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Original Article

# Comparison of the Effects of Acceptance and Commitment Therapy and Emotion-Focused Therapy on Mental Vitality in Caregivers of Elderly Parents

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## A B S T R A C T

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**Introduction:** Caregiving burden for older adults can impose significant physical and emotional demands, leading to a reduction in mental vitality among caregiver children. Effective psychological interventions are crucial to enhance their well-being.

**Methods:** This quasi-experimental study included two psychological interventions: Acceptance and Commitment Therapy (ACT) and Emotion-Focused Therapy (EFT), with baseline, post-test, and follow-up phases, along with a control group for comparison. The research population comprised female caregivers who accompanied their older adults to health centers in Tehran. From a total of 169 individuals, 45 participants were selected through convenience sampling and were randomly assigned to three groups of 15 participants each, forming two experimental groups and one control group. Data were collected using the Ryan and Frederick Mental Vitality Questionnaire, and multivariate covariance analysis was applied for data analysis to assess the effectiveness of the interventions.

**Results:** The analysis showed that both ACT and EFT interventions significantly improved the mental vitality of caregiver children in the post-test and follow-up stages compared to the control group ($p = 0.001$). Additionally, EFT demonstrated a greater impact on enhancing mental vitality compared to ACT.

**Conclusion**: Emotion-focused interventions, such as EFT, can be considered a more effective approach for improving the mental vitality of caregiver children of older adults. This highlights the importance of incorporating tailored emotional support strategies in caregiver assistance programs.

**Keywords**: Acceptance and Commitment Therapy, Emotion-Focused Therapy, Mental Vitality, Caregivers, Aged

## Introduction

One of the major demographic challenges faced by countries around the world is population aging and its associated consequences. Aging is a critical phase of human life during which individuals are exposed to potential threats such as an increased risk of chronic illnesses, loneliness, social isolation, and a lack of social support. Due to physical and mental impairments, their personal independence is often threatened in many situations (1). Therefore, addressing the issues and needs of this stage of life is a social necessity. The older adults not only experience these impacts themselves, but family members, friends, and other caregivers who provide support are also affected (2). Caregivers are those who are most involved in providing assistance and care for the older adults during periods of illness or disability. In most





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cases, families bear the direct responsibility and significant burden of caring for the older adults. According to Fernández-Portero (3), 95% of caregiving for dependent individuals falls on a family member. Informal caregiving, or family caregiving, entered the health literature in the 1980s (2). Major reasons for the emergence of family caregiving include the increasing older adults population, the rising number of chronic illnesses, and changes in healthcare systems, especially healthcare costs (4). As a result, family caregivers, particularly children, are now considered the backbone of long-term care systems, and due to increasing hospitalization costs, families are encouraged to care for the older adults at home. Thus, aging not only poses challenges for the older adults but can also create difficulties for family members who assume the role of caregivers (5).

One significant challenge is that caregiving for the older adults is associated with a decrease in mental vitality, leading to reduced quality of life (6), and general health (7). There is a consensus that individual health depends not only on having good genes or access to resources but also on how actively individuals organize their lives and behaviors to enhance their well-being (8). The concept of well-being, with mental vitality as one of its dimensions, is complex and relates to functioning and experiencing optimal performance. Ryan and Frederick describe mental vitality as a state of abundant energy, enthusiasm, alertness, and not feeling fatigued or depleted. They have shown that low mental vitality results in irritability and fatigue, leading to reduced use of one's full potential for daily activities (9). Conversely, high mental vitality means having sufficient energy for tasks, maintaining a positive mood, and effectively accomplishing tasks (6). Therefore, mental vitality reflects a state of positive psychological energy, where an individual is full of life. Ryan and Frederick (35) describe vitality as energy originating from within, not influenced by specific external threats. Mental vitality is a complex structure associated with functioning and optimal performance experiences (10). When mental vitality is low, irritability and fatigue appear, and individuals cannot utilize their full potential for daily tasks (11). On the other hand, high mental vitality ensures that sufficient energy is available for activities, and mood remains positive, facilitating task performance (12). A person with high vitality not only shows this vitality in individual productivity but also spreads it to those around them, creating a positive and energizing environment (13). Thus, vitality is an indicator of psychological health and well-being, while mania is associated with distress and psychological disintegration (14).

