

## Comparing the Effectiveness of Emotional Efficacy Therapy and Integrated Transdiagnostic Treatment on Psychological Fatigue in Women Involved in Emotional Divorce with Early Marriage

Abdolhamid Rastegar<sup>1</sup> , Emad Yousefi<sup>2</sup> , Leila Khajepour<sup>3</sup> 

1. PhD student in Counseling, Department Of Counseling, Qeshm Branch, Islamic Azad University, Qeshm, Iran

2. Assistant Professor, Department of Psychology, Islamic Azad University, Qeshm, Iran , [emad.yousefi.30@gmail.com](mailto:emad.yousefi.30@gmail.com)

3. Assistant Professor, Department of Education, Islamic Azad University, Qeshm, Iran

### Article Info

#### Article type:

Research Article

#### Article history:

Received 12 May. 2024

Received in revised form 8

Sep. 2024

Accepted 24 Oct 2024

Published online 01 Mar. 2025

#### Keywords:

Emotional efficacy therapy,

Integrated transdiagnostic  
treatment,

Psychological fatigue,

Emotional divorce,

Early marriage

### ABSTRACT

**Objective:** The objective of the current investigation was to evaluate the comparative efficacy of emotional efficacy therapy versus integrated transdiagnostic therapy on psychological fatigue among women experiencing emotional divorce as a consequence of early marriage.

**Methods:** This research was designed as a quasi-experimental study employing a pre-test and post-test framework along with a control group, aligning with its intended aims. The sample population comprised 45 women engaged in emotional divorce, all of whom were diagnosed by licensed psychologists at counseling centers located in Shiraz. Participants were selected through convenience sampling from the pool of women seeking counseling services and were randomly allocated into three groups of 15 individuals each (with one control group consisting of 15 participants and two experimental groups totaling 30 participants). Data collection was conducted utilizing the Multidimensional Fatigue Inventory (MFI) as a measurement instrument. The analysis of the data was executed through SPSS software, encompassing covariance analysis.

**Results:** The findings revealed that both integrated transdiagnostic therapy and emotional efficacy therapy were effective in alleviating psychological fatigue among women undergoing emotional divorce and early marriage; however, there was no statistically significant difference in the effectiveness between the two therapeutic approaches, integrated transdiagnostic therapy and emotional efficacy therapy.

**Conclusions:** The results predominantly endorse two therapeutic approaches: integrative transdiagnostic therapy and emotional efficacy therapy, which have been identified as efficacious interventions for psychological fatigue in women who experiencing emotional divorce.

**Cite this article:** Rastegar, A., Yousefi, E. & Khajepour, L. (2025). Comparing the effectiveness of emotional efficacy therapy and integrated transdiagnostic treatment on psychological fatigue in women involved in emotional divorce with early marriage. *Iranian Journal of Educational Research*, 4 (1), 195-214.

DOI: <https://doi.org/10.22034/4.1.195>



© The Author(s).

DOI: <https://doi.org/10.22034/4.1.195>

Publisher: University of Hormozgan.

## Introduction

The findings of the investigation reveal that a significant proportion of couples pursuing divorce were relatively youthful at the moment of their nuptials and perceive this youthful age as the predominant factor contributing to divorce; this phenomenon is particularly prevalent among women ([Yoosefi Lebni et al., 2023](#)). A critical consideration regarding early marriages is that certain couples, particularly women, may opt against formal divorce due to factors associated with early matrimony and a lack of adequate information, in conjunction with additional influences (such as procreation, financial demands, negative perceptions of divorce, absence of material and psychological support, familial opposition, apprehension regarding the loss of familial and social standing, fear of solitude, anxiety about diminishing social prestige, obsessive personality traits, limited decision-making autonomy, concern for an unpredictable future, trepidation of social rejection, or even acclimatization to cohabitation) and may subsequently encounter various complications ([Sodani et al., 2021](#)); however, they do not reference a formal and legal dissolution of marriage, which constitutes the essence of an emotional divorce.

In the context of emotional divorce, although the partners may persist as a social entity, their mutual attraction and trust have dissipated. Bohannon posits that emotional divorce represents the most pivotal phase within the divorce continuum and signifies an erosion of the marital bond, supplanted by a sense of estrangement. Despite the couple's continued coexistence as a social unit, their mutual attraction and trust have indeed vanished. In such scenarios, rather than providing support to one another, the partners engage in behaviors aimed at inflicting harm, disappointment, and diminishing each other's self-worth, each individual striving to substantiate the other's faults, deficiencies, and rejection. Emotional divorce is experienced as a distressing dichotomy between submission and self-loathing versus self-mastery, with the couple inflicting pain upon one another due to their feelings of despair and hopelessness ([Salehpour et al., 2019](#)). In examining the causal and mediating factors associated with emotional divorce, the research outcomes suggest that emotional divorce is not a phenomenon arising from a singular, explicit factor, but is rather the result of an amalgamation of influences, including: the failure to satisfy the emotional requirements of partners, male inattentiveness, communication deficits, inconsistent cognitive and attitudinal patterns between genders, a lack of empathy and companionship, avoidance of humor within the couple's relationship, sexual difficulties, etc., which collectively culminate in emotional

divorce and exhibit variability in the processes that create emotional divorce within the lives of the women investigated ([Vatankhah et al., 2021](#)).

