the generalizability of the results to other age groups and different geographical contexts.

Considering these limitations, it is recommended that future research employ random sampling methods and more diverse statistical populations (in terms of age and geographical context) to enhance the generalizability of findings. Longitudinal studies with long-term follow-up periods are also advised to evaluate the stability of treatment effects. Utilizing multiple measurement tools (e.g., clinical interviews) alongside qualitative methods can help mitigate self-reporting biases. Lastly, careful control of intervening and background variables, including socioeconomic status, spousal social support, and personality characteristics, could provide a deeper understanding of the effectiveness of psychological interventions in this area.

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