Research shows that caregiver vitality can enhance responsiveness to the needs of the older adults, generating energy, enthusiasm, and eagerness (15), while also boosting the caregiver's own joy and well-being (16). Additionally, studies indicate that caregivers of older adults with illnesses often experience lower levels of joy and psychological health due to high caregiving demands, necessitating appropriate psychological interventions (17). These caregivers also exhibit higher levels of stress and psychological distress compared to the general population and those not in caregiving roles, which can lead to decreased vitality and a negative outlook on life (18).

Various psychological and social interventions have been developed to reduce negative psychological symptoms and improve the general health of caregivers (19). Acceptance of the reality of parents' declining abilities and their caregiving needs helps family caregivers adapt better to these conditions (20). For example, a recent review showed that Acceptance and Commitment Therapy (ACT) is beneficial for family caregivers of individuals with dementia (21). ACT has two main objectives: “active acceptance of unwanted and possibly uncontrollable thoughts and emotions, and commitment to act in alignment with individually chosen values” (22). Evidence suggests that ACT is associated with psychological health indicators such as adaptive emotional regulation, lower levels of negative affect, and reduced psychological symptoms. It has been shown that ACT interventions lead to a decrease in thought suppression (23), symptoms of depression and anxiety (24), caregiver burnout, and an increase in quality of life (25) among family caregivers of the older adults.

Another treatment that has recently gained significant attention from clinical researchers for reducing the problems of the older adults and family caregivers is Emotion-Focused Therapy (EFT) (26). Unlike ACT, which integrates acceptance and mindfulness strategies with commitment and behavior change, EFT considers emotions as the core structure of the individual and a key factor for organizing behavior (27). Research by Lee (28) showed that EFT for family caregivers of individuals with early-onset dementia led to better adaptation to the new caregiving role and increased caregiving self-efficacy. Additionally, studies indicate that EFT has a significant impact on reducing depressive symptoms (37), psychological distress (31), and pain catastrophizing (29). Robinson (30) found in their research that EFT, by impacting empathy, is more effective on emotional-physical components compared to cognitive components. Studies also demonstrate that EFT enhances distress tolerance and functional



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flexibility (31), fosters emotional bonds within the family (32), and improves emotional self-regulation and psychological well-being (33).

Upon reviewing the literature, no prior studies have specifically examined the psychological well-being of caregiver children of the older adults or compared the effectiveness of EFT and ACT as active interventions for this unique group. Most existing research (23, 34) highlights the positive effects of EFT and ACT on general caregivers of the older adults but does not address the specific challenges faced by adult children who serve as primary caregivers. Furthermore, while the benefits of EFT and ACT in reducing stress and improving overall well-being among caregivers are well-documented, their comparative effectiveness, particularly in the context of enhancing mental vitality, remains unexplored. Given the increasing older adult's population and the unique challenges faced by caregiver children, this study aims to address these gaps by investigating and comparing the effectiveness of EFT and ACT on the mental vitality of caregiver children of older adults. This novel approach not only underscores the importance of targeted psychological interventions but also provides new insights into tailored strategies for supporting this essential caregiver group. Considering the above, the present study seeks to answer the question: Is there a difference in the effectiveness of EFT and ACT on the mental vitality of caregiver children of older adults?

## Methods

### *Study type*

The current study is a fundamental research type utilizing a quasi-experimental design that includes baseline, post-test, and a three-month follow-up with a control group.

### *Participants*

The target population for this study included all female caregivers (daughters) who accompanied older adults to health centers and facilities in the eastern districts of Tehran (Districts 4, 7, 8, and 13) from April to the end of spring 2023. According to data from these centers, the total number of eligible individuals in 2023 was 169. Participants were asked to complete the Ryan and Frederick (35) mental vitality questionnaire, with confidentiality, informed consent, and screening for any history of illness or current treatment (medication or psychotherapy) ensured. After initial screening, 45 participants were selected. In psychotherapy research, maintaining group sizes between 10 to 15 members is recommended, so the group sizes in this study adhered to these standards. To mitigate participant dropout during the study phases, an additional 5 individuals were included in each group. Consequently, 45 caregivers were chosen based on the study's inclusion and exclusion criteria, their availability for the required sessions, and their ability to attend in-person group therapy. Participants were selected using a multi-stage cluster random sampling method and randomly divided into two experimental groups and one control group, each comprising 15 members.