A construct that arises from emotional dissolution and has been addressed in early marital research is the phenomenon of psychological fatigue, which incrementally propels individuals toward disengagement from married existence ([Ordway et al., 2020](#)). Fatigue is recognized in the realm of psychology as one of the most significant and prevalent concerns ([Van Cutsem et al., 2017](#)). Numerous patients seeking the assistance of psychologists and psychiatrists report experiencing exhaustion; however, they frequently articulate this sentiment through alternative conventional terminologies. The issue of fatigue has been explored in assorted studies under various designations such as depression, apathy, or helplessness. Despite the shared attributes among these constructs, fatigue possesses distinct characteristics that warrant independent examination ([Babapour et al., 2016](#)). Psychological fatigue represents a topic that lacks an extensive historical context within psychological literature, and in instances where it has been referenced, it has typically been equated with terms such as anxiety, fear, and apprehension ([Bay & Novinrouz, 2022](#)). In the preceding decade, a relatively substantial body of research has been dedicated to the exploration of worry by psychological scholars, thereby establishing worry as a significant topic of inquiry within the discipline of psychology ([Tran et al., 2020](#)). Mental fatigue constitutes a distressing and profound psychological condition that diminishes an individual's capabilities and performance in both physical and cognitive domains, and it remains unaffected by sleep or rest. Furthermore, a decline in the quality of life is among the repercussions associated with mental fatigue. When stress levels reach excessive thresholds, the potential for mental fatigue emerges and evolves progressively, resulting in diminished motivation, energy, and concentration ([Babapour et al., 2016](#)). Manifestations of mental fatigue encompass the following: impatience, irritability, excessive daydreaming, insufficient concentration on daily responsibilities, overeating, poor sleep quality or insomnia, magnifying trivial tasks, feelings of emptiness, and an increase in daily conflicts with others ([Hu & Lodewijks, 2020](#)). It is noteworthy that mental fatigue presents symptoms that are analogous to those of depression, thereby rendering an individual's life monotonous and stagnant.

To date, a multitude of treatments and interventions have been employed to enhance the quality of life for couples; however, the identification of the most effective treatment modality should be prioritized to yield more favorable outcomes. In response to the limitations inherent in cognitive-behavioral methodologies, practitioners have advocated for transdiagnostic therapy utilizing an integrative approach, whereby a singular treatment protocol is applied ([Barlow et al., 2020](#)). Among the various protocols proposed within the realm of integrated therapy, the Barlow Integrated Transdiagnostic Protocol demonstrates enhanced applicability in addressing numerous disorders, particularly emotional divorce ([Barlow et al., 2017](#)). This methodology represents a form of transdiagnostic cognitive-behavioral therapy that emphasizes emotional factors and is specifically tailored to address emotional and mood-related disorders. This therapeutic intervention places significant importance on the perception and reaction of the emotional systems of individuals experiencing emotional difficulties, and by underscoring the functional characteristics of internal emotional states, it addresses maladaptive attempts to regulate individuals' emotional experiences while initiating the facilitation of the emotional processing mechanism ([Chapdelaine et al., 2023](#)).

Integrative Transdiagnostic therapy, through a structured assessment in a meta-cognitive framework, elucidates individuals' cognitive inconsistencies and dysfunctions, alongside emotional avoidances, and by augmenting their insight (impacting the cognitive awareness of individuals undergoing emotional divorce) with respect to these dysfunctions, it establishes a foundation for ameliorating these conditions within a comprehensive and functional paradigm ([Wise et al., 2023](#)). This therapeutic approach exerts a beneficial influence on the alleviation of mood and anxiety disorders and, by promoting the recovery trajectory and emotional responsiveness of individuals, while ameliorating existing tensions, it concurrently forestalls the intensification of such symptoms ([Schaeuffele et al., 2022](#)). In contrast to traditional cognitive-behavioral methodologies, this therapeutic model exhibits a more constructive role in enhancing transdiagnostic symptoms of individuals grappling with mood-related challenges (including issues pertaining to mental fatigue and feelings of isolation) and can serve as a foundational strategy for addressing these concerns ([Timulak et al., 2022](#)).

Integrative transdiagnostic therapy identifies individuals' maladaptive emotional symptoms and, through instruction in the reconstruction process as well as strategies for managing internal

perceptual emotions, significantly mitigates individuals' mental-psychological tensions while substantially enhancing the psychological security of this population ([Fujisato et al., 2021](#)). [Wise et al. \(2023\)](#) elucidated in their investigation that one of the salient functions of integrative transdiagnostic therapy is to assist individuals in augmenting their capacity to regulate internal emotional states and also to confront the underlying causes of maladaptive emotions, which is accomplished by focusing on both the emotional and cognitive frameworks of this demographic. An unstable cognitive structure and the presence of unconstructive beliefs (which are frequently observed in early marriages) serve as principal contributors to the emergence and persistence of various issues, a factor that is emphasized for correction during integrative transdiagnostic therapy, thereby enhancing the efficacy of this therapeutic approach across diverse domains, with the expectation that it will also positively influence the challenges faced by the current cohort.