The first experimental group participated in ACT, while the second group received EFT. The control group did not participate in any therapeutic intervention.

To be included in the study, participants needed to sign an informed consent form, not be receiving any other psychological treatment or intervention, be female caregivers (daughters) of older adults, hold at least a middle school diploma, and have no history of psychological disorders. The exclusion criteria included missing more than two therapy sessions, using psychiatric medication or substances in the last three months, and having serious physical conditions like cancer or multiple sclerosis.

### *Instruments*

The data collection tool for this study was the Ryan and Frederick Mental Vitality Questionnaire (35). Ryan and Frederick developed this scale to assess mental vitality, consisting of 8 items. Respondents rate their experiences on a 7-point Likert scale, ranging from "strongly agree" (scored as 7) to "strongly disagree" (scored as 1). The scores are totaled, and interpretations are made according to the following criteria: for a single questionnaire, scores between 7 and 16 indicate low mental vitality, scores between 16 and 32 indicate moderate mental vitality, and scores above 32 signify high mental vitality. If, for example, there are 10 completed questionnaires, the thresholds should be multiplied by 10 for overall assessment.

This questionnaire was standardized in Iran by Rajaei et al., (36). The scale's Cronbach's alpha reliability coefficient was reported as 0.71.

### *Procedure*

To conduct the psychological interventions, the study was initiated after receiving approval from the university and was implemented at health centers in Districts 4, 7, 8, and 13 of Tehran, Iran. After introducing the study and explaining the research process to the health center administrators, all family caregivers (adult children) visiting these centers and holding active records were invited to participate. The participants were selected using a convenience sampling method from health centers. Initially, eligible participants were identified based on the inclusion criteria outlined below. Out of 139 eligible individuals,



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57 participants were chosen for the study, ensuring they met all requirements and had the capacity to attend the required sessions. Once participants were briefed on the research process, they were randomly assigned to three groups: two experimental groups (each with 19 members) and one control group (also with 19 members). The random allocation sequence was generated using a computerized random number generator. Each participant was assigned a unique identification number, and these numbers were randomly allocated to one of the three groups (two experimental groups and one control group) to ensure unbiased group assignment. Following the random assignment, baseline assessments were distributed among all participants for completion. Participants were blinded to the type of intervention they received, while researchers were aware of group assignments due to the nature of the psychological interventions. Once the baseline was collected, the intervention sessions commenced. The first experimental group received ACT, which took place on a designated weekday, with sessions scheduled once a week and lasting approximately two hours. Prior to each session, the necessary arrangements were ensured, such as setting up chairs with 1.5-meter spacing and providing disinfectants, masks, and other sanitary supplies. Each session began with a review of the previous week's assignments, followed by a question-and-answer segment. The session's content was then presented, with time allocated for any clarifying questions. At the end of each session, a summary along with the assignments was sent to participants via social networks. For the second experimental group, which received EFT, the intervention started after the completion of initial assessments and was held on an alternate weekday. These sessions were also conducted weekly, lasting about two hours each. As with the first group, all necessary preparations were made before each session. Each session began with a review of prior assignments, followed by a presentation of the session's objectives. The post-test assessments for all participants were conducted within a maximum of one week after the completion of the interventions. The follow-up assessments were administered three months later. Missing data were handled by excluding participants with incomplete responses in either post-test or follow-up assessments. Data from the completed questionnaires were inputted into SPSS software, and three months after the post-test, follow-up assessments were conducted for both experimental groups and the control group. The participant flow, including the numbers at each stage (screening, allocation, follow-up, and analysis) and the reasons for any exclusions, was documented in a CONSORT diagram (Figure 1).

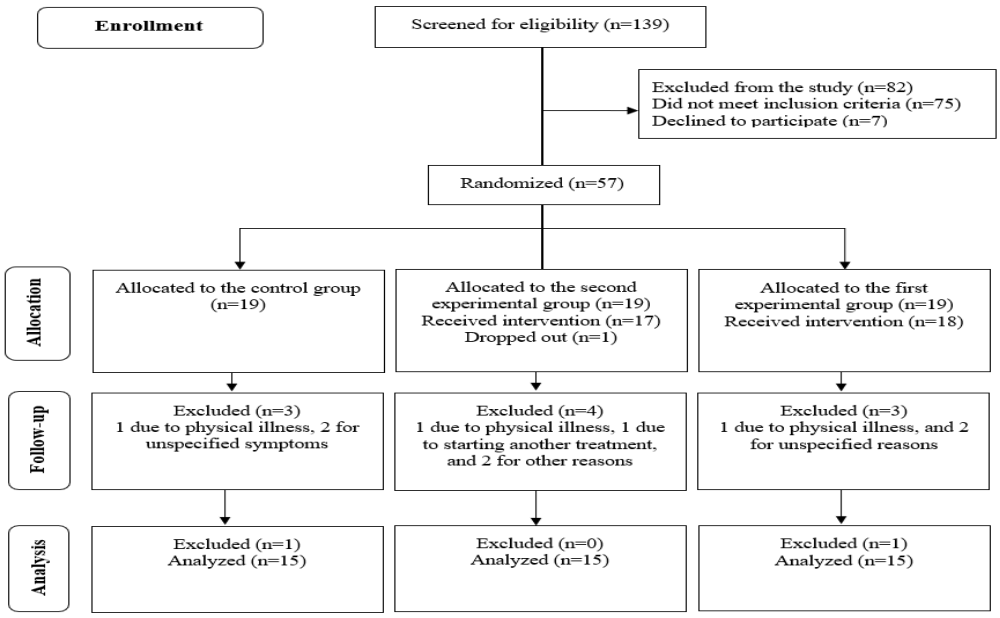


**Figure 1. Consort flow diagram**



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*Interventions*

The interventions used in the current study included EFT (Table 1), and ACT (Table 2) (37, 38). The protocols used are described as follows.

*Statistical analysis*

Data were analyzed using SPSS version 27. Univariate covariance analyses (ANCOVA) was used to compare group differences, with partial eta squared calculated to determine effect sizes. Post hoc comparisons were performed using Bonferroni tests to identify specific group differences. The significance level was set at $p < 0.05$.

*Ethical considerations*

This study was approved by the Ethics Committee of Islamic Azad University, Roudehen Branch (Ethics Code: IR.IAU.TNB.REC.1402.036). Informed consent was obtained from all participants, and confidentiality was maintained. Participation was voluntary, with the right to withdraw at any time. Data were used solely for research purposes. To uphold ethical standards, the control group received a condensed ACT intervention in six sessions, each lasting two hours, after the study's completion.

**Table 1. Emotion-focused therapy (EFT) intervention protocol based on Greenberg and Watson's model (2022)**

| Week | Content |
|---|---|
| **Week 1** | Content: Introduction, distributing educational brochures, and emotional tracking sheets.<br>Objective: Build rapport, train in empathic behavior, identify interaction cycles, and recognize core emotions.<br>Assignment: Create emotion masks and journal daily emotions. |
| **Week 2** | Content: Discuss current issues and observe emotional processing.<br>Objective: Identify and express painful emotional experiences.<br>Assignment: Talk about perceived feelings with close, trusted individuals. |
| **Week 3** | Content: Observe emotional processing styles and provide emotional coaching.<br>Objective: Increase emotional awareness, acceptance, and regulation.<br>Assignment: Document weekly events, related feelings, and reactions; set goals. |
| **Week 4** | Content: Address trauma-related emotions linked to attachment or identity.<br>Objective: Recognize emotional barriers from past experiences.<br>Assignment: Write about past trauma involving family. |
| **Week 5** | Content: Teach primary and secondary emotions.<br>Objective: Identify and work on primary and secondary emotions using techniques like the empty chair.<br>Assignment: Expand on past assignments with additional emotional insights. |
| **Week 6** | Content: Review assignments and discuss emotion-blocking factors.<br>Objective: Identify and address blocks to emotional expression.<br>Assignment: Practice expressing emotions; note reasons for any difficulties. |
| **Week 7** | Content: Identify themes and images related to emotional blocks.<br>Objective: Understand how these elements relate to expressing emotions.<br>Assignment: Revisit similar situations with increased emotional awareness. |
| **Week 8** | Content: Discuss internalized meanings from significant figures and their impact on emotions.<br>Objective: Replace old beliefs with new, positive meanings.<br>Assignment: N/A |
| **Week 9** | Content: Review and share experiences.<br>Objective: Highlight the importance of acceptance and awareness for personal growth.<br>Assignment: Reinforce and generalize the new self for future application. |
| **Week 10** | Content: Review and discuss experiences.<br>Objective: Stabilize the new self and apply changes to future scenarios. |