There exist alternative therapeutic modalities through which individuals experiencing emotional divorce can articulate their negative emotions and feelings, thereby facilitating the healing of their existential wounds. Women undergoing emotional divorce can acquire the requisite skills to engage constructively with the traumas of their lives throughout the therapeutic process. One particular treatment model that may prove effective in ameliorating and addressing the trauma associated with emotional divorce, while also mitigating the arising complications, is emotional efficacy therapy ([Ramezani et al., 2023](#)). Emotional efficiency therapy represents a form of transdiagnostic intervention that synthesizes elements from acceptance and commitment therapy, dialectical behavior therapy, and cognitive behavioral therapy. By employing five essential components—emotion awareness, mindful acceptance, values-based action, mindful coping, and exposure-based skills practice—this therapeutic approach assists women experiencing emotional divorce, particularly those with prior early marriages, in acquiring strategies that facilitate the development of a constructive relationship with their emotions, thereby replacing maladaptive responses that are contextually incongruent ([Ebrahimi et al., 2021](#)). Furthermore, emotional efficiency therapy addresses three transdiagnostic mechanisms, specifically significant distress intolerance, elevated emotional avoidance, and persistent rumination and excessive worry, which are critically associated with emotional dysregulation ([Bayrami et al., 2021](#)). Broadly defined, emotional efficiency pertains to the capacity of an individual to effectively experience and respond to the spectrum of emotions that problematic individuals encounter throughout their lives, thus

possessing the potential to alter the beliefs of the majority in accordance with contextual factors and to supplant irrational beliefs. Within the framework of emotional efficiency-based therapy, it is posited that diminished emotional efficiency is predominantly attributable to vulnerabilities or foundational patterns of maladaptive behavioral responses, which manifest as behaviors aimed at circumventing emotional distress or the aversion to pain, ultimately exacerbating or perpetuating psychological harm. In this therapeutic paradigm, emotional dysregulation is characterized by a diverse array of thoughts, feelings, physical sensations, and behavioral inclinations that are maladaptive relative to the contextual framework. Supporting the efficacy of emotional efficiency-based therapy, [Niknezhadi et al. \(2023\)](#) indicated that this modality has enhanced self-regulation and intimacy among women grappling with marital infidelity. Additionally, findings from the research conducted by [Zolfaghari et al. \(2021\)](#) revealed that emotional efficiency, intimacy, and forgiveness grounded in personal values exert a significant direct and indirect impact on recovery from marital infidelity. Moreover, [Imanizad et al. \(2022\)](#) demonstrated that emotion-focused couple therapy can serve as a valuable and effective strategy for therapists aiming to increase forgiveness and diminish dysfunctional beliefs among couples, thereby contributing to the enhancement of marital relationships.

In conclusion, and in consideration of the previously articulated points, it is essential to note that given the vulnerable demographic within society (women experiencing emotional divorce), the scarcity of analogous research pertaining to the focus of the current study, and the imperative to employ the most effective intervention strategies, the present investigation was conceived to examine whether a statistically significant difference exists in the efficacy of emotional efficiency-based therapy compared to integrated transdiagnostic therapy in mitigating psychological fatigue among women engaged in emotional divorce and early marriage.

### Material and Methods

The current investigation constitutes an applied research endeavor with respect to its objectives and employs a quasi-experimental methodology characterized by a pre-test and post-test design involving a control group. The statistical population for this inquiry encompassed all women who entered into early marriages and sought assistance from counseling centers in Shiraz during the year 2023, concurrently experiencing marital difficulties. A sample size of 15 individuals per

group in semi-experimental research is sufficient to yield statistically significant outcomes; consequently, the sample for this investigation comprised 45 women engaged in emotional divorce, all of whom were diagnosed by qualified psychologists at counseling facilities in Shiraz (specifically Segal, Afagh, and Avae Mehr counseling centers). The participants were selected from the entire pool of women seeking counsel and were randomly allocated into three groups, each consisting of 15 individuals (with one control group of 15 individuals and two experimental groups totaling 30 individuals). One of the experimental groups received training in emotional efficiency-based therapy, while the second experimental group underwent training in integrated transdiagnostic therapy; the control group, conversely, did not receive any form of training.

The inclusion criteria for participation in this study were delineated as follows: the participants were required to reside in Shiraz, to be married prior to reaching the age of 18, and to have completed a minimum of three years of military service. Furthermore, individuals had to provide informed consent to partake in the study and must not have been afflicted by any specific physical or psychological disorders, as assessed through preliminary interviews. The exclusion criteria for the research encompassed: failure to provide comprehensive responses to the survey questions, reluctance to participate in the study, and involvement in concurrent research or interventions.

The assessment tool employed in this study was the Smets Multidimensional Fatigue Inventory (MFI).

**The Smets Multidimensional Fatigue Inventory (MFI):** This inventory, devised by [Smets et al. \(1995\)](#), comprises 20 items distributed across five subscales, namely: general fatigue (4 items), physical fatigue (4 items), decreased activity (4 items), diminished motivation (4 items), and mental fatigue (4 items), which collectively serve to evaluate the construct of fatigue. The questionnaire is rated on a 5-point Likert scale ranging from 1 = yes, completely true to 5 = no, completely false. Items 2, 5, 9, 10, 13, 14, 16, 17, 18, and 19 are to be scored in reverse order. The cumulative score for each domain ranges from 4 to 20, while the total fatigue score—obtained by summing the scores across the domains—can vary from 20 to 100. A higher total indicates an elevated level of fatigue. The assessment of the validity and reliability of this questionnaire was conducted across various demographic cohorts, including individuals diagnosed with cancer undergoing radiotherapy, patients afflicted with chronic fatigue syndrome, first-year students in psychology and medicine, military personnel, and third-year medical students. Confirmatory



factor analysis indicated that the items within each dimension were representative of the same construct, and the questionnaire demonstrated strong internal consistency (with alpha coefficients for general, physical, and mental fatigue exceeding 0.80, while those for decreased activity and motivation surpassed 0.65). Findings from other studies further corroborate the robust reliability and validity of this assessment instrument. This questionnaire has been translated into Persian, with its reliability and validity having been substantiated ([Khani Jazani et al., 2012](#)). In the investigation conducted by [Chehrehgosha et al. \(2013\)](#), the mean fatigue score among patients was determined to be  $54.65 \pm 8.78$  on a scale of 100 points. The scores documented in the respective domains were as follows: general fatigue  $9.98 \pm 2.31$ , physical fatigue  $11.66 \pm 2.79$ , mental fatigue  $10.72 \pm 2.84$ , decreased activity  $10.86 \pm 2.18$ , and decreased motivation  $11.42 \pm 2.57$ .

### Research implementation method

Initially, the researcher composed a formal correspondence on behalf of the Islamic Azad University, Qeshm Branch, directed towards the counseling centers. Subsequently, by visiting the counseling centers, a cohort of 45 individuals who satisfied the entry criteria for the study was selected through a convenience sampling technique and then randomly allocated into three distinct groups (first experimental group: 15 individuals; second experimental group: 15 individuals; control group: 15 individuals). The first experimental group underwent training in emotional efficacy-based therapy, while the second experimental group received instruction in integrated transdiagnostic therapy, and the control group did not partake in any targeted intervention. Following data collection, the results were analyzed utilizing SPSS version 26 software.

### Treatment protocols

**Table 1.** Summary of emotional efficacy-based therapy sessions

Session	Aim	Content
1	Awareness of emotions	Establishing a relationship and introducing the training program, training in practicing the technique of psychological observation of emotions (awareness of emotions) and practicing observing one's own and others' emotions
2	Identifying your dysfunctional thoughts	Training in brain function in the dimension of emotion, identifying thoughts, practicing surfing on dysfunctional thoughts, psychological training on surfing on emotions and confrontation
3	Mindful acceptance	Conscious acceptance and surfing on emotions using the metaphor of the monster on the bus, training in identifying the moment of choice (the time between emotional arousal and one's response), practicing surfing on emotions and mindful acceptance of emotions
4	Value-based action	Practice mindful acceptance and introducing values-based action, mindful coping through relaxation (abdominal breathing, tension-free relaxation, breathing with sign control, practicing the five senses and self-soothing. Values Statement Practice -



5	Choosing action consistent with values	Practice mindful acceptance and value-based action selection, emotional coping, emotional coping practice
6	Fundamental acceptance	Teaching fundamental acceptance practice by facing emotion and replacing adaptive coping thoughts with dysfunctional coping thoughts
7	Redirecting attention	Practice mindful coping through attention shifting and visual exposure to real situations, shifting attention from the disturbing stimulus or emotion to behavior that is consistent with values, such as intimacy, which leads to improved relationships and a positive impact on emotional regulation. Review of sessions and test administration
8	Summary and post-test	Receive feedback and troubleshoot, summarize and evaluate sessions, appreciate participation in sessions, administer post-test. Review of sessions and administer post-test

This therapeutic protocol was developed by [McKay and West \(2016\)](#) and has also been employed by [Bayrami et al. \(2021\)](#) in the Iranian population.

**Table 2.** Summary of Integrative Transdiagnostic Therapy Sessions

Session	Aim	Content
1	Increasing motivation to participate in treatment	Increase patients' readiness and motivation for behavioral change and strengthen self-efficacy through belief in one's own ability to successfully achieve the desired change.
2	Psychological education and emotional experience seeking	Psychoeducation about the nature of emotions, the main components of emotional experience, and the concept of learned responses.
3	Emotional awareness training	Identifying how one reacts and responds to emotions, non-judgmental and present-centered awareness in emotional experience.
4	Cognitive appraisal and reappraisal	Identifying the role of maladaptive automatic evaluations in creating emotional experiences, identifying one's own thinking patterns and methods for correcting maladaptive thinking.
5	Emotional avoidance and emotion-induced behaviors	Identifying emotional patterns and maladaptive behaviors caused by emotion, being aware of how behaviors affect the continuation of discomfort, trying to change current patterns of emotional responses.
6	Awareness of and tolerance for bodily sensations	Increasing awareness of the role of bodily sensations along with emotional experiences.
7	Endogenous and situation-based emotional coping	Emphasis on internal and external triggers of emotion, increasing tolerance to them, and learning new contexts.
8	Relapse prevention	Review of therapeutic concepts and discussion of treatment progress, anticipation of potential problems and how to deal with them, encouragement and encouragement to continue the methods taught.

This treatment protocol was formulated by [Barlow \(2000\)](#). [Zareie Faskhudi et al. \(2021\)](#) applied this protocol for the Iranian community in their research endeavors.

## Results

The data were analyzed using SPSS software (version 26) in the form of descriptive and inferential tests. Mean, standard deviation, etc. tests were used to describe the research indicators and the research objectives were examined through the inferential test of analysis of covariance.

In Table (3), descriptive statistics related to the mean and standard deviation of psychological fatigue scores are shown separately for the control group, integrated transdiagnostic therapy, and emotional efficacy-based therapy in two measurement stages (pre-test and post-test).