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**Table 2. Acceptance and Commitment Therapy (ACT) Intervention Protocol**

| Week | Content |
|---|---|
| **Week 1** | Content: Introduction, reviewing participants' problem history, explaining therapy goals, discussing change, visualization training, and establishing a participation contract.<br>Objective: Build rapport and set therapy expectations. |
| **Week 2** | Content: Training on the futility of avoiding mental experiences and clarifying values.<br>Objective: Foster "creative hopelessness."<br>Assignment: List repetitive, ineffective actions. |
| **Week 3** | Content: Discuss activity stages and provide focus exercises.<br>Objective: Improve concentration for exercises.<br>Assignment: Practice focus exercises (e.g., sensory awareness). |
| **Week 4** | Content: Identify ineffective control strategies, continue exposure exercises.<br>Objective: Accept painful events instead of resisting them.<br>Assignment: Document painful events and brainstorm alternative solutions. |
| **Week 5** | Content: Teach acceptance and use metaphors for changing language.<br>Objective: Understand the implications of avoiding experiences.<br>Assignment: Evaluate new approaches to painful events. |
| **Week 6** | Content: Exposure exercises for worries and discussion.<br>Objective: Increase awareness of emotions and focus on present activities.<br>Assignment: Practice mindfulness and adjust self-talk. |
| **Week 7** | Content: Mindfulness exercises and observing events non-judgmentally.<br>Objective: View life experiences without labels or judgment.<br>Assignment: Reflect on daily experiences and consider new perspectives. |
| **Week 8** | Content: Teach detachment from thoughts and feelings.<br>Objective: Practice cognitive defusion (seeing thoughts as separate).<br>Assignment: Document issues and practice visualization metaphors. |
| **Week 9** | Content: Set and review values-aligned goals.<br>Objective: Commit to a values-based life and self-reflection.<br>Assignment: Write goals and values. |
| **Week 10** | Content: Review and discuss session experiences.<br>Objective: Encourage motivation for committed action.<br>Assignment: Reflect on exercise outcomes and new insights. |

## Results

The demographic analysis of the participants revealed that 48.89% (22 individuals) were under the age of 30, while 35.55% (16 individuals) were between 30 and 40 years old. Regarding educational levels, 33.33% (15 participants) held a high school diploma, and 6.67% (3 participants) possessed a master's degree. (Table 3)

The Descriptive Index of Mental Vitality is reported in Table 4.

As shown in Table 5, after adjusting for the baseline scores, a significant difference was observed in the mean post-test scores for the mental vitality variable among the ACT group, the EFT group, and the control group ($p \leq 0.001$). This finding suggests that the adjusted mean post-test scores for mental vitality varied significantly across the groups ($p \leq 0.001$). The effect size for mental vitality improvement at the post-test stage was 72%.

Furthermore, after controlling for baseline scores, there was a significant difference in the mean follow-up scores for mental vitality among the ACT group, the EFT group, and the control group ($p \leq 0.001$). This implies that the adjusted mean follow-up scores for mental vitality were significantly different across the groups ($p \leq 0.001$). The effect size for mental vitality improvement at the follow-up stage was found to be 65%.

To further explore the differences in mental vitality between the experimental groups and the control group at the post-test and follow-up stages, pairwise comparisons were conducted using the Bonferroni test on the adjusted means. The outcomes of these comparisons are detailed in Table 6.

Table 6 illustrates that both ACT and EFT interventions led to significant improvements in mental vitality at both the post-test and follow-up stages compared to the control group ($p \leq 0.001$). Additionally, the results indicate that EFT had a stronger effect on enhancing the mental vitality of daughters caring for older adults than ACT. Specifically, the EFT group demonstrated an increase of 2.70 points in the post-test and 2.05 points in the follow-up stage compared to the ACT group in terms of mental vitality for caregiver daughters.



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**Table 3. Demographic characteristics of participants (n = 45)**

| Variable | | Frequency (Percentage Frequency) | | | |
|---|---|---|---|---|---|
| | | ACT group (n = 15) | EFT group (n = 15) | Control group (n = 15) | Total (n = 45) |
| Age | Under 30 years | 7 (46.67%) | 8 (53.33%) | 7 (46.67%) | 22 (48.89%) |
| | 30-40 years | 5 (33.33%) | 5 (33.33%) | 6 (40%) | 16 (35.55%) |
| | 40-50 years | 2 (13.33%) | 2 (13.33%) | 1 (6.67%) | 5 (11.11%) |
| | Over 50 years | 1 (6.67%) | 0 (0%) | 1 (6.67%) | 2 (4.45%) |
| Education | Middle school | 1 (6.67%) | 2 (13.33%) | 2 (13.33%) | 5 (11.11%) |
| | High school Diploma | 5 (33.33%) | 5 (33.33%) | 5 (33.33%) | 15 (33.33%) |
| | Associate degree | 4 (26.67%) | 4 (26.67%) | 4 (26.67%) | 12 (26.67%) |
| | Bachelor's degree | 3 (20%) | 2 (13.33%) | 5 (33.33%) | 10 (22.22%) |
| | Master's degree | 2 (13.33%) | 2 (13.33%) | 1 (6.67%) | 3 (6.67%) |

**Table 4. Descriptive index of Mental Vitality (n = 45)**

| Variable | | Mean ± Standard Deviation | | |
|---|---|---|---|---|
| | | Base-line | Post-test | Follow-up |
| Mental vitality | ACT Group | 15.35 ± 4.23 | 22.60 ± 5.16 | 20.40 ± 5.04 |
| | EFT group | 15.10 ± 4.06 | 25.30 ± 5.33 | 22.45 ± 5.29 |
| | Control group | 15.25 ± 4.14 | 15.10 ± 4.06 | 15.15 ± 4.09 |

**Table 5. Results of ANCOVA in post-test and follow-up**

| Research Stage | Variable | SS | Df | MS | F | p | Partial Eta |
|---|---|---|---|---|---|---|---|
| **Post-test** | Mental | 1450.52 | 2 | 725.26 | 123.15 | 0.001 | 0.72 |
| **Follow-up** | vitality | 1236.14 | 2 | 618.07 | 52.18 | 0.001 | 0.65 |

**Table 6. Results of bonferroni test on adjusted means of mental vitality by group**

| Research stage | Groups | Mean difference | p |
|---|---|---|---|
| **Post-intervention assessment** | ACT-control | 7.50 | 0.001 |
| | EFT-control | 10.20 | 0.001 |
| | ACT-EFT | 2.70 | 0.001 |
| **Three-month follow-up assessment** | ACT-control | 5.25 | 0.001 |
| | EFT-control | 7.30 | 0.001 |
| | ACT-EFT | 2.05 | 0.001 |

## Discussion

The present study aimed to compare the effectiveness of ACT and EFT on the mental vitality of caregiver children of older adults. The findings revealed that both ACT and EFT interventions produced significant improvements in mental vitality in the post-test and follow-up stages compared to the control group. Additionally, the results indicated that EFT had a greater positive effect on the mental vitality of caregiver daughters than ACT. Specifically, the EFT group showed an increase of 2.70 points in the post-test and 2.05 points in the follow-up stage compared to the ACT group.