**Table 3.** Statistical description of psychological fatigue scores in two measurement stages by group

Group	Variable	Pretest		Posttest	
		Mean	SD	Mean	SD
Control	General fatigue	15.33	2.637	15.07	2.344
	Physical fatigue	14.13	2.560	14.67	2.870
	Reduced activity	13.35	5.563	12.92	4.838
	Reduced motivation	15.67	3.132	14.47	2.232
	Mental fatigue	12.27	6.158	12.62	5.436
	Psychological fatigue	70.75	7.825	69.75	8.214
Integrated transdiagnostic therapy	General fatigue	14.87	2.356	10.27	3.058
	Physical fatigue	13.40	2.798	10.67	2.610
	Reduced activity	13.27	5.763	9.47	4.240
	Reduced motivation	16.67	2.193	13.47	2.475
	Mental fatigue	13.27	4.652	9.13	3.665
	Psychological fatigue	71.48	7.683	53.01	7.945
Emotional efficacy-based therapy	General fatigue	15.20	3.005	11.60	3.112
	Physical fatigue	12.73	2.840	8.80	2.242
	Reduced activity	14.93	5.257	8.40	4.968
	Reduced motivation	15.67	2.795	11.53	2.924
	Mental fatigue	13.73	4.061	8.60	4.188
	Psychological fatigue	72.26	8.112	48.93	7.832

As can be seen, in the control group, the average scores in the pre-test and post-test stages do not show much change, but in the experimental groups, we witness a greater decrease in scores in the post-test compared to the pre-test.

In order to compare the effectiveness of emotional efficiency-based therapy and integrated transdiagnostic therapy on psychological fatigue of women involved in emotional divorce with early marriage, a multivariate analysis of covariance (MANCOVA) test was used. The results of this test are presented in table 4.

**Table 4.** Results of multivariate analysis of covariance to compare psychological fatigue of the experimental and control groups

Effect	Test	Value	F	Effect DF	Error DF	P	Effect size
Group	Pillai's Trace	0.771	4.263	10	68	0.001	0.385
	Wilks' Lambda	0.246	6.695	10	66	0.001	0.504
	Hotelling's Trace	2.988	9.563	10	64	0.001	0.599
	Roy's largest root	2.965	20.161	5	34	0.001	0.748

As can be seen, the significance level of all four relevant multivariate statistics, namely the Pillai's Trace, Wilks' Lambda, Hotelling's Trace and Roy's largest root, is less than 0.01 ( $p < 0.01$ ). Thus, the null hypothesis is rejected and it is determined that there is a significant difference between the levels of psychological fatigue of the experimental and control groups in the post-test. In order to examine the differences between the groups in each of the components of psychological fatigue, a between-subjects effects test was used, the results of which are presented in table 5.

**Table 5.** Between-subjects effects test for comparing the components of psychological fatigue in the experimental and control groups in the post-test

Variable	Source	SS	DF	MS	F	P	Effect size
General fatigue	Between group	139.460	2	69.730	12.544	0.001	0.404
	Error	205.680	37	5.559			
Physical fatigue	Between group	65.328	2	32.664	17.110	0.001	0.480
	Error	70.635	37	1.909			
Reduced activity	Between group	409.747	2	204.873	14.230	0.001	0.435
	Error	532.709	37	14.398			
Reduced motivation	Between group	165.054	2	82.527	16.436	0.001	0.470
	Error	185.780	37	5.021			
Psychological fatigue	Between group	102.184	2	51.092	5.414	0.009	0.226
	Error	349.138	37	9.436			

Table 5 shows the results of the between-subjects effects test for comparing the components of psychological fatigue in the experimental and control groups in the post-test. According to the results presented in Table 5, the F value obtained is significant for all components at the 0.01 level ( $p < 0.01$ ). Therefore, the null hypothesis is rejected and it is concluded that there is a significant difference between the mean scores of the components of psychological fatigue in the control, integrated transdiagnostic therapy, and emotional efficacy-based therapy groups in the post-test. For pairwise comparisons of the treatment groups with each other and with the control group, the Bonferroni post-test test was used. The results obtained are presented in table 6.

**Table 6.** Results of the Bonferroni post hoc test

Variable	Group	Group	Mean difference	Std. Error	P
General fatigue	Control	Integrated transdiagnostic therapy	4.134	0.978	0.001
		Emotional efficacy	4.458	0.959	0.001
	Integrated transdiagnostic therapy	Emotional efficacy	0.324	0.884	1
Physical fatigue	Control	Integrated transdiagnostic therapy	2.537	0.573	0.001
		Emotional efficacy	3.197	0.562	0.001
	Integrated transdiagnostic therapy	Emotional efficacy	0.661	0.518	0.631
Reduced activity	Control	Integrated transdiagnostic therapy	7.108	1.574	0.001
		Emotional efficacy	7.626	1.543	0.001
	Integrated transdiagnostic therapy	Emotional efficacy	0.517	1.423	1
Reduced motivation	Control	Integrated transdiagnostic therapy	4.356	0.929	0.001
		Emotional efficacy	4.937	0.911	0.001
	Integrated transdiagnostic therapy	Emotional efficacy	0.581	0.840	1
Psychological fatigue	Control	Integrated transdiagnostic therapy	3.526	1.274	0.026
		Emotional efficacy	3.825	1.250	0.012
	Integrated transdiagnostic therapy	Emotional efficacy	0.299	1.152	1

Based on the results of the Bonferroni post hoc test, both integrated transdiagnostic therapy and emotional efficacy-based therapy were effective in reducing psychological fatigue in women involved in emotional divorce and early marriage, but there was no significant difference between the effectiveness of the two methods of integrated transdiagnostic therapy and emotional efficacy-based therapy.