Due to the novelty of this study and the lack of similar research, direct comparisons with previous studies are not possible. However, the findings align with certain aspects of previous research (5, 33, 39, 40).

The results of the study by Zehtab and Tabatabaeinejad (5), indicated that Mindfulness-Based Cognitive Therapy (MBCT) significantly improved the psychological well-being and quality of life of caregivers. These findings align with the present study, which examines the effects of ACT and EFT on the mental vitality of caregivers, as both studies focus on the impact of psychological interventions on enhancing the well-being and mental vitality of caregivers of older adults. The study by Shirazipour (39), which focused on the effectiveness of Acceptance and Commitment Therapy (ACT) in reducing intrusive thoughts and concerns about body image in elderly



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patients with depression, demonstrated that ACT significantly reduced these worries and intrusive thoughts. Similar to the present study, this research also explores the effectiveness of ACT in improving the mental health of elderly individuals and their caregivers. Additionally, Heydarian and Seyrafi (40), showed that EFT had a significant positive effect on reducing anxiety and improving the psychological well-being of patients. These findings are consistent with the results of the present study, as EFT's impact on the mental vitality of caregivers of older adults was also examined. The study by Andriani Khoinejad and Akbari Amarghan (33), demonstrated that both EFT and ACT had positive and significant effects on emotional self-regulation and psychological well-being in couples, with EFT showing better results in improving emotional self-regulation. This study is similar to the current research, which investigates the effects of EFT and ACT on mental vitality, and shows that both approaches are effective in improving psychological well-being, with EFT having a greater impact in this regard. The effectiveness of ACT in enhancing mental vitality can be attributed to its emphasis on accepting internal thoughts and feelings, helping individuals experience intrusive thoughts merely as mental events and gain awareness of the dysfunctionality of their current mental strategies. ACT employs mindfulness, acceptance, and cognitive defusion skills to increase psychological flexibility, allowing individuals to focus on the present reality without judgment, thus enabling them to act in ways consistent with their values (40). This approach helps clients adopt the perspective of the "self-as-context," which enables them to separate themselves from unpleasant memories and thoughts. Enhanced acceptance allows them to engage with their values without focusing on negative automatic thoughts, which can explain the positive effect of ACT on the mental vitality of caregiver children of older adults.

The presence of an older adults individual in need of care can create stress within a family, affecting all members. ACT addresses various clinical manifestations associated with caregiving for the older adults, such as avoidance, thought suppression, impaired quality of life, and mood issues (41). Unlike traditional approaches aimed at altering or suppressing unwanted thoughts and feelings, ACT focuses on enhancing psychological flexibility, which refers to the ability to remain present and act according to personal values in specific situations, thereby positively impacting the mental vitality of caregiver children. This therapy fosters a more positive outlook among caregivers, equipping them with acceptance and commitment skills that increase their likelihood of accepting the caregiving role (21). Given ACT's focus on values, commitment, acceptance of the older adults, and present-moment awareness, its effectiveness in improving mental vitality is reasonable.

Another explanation is that through cognitive defusion, caregivers learn to perceive internal events as they are, rather than as dictated by the events themselves. This approach enhances the process of acceptance, as cognitive defusion from thoughts, evaluations, and emotions reduces the psychological barriers these internal events may create. Gaining awareness of aging and acquiring skills to accept the challenges of older adults help caregivers view those issues as less stressful, meaning their perception of outcomes fosters a particular emotional state. ACT aids caregivers in managing their environment, developing problem-solving skills, overcoming despair, and teaching them to respond effectively to situations using strategies like self-soothing. Acceptance techniques encourage individuals to cease resisting problems and acknowledge painful experiences as a natural part of being human, all of which contribute to enhancing the mental vitality of caregiver children.