## Discussion

Based on the findings derived from the post hoc Bonferroni analysis, both integrated transdiagnostic therapy and emotional efficiency-based therapy demonstrated efficacy in mitigating psychological fatigue among women experiencing emotional divorce and early marriage; however, no statistically significant difference was observed in the effectiveness of these two therapeutic modalities.

Concerning the pronounced impact of emotional efficiency-based therapy and integrated transdiagnostic therapy on various dimensions of psychological fatigue (including general fatigue, physical fatigue, reduced activity, diminished motivation, and mental fatigue) in women facing emotional divorce and early marriage, as well as the absence of a significant differential effect between these two therapeutic approaches on the aforementioned variable, existing research literature indicates that these findings are partially corroborated by the investigations conducted by [Sharifi et al. \(2020\)](#), [Ebrahimi et al. \(2021\)](#), [Zareie Faskhudi et al. \(2021\)](#) and [Ramezani et al. \(2023\)](#).

To elucidate the substantial impact of emotional efficiency therapy and integrated transdiagnostic therapy on psychological fatigue (encompassing general fatigue, physical fatigue, reduced activity, diminished motivation, and mental fatigue) experienced by women engaged in emotional divorce and early marriage, as well as the lack of a significant distinction between these two therapeutic modalities regarding the aforementioned variable, both empirical evidence and the theoretical framework posited by the researcher are employed. Throughout emotional efficiency therapy, participants were directed towards enhancing their emotional awareness. Individuals recognized both positive and negative emotions, became acquainted with the manifestations of each, and developed the capacity to identify these emotions at the precise moment of their emergence. The precise identification of positive and negative emotions enabled participants to contemplate strategies for their voluntary expression. For instance, upon recognizing feelings of sadness or anger within themselves, participants were encouraged to refrain from allowing these emotions to persist unduly, opting instead for strategies aimed at alleviation or elimination. The recognition and articulate expression of emotions constituted the initial effective step in the mitigation of mental fatigue. When an individual harbors an emotion internally for an extended duration without expression, they may become irritable and gradually succumb to mental fatigue. However, through the acquisition of skills in recognizing and constructively expressing emotions, this contributing factor to mental fatigue can be effectively addressed.

[Ramezani et al. \(2023\)](#) posited in their research that one of the primary contributors to mental and emotional fatigue is the persistent experience of negative emotions—a phenomenon that is alleviated during emotional efficiency therapy. These researchers illustrated that emotional efficiency therapy, by enhancing participants' emotional awareness and instructing them on the

expression of both positive and negative emotions, significantly aids individuals in transcending the burdens imposed by negative emotions, thus fostering greater mental security and tranquility. In the subsequent phases of this therapeutic process, the therapist facilitated the differentiation of positive and negative thoughts among participants. The ability to distinguish between positive and negative thoughts, coupled with the modification of negative cognitions through the cognitive restructuring process, represents a fundamental component of emotional efficiency therapy ([Ebrahimi et al., 2021](#)).

A salient factor that significantly contributes to the enhancement of psychological safety while concurrently mitigating psychological tensions is the process of cognitive restructuring. By systematically eliminating maladaptive thoughts and substituting them with constructive and efficacious cognitions, the participants experienced a marked reduction in both mental and emotional fatigue. Indeed, the obliteration of negative thought patterns correspondingly diminished emotional and cognitive tensions, thereby augmenting the cognitive safety of the group members. The amplification of mutual safety further facilitated a decrease in the mental and psychological fatigue experienced by the participants.

Integrative transdiagnostic therapy, akin to emotional efficiency therapy, also significantly contributed to the reduction of psychological fatigue among members. Among the principal factors contributing to mental and psychological fatigue are the persistent experience of negative emotions, deleterious and pathogenic beliefs, and a disconnection from core life values. [Timulak et al. \(2022\)](#) asserted in their research that integrative transdiagnostic therapy effectively diminishes psychological and mood-related tensions while enhancing psychological security by assisting individuals in the regulation of their internal emotions, as well as in the evaluation and rectification of maladaptive beliefs. Within the framework of this therapeutic modality, the therapist instructed participants on how to recognize and articulate their internal emotional states. On one side, the members became cognizant of both their positive and negative emotions, subsequently expressing them through structured programs. They sustained this practice beyond the confines of therapy sessions. The ongoing recognition and constructive articulation of both positive and negative emotions constituted a fundamental element that laid the groundwork for the enhancement of psychological tranquility and the alleviation of mental and emotional fatigue among the participants throughout this therapeutic process. In the subsequent phase of this

therapeutic intervention, a cognitive assessment was administered to the members. They identified their cognitions, evaluated their alignment with reality, and, with the therapist's guidance, quantified their degree of conformity to actual conditions. The assessment and deconstruction of negative beliefs, enacted through a cognitive restructuring process, represented another facet of this therapeutic approach that effectively fostered an increase in the members' mental tranquility while concurrently diminishing their physical, mental, and emotional fatigue. [Sharifi et al. \(2020\)](#) further posited in their research that during integrative transdiagnostic therapy, the modification of the cognitive framework is a crucial step in alleviating mood disturbances and psychological tensions while enhancing psychological efficiency. These scholars also underscored that the execution of this component of integrative transdiagnostic therapy plays a significant role in decreasing individuals' mental and emotional fatigue.

Although both emotional efficiency and integrative meta-diagnostic methodologies have contributed significantly to the amelioration of psychological fatigue, no substantial differences were observed between these two methodologies regarding their efficacy in addressing psychological fatigue. The absence of significant distinctions between the two methodologies can be attributed to their inherent content and functional characteristics. The two methodologies exhibit a substantial degree of similarity in both nature and function. Both therapeutic methodologies emphasize the enhancement of the individual's capacity to regulate internal emotional states, as well as the assessment and modification of cognitive frameworks. The previously mentioned similarities, coupled with the absence of divergent elements within these two methodologies, render it evident that neither is superior in the alleviation of psychological fatigue.



### Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

### Ethics statement

The studies involving human participants were reviewed and approved by the ethics committee of Islamic Azad University. The patients/participants provided their written informed consent to participate in this study.

### Author contributions

All authors contributed to the study conception and design, material preparation, data collection, and analysis. All authors contributed to the article and approved the submitted version.

### Funding

The authors did (not) receive support from any organization for the submitted work.

### Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## References

- Babapour, J., Zeinali, S., Zarezade, F., & Nejati, B. (2016). The Structural Association of Religious Attitude and Coping Style with Quality of Life and Fatigue in Cancer Patients [Correlation]. *Journal of Health and Care*, 18(1), 45-54. <http://hcjournal.arums.ac.ir/article-1-436-fa.html>
- Barlow, D. H. (2000). Unraveling the mysteries of anxiety and its disorders from the perspective of emotion theory. *American psychologist*, 55(11), 1247.
- Barlow, D. H., Farchione, T. J., Bullis, J. R., Gallagher, M. W., Murray-Latin, H., Sauer-Zavala, S., . . . Boswell, J. F. (2017). The unified protocol for transdiagnostic treatment of emotional disorders compared with diagnosis-specific protocols for anxiety disorders: A randomized clinical trial. *JAMA psychiatry*, 74(9), 875-884.
- Barlow, D. H., Harris, B. A., Eustis, E. H., & Farchione, T. J. (2020). The unified protocol for transdiagnostic treatment of emotional disorders. *World Psychiatry*, 19(2), 245.
- Bay, F., & Novinrouz, E. (2022). The predictive effect of early maladaptive schemas and hardiness on burnout of elementary school teachers. *Iranian Evolutionary Educational Psychology Journal*, 4(1), 73-83.

- Bayrami, M., Hashemi Nosrat Abad, T., Smaeilpour, k., & Shiri, A. (2021). Effectiveness of Emotion Efficacy Therapy on Internet Dependency and Psychological Vulnerability in Students Addicted to Internet. *Clinical Psychology Studies*, 12(44), 23-43. <https://doi.org/10.22054/jcps.2021.56400.2459>
- Chapdelaine, A., Vasiliadis, H.-M., Provencher, M. D., Norton, P. J., & Roberge, P. (2023). Cost-effectiveness of transdiagnostic group cognitive behavioural therapy for anxiety disorders v. treatment as usual: economic evaluation of a pragmatic randomized controlled trial over an 8-month time horizon using self-reported data. *Psychological medicine*, 53(14), 6570-6582.
- Chehrehgosha, M., Dastourpour, M., Sanagu, A., & Mohamadi, A. (2013). Cancer-related fatigue and its relationship with demographic and clinical characteristics. *Jorjani Biomedicine Journal*, 1(2), 24-31.
- Ebrahimi, M., Shahhabizadeh, f., Esmaeili, A. A., & Ahi, G. (2021). The Effectiveness of Trans diagnostic based Emotion Efficiency Therapy on Emotional Distress, Nursing Stress, and Health Anxiety of Anxious Nurses; Simultaneous Follow-Up with COVID-19 Pandemic [Psychiatric and Mental Health Nursing]. *Iranian Journal of Nursing Research*, 16(5), 19-31. <http://ijnr.ir/article-1-2502-fa.html>
- Fujisato, H., Kato, N., Namatame, H., Ito, M., Usami, M., Nomura, T., . . . Horikoshi, M. (2021). The unified protocol for transdiagnostic treatment of emotional disorders among Japanese children: A pilot study. *Frontiers in Psychology*, 12, 731819.
- Hu, X., & Lodewijks, G. (2020). Detecting fatigue in car drivers and aircraft pilots by using non-invasive measures: The value of differentiation of sleepiness and mental fatigue. *Journal of safety research*, 72, 173-187.
- Imanizad, A., Golmohammadian, M., Moradi, O., & Goudarzi, M. (2022). Comparison of the effectiveness of solution-oriented couple therapy with emotion-oriented couple therapy on forgiveness, sexual function and communication beliefs of couples with marital infidelity [Research]. *Rooyesh-e-Ravanshenasi Journal(RRJ)*, 10(10), 145-160. <http://frooyesh.ir/article-1-2970-fa.html>