The findings of this study demonstrated that EFT was effective in enhancing the mental vitality of daughters caring for older adults. Individuals with higher levels of vitality tend to experience positive emotions and view events in their surroundings optimistically. In contrast, those with lower vitality often perceive life events negatively and experience more negative emotions such as anxiety, depression, and anger. This study's results suggest that EFT focuses on the role of emotions in maintaining persistent, maladaptive patterns and aims to reveal vulnerable emotions in caregiver daughters and facilitate their safe expression (40). Emotions play a central role in attachment theory and are essential for predicting, interpreting, responding to, and regulating life experiences. Emotions are not stored in memory but are reactivated through situational appraisals that trigger specific emotional frameworks, leading to particular sets of behaviors. During EFT, such situations are revisited so that caregivers can explore and expand their emotional experiences and modify them through new emotional experiences. This process makes emotions more accessible, developed, and reconstructive, contributing to the moment-by-moment rebuilding of their experiences. Through this stage of therapy, caregivers become more aware of their emotions and, in a safe space, express authentic emotions in various life situations, which enhances their mental vitality (27).

EFT integrates the intrapersonal and interpersonal world by exploring, experiencing, and processing emotional responses, leading to the formation of new interactions. The goal is not just emotional expression



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or catharsis but to experience new aspects of oneself, which triggers new emotional responses in daughters caring for older adults. Thus, revealing emotions, addressing attachment needs, and responding to them are fundamental processes in EFT that support mental vitality by enabling caregivers to access, process, and express their emotions.

The results also indicated that EFT was more effective than ACT and the control group in increasing mental vitality at both post-test and follow-up stages. Therefore, there was a significant difference in the effectiveness of EFT and ACT, favoring EFT in enhancing mental vitality among daughters caring for older adults. This greater effectiveness can be attributed to the structured and step-by-step nature of EFT. In its initial stages, EFT assesses communication styles, uncovers defenses, and makes individuals aware of the consequences of these patterns. This gradual process helps caregivers identify suppressed emotions and improve their emotional regulation. EFT emphasizes secure and adaptive attachment methods through mutual care, support, and attention to personal and interpersonal needs, thereby fostering mental vitality (28).

EFT equips caregiver daughters with increased emotional awareness, allowing them to manage negative emotions such as anger, anxiety, stress, and depression while enhancing resilience and adaptability. Unlike ACT, EFT enhances the ability to symbolize emotions, reducing abnormal psychological reactions and improving self-care and self-regulation, which mitigates the intensity of negative emotions. Participants who undergo EFT learn to identify, articulate, and recognize their emotions, enabling them to better manage stress and cope with challenging situations. Consequently, they develop more effective emotion management skills. Given the crucial role of emotions in life, EFT serves as a therapeutic approach that modulates emotions, facilitates effective responses to stressful situations, and promotes active participation in social interactions. Thus, by raising awareness of both positive and negative emotions and encouraging timely acceptance and expression, EFT has a more significant impact on mental vitality than ACT.

## Conclusion

In conclusion, the results of this study suggest that while both therapies are beneficial, EFT's targeted focus on emotional processing and regulation provides a more robust framework for supporting mental vitality among caregivers. Future research could build on these findings by exploring the long-term effects of EFT and ACT, and examining their applications across diverse caregiving populations to further validate these results.

## Study limitations

This study had several limitations. The sample was drawn exclusively from caregiving children who accompanied older adults to health centers in eastern Tehran, which restricts the extent to which the findings can be generalized. A notable limitation was the relatively small sample size, which limits the applicability of the results to broader populations. Furthermore, the limited sample size made it difficult to align the intervention and control groups based on demographic and educational characteristics. The reliance on self-reported measures and the lack of neutral counseling sessions for the control group, which could have minimized the expectancy effect, also posed challenges to the generalizability of the results. Additionally, the use of convenience sampling may have somewhat compromised the external validity of the findings.

## Conflict of Interests

This study does not have any conflict of interests.

## Acknowledgement

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## Authors' Contribution

The research was designed and conceptualized by Ms. Zahra Noorali and Dr. Reza Khakpour. Ms. Zahra Noorali managed data collection, conducted the initial data analysis, and prepared the first draft of the article. Dr. Reza Khakpour supervised all phases of the study, validated the methodology, and provided feedback on various drafts. Dr. Pante'a Jahangir assisted with the



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statistical analysis, data interpretation, and provided critical reviews that improved the scientific rigor of the article. All authors reviewed and approved the final manuscript.

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