- Khani Jazani, R., Saremi, M., Kavousi, A., Shirzad, H., & Rezapour, T. (2012). Different Scales of Fatigue in Traffic Policemen [Systematic Review]. *Journal of Police Medicine*, 1(1), 5-14. <https://doi.org/10.30505/1.1.5>
- McKay, M., & West, A. (2016). *Emotion efficacy therapy: A brief, exposure-based treatment for emotion regulation integrating ACT and DBT*. New Harbinger Publications.
- Niknezhadi, M., Sajjadian, Ilnaz, & Manshaee, G. (2023). The Effectiveness of Emotion Efficacy Therapy on Trust in Close Relationships and Interpersonal Forgiveness of Women Injured by the Trauma of Husband Infidelity. *Journal of Family Research*, 19(3), 483-500. <https://doi.org/10.48308/jfr.19.3.483>
- Ordway, A. M., Moore, R. O., Casasnovas, A. F., & Asplund, N. R. (2020). Understanding vicarious trauma, burnout, and compassion fatigue in high-conflict divorce. *The family journal*, 28(2), 187-193.
- Ramezani, N., Sajjadian, I., Manshaee, G., & Barekatain, M. (2023). The Effectiveness of Emotion Efficacy Therapy on Burden and Compassion Fatigue of Caregivers Patients with Dementia. *Journal of Isfahan Medical School*, 41(720), 373-381. <https://doi.org/10.48305/jims.v41.i720.0373>
- Salehpour, P., Ahghar, G., & Navabi Nejad, S. (2019). The Effectiveness of mindfulness-based cognitive therapy on reducing irrational beliefs and emotional divorce in married women referred to Tehran counseling centers. *medical journal of mashhad university of medical sciences*, 62(December), 169-178.
- Schaeuffele, C., Bär, J., Buengener, I., Grafiadeli, R., Heuthaler, E., Strieder, J., . . . Boettcher, J. (2022). Transdiagnostic processes as mediators of change in an internet-delivered intervention based on the unified protocol. *Cognitive Therapy and Research*, 1-14.
- Sharifi, M., Mami, S., Mohammadzadeh, J., Ahmadi, V., & Kakabaraei, K. (2020). Evaluation of the effectiveness of unified protocol for the transdiagnostic treatment and emotion regulation intervention in patients with generalized anxiety disorder in a military hospital [Original]. *EBNESINA*, 22(3), 73-77. <https://doi.org/10.22034/22.3.73>

- Smets, E., Garssen, B., Bonke, B. d., & De Haes, J. (1995). The Multidimensional Fatigue Inventory (MFI) psychometric qualities of an instrument to assess fatigue. *Journal of psychosomatic research*, 39(3), 315-325.
- Sodani, M., Karimi, S., & Shirali Nia, K. (2021). The effectiveness of counseling with an emphasis on Choice Theory in reducing emotional divorce in couples. *Iranian Journal of Family Psychology*, 3(2), 83-92.  
[https://www.ijfpjournal.ir/article\\_245520\\_a1c3d92b3ac31f3b0f02c8937550e792.pdf](https://www.ijfpjournal.ir/article_245520_a1c3d92b3ac31f3b0f02c8937550e792.pdf)
- Timulak, L., Richards, D., Bhandal-Griffin, L., Healy, P., Azevedo, J., Connon, G., . . . Enrique, A. (2022). Effectiveness of the internet-based Unified Protocol transdiagnostic intervention for the treatment of depression, anxiety and related disorders in a primary care setting: a randomized controlled trial. *Trials*, 23(1), 721.
- Tran, Y., Craig, A., Craig, R., Chai, R., & Nguyen, H. (2020). The influence of mental fatigue on brain activity: Evidence from a systematic review with meta-analyses. *Psychophysiology*, 57(5), e13554.
- Van Cutsem, J., Marcora, S., De Pauw, K., Bailey, S., Meeusen, R., & Roelands, B. (2017). The effects of mental fatigue on physical performance: a systematic review. *Sports medicine*, 47, 1569-1588.
- Vatankhah, H., Koochak Entezar, R., & Ghanbari Panah, A. (2021). Prediction of Emotional Divorce Based on Cognitive Flexibility and Meaning of Life with mediation Work-Life Balance [Research]. *Rooyesh-e-Ravanshenasi Journal(RRJ)*, 10(9), 161-172.  
<http://frooyesh.ir/article-1-2861-fa.html>
- Wise, T., Robinson, O. J., & Gillan, C. M. (2023). Identifying transdiagnostic mechanisms in mental health using computational factor modeling. *Biological psychiatry*, 93(8), 690-703.
- Yoosefi Lebni, J., Solhi, M., Ebadi Fard Azar, F., Khalajabadi Farahani, F., & Irandoost, S. F. (2023). Exploring the consequences of early marriage: a conventional content analysis. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 60, 00469580231159963.

- Zareie Faskhudi, B., Karbalaee Mohammad Meigouni, A., Rezabakhsh, H., & Ghelichi, L. (2021). Comparison of the Effect of Unified Transdiagnostic Treatment from Emotional Disorders and Emotion Efficacy Therapy on Emotion Regulation among Adults with Stuttering. *Journal of Applied Psychological Research*, 12(2), 185-209. <https://doi.org/10.22059/japr.2021.312232.643672>
- Zolfaghari, D., Mohammadkhani, S., Mahdavian, A., & Akbari, M. (2021). Transdiagnostic model of healing from marital infidelity with emphasis on the role of metacognitions, schemas, intimacy, emotional efficiency and forgiveness. *Clinical Psychology and Personality*, 19(1), 27-39. <https://doi.org/10.22070/cpap.2021.7279.0>