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# Effects of self-healing intervention on quality of life and mother-child interaction among female breadwinners

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ABSTRACT

*Objectives:* This study aimed to investigate the effectiveness of self-healing (the healing codes) intervention on quality of life (QoL) and mother-child interaction among female breadwinners.
*Methods:* The study population comprised all female breadwinners who referred to the welfare centers of Isfahan in 2020; using convenience sampling, we selected 30 women and divided them into experimental and control groups (n = 15 per group). The experimental group underwent fourteen sessions (90-min sessions per week) of self-healing training.
*Results:* The mean ± SD of QoL and mother-child interaction for experimental and control groups in the post-test stage were 84.33 ± 3.92 and 160.86 ± 8.74 respectively. Self-healing intervention had significant effects on QoL and mother-child interaction among female breadwinners. The intervention program improved the components of QoL and mother-child interaction among female breadwinners ($p < 0.01$).
*Conclusions:* Self-healing training can be used as a novel approach to enhance QoL and mother-child interaction in this group of women.

## 1. Introduction

Various factors such as divorce and a husband's addiction, imprisonment, and demise can change the structure of a family and cause the emergence of a phenomenon called single-parent families, in which women are breadwinners [1]. Female breadwinners are among the most vulnerable strata. Facing more stress to manage their lives, these women are more prone to social discrimination and psychological pressure than others [2]. Being employed, doing housework, taking care of children, shouldering the responsibility for nurturing children, dealing with mother-child relationships in developing children's personalities and mental health, having financial concerns, and lacking enough supportive resources can stress female breadwinners out every day. As a result, they face problems such as physical diseases, communicative problems, sleep disorders, and depression, which will finally affect their QoL and that of their families [3–5].

QoL is a multidimensional concept affected by various important factors such as physical status, mental status, personal beliefs, and social relationships. Female breadwinners experience lower QoL due to the specific financial, social, and psychological problems they usually face; therefore, they are more prone to social traumas than other members of a family [6]. Hernández et al. [3] reported that female breadwinners had lower QoL and higher levels of stress than their peers [7]. According to Shukuhy et al. [8], female breadwinners can be empowered if they identify their specific abilities.

Parent-child communication requires knowledge and information on effective methods of care and interaction and communication with the child [9]. A mother is the first person who communicates directly with her child, and childhood is among the most important stages of life in which the child's personality is developed [10]. Therefore, the mother-child interaction is considered one of the major factors affecting every child's mental and social transformation. The mother-child interaction refers to the maternal parenting style that emerges in mutual relationships between a mother and her child. In other words, interaction is a kind of two-way exchange [11]. In the early years of childhood, the quality of mother-child interaction lays the foundations for the social-emotional cognitive transformation of a child in the future. In fact, the quality of parent-child interaction can affect a child's biological, mental, and social development [12]. Some adverse effects of inappropriate interaction include the multitude of problems concerning children's psychological health and their perceived stress, especially at ages under seven years [13].

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A parent's sense of self-efficacy requires knowledge and information on the effective methods of childcare and interaction with children [14]. The basic function of a family and the mother-child interaction is to provide an environment for the growth and survival of other family members at social, cognitive, and biological levels. Therefore, many problems of female breadwinners can be detected through the accurate identification of the effects of human values such as affection, satisfaction, and forgiveness as well as intrapersonal factors such as intimacy, honesty, trust, and commitment on interpersonal behaviors [15]. Cognitive problems constitute one of such intrapersonal factors. Contributing to mindfulness, these problems have recently drawn a great deal of research attention. The cognitive process affects the mother-child interaction; as a result, it has positive effects on the robustness of family foundations [16].

Accordingly, it is necessary to identify the solutions that can help enhance QoL and mother-child interaction by considering the vulnerability of female breadwinners. Regarded as an intervention that may affect these components, self-healing is a new treatment method aiming to manage and control physiological stress. Alex Lloyd, a self-healing theorist, has begun researching into this new therapy since 2001; however, the official theory was proposed in the US in 2016. Cooperating with Ben Johnson, an oncologist, and Bruce Lipton, a cellular-molecular biologist, Alex Lloyd developed his theory after 16 years [17]. The ultimate goal of this therapy is to increase comfort, love, affection, and QoL and decrease cellular destructive beliefs by training individuals in practicing self-help skills to reduce illogical stress, stop the fight-or-flight response system, improve the immune system, decline physiological stress, and infuse cellular, mental, and physical peace. This therapeutic approach focuses on an individual's attempts to treat cellular destructive memories and images (hidden memory or false memory), detect false beliefs, identify hidden fears, root the reasons for physiological stress, eliminate unhealthy personality traits, modify the lifestyle, and concentrate on requests from God in prayers. Two different questions are answered in this approach: 1- The human is the only creature who is given the power of thinking and reasoning, why he does not act wisely? 2- Why physical diseases have become higher and debilitating despite medical advances? [18]. This therapy plays a preventive, facilitative role in the process of improving and rehabilitating individuals [19–21]. Latifi et al. [19] reported that self-healing is an appropriate intervention method to increase self-compassion and reduce body image concern and thus accelerate the process of skin cancer recovery. Zarean & Latifi [20] reported that self-healing was effective in promoting psychological capital and distress tolerance in women with addicted husbands. In Iran, Latifi & Marvi [21] localized this approach, prepared the relevant protocol, and applied it in the country with the approval of Dr. Loyd.

Given the importance of female breadwinners' health, it appears that the self-healing approach is an up-to-date, relatively simple, and publicly understandable method that can effectively rehabilitate female breadwinners. Accordingly, the present study sought to investigate the effect of self-healing training on quality of life and mother-child interaction among female breadwinners.

## 2. Methods

This quasi-experimental study consisted of all female breadwinners who referred to the welfare centers of Isfahan in 2020. The study period was from March to July 2020. Via convenience sampling, we selected 30 women who were willing to participate in the project. Fifteen participants were included in each group. The Inclusion criteria were: Willingness to attend treatment sessions, not receiving simultaneous psychological or pharmaceutical treatment, no occupational or medical prohibition to receive psychological services, having a minimum of middle education, having at least one child under 7 years old. The exclusion criteria were absence in more than two treatment sessions, use of psychiatric drugs, and having acute or chronic mental disorders. After sampling, the experimental group received fourteen sessions (90-min sessions per week) of self-healing training by a psychotherapist in the psychology clinic; the control group did not receive any treatment. Table 1 presents the summary of the sessions. In all sessions with an emphasis on confidentiality, all the group members were asked to participate actively in discussions and share their individual experiences with others. Introspection and finding destructive cellular memories and techniques to reduce the negative effects of these memories were the main subjects of the individualized sessions. The participants had to perform personal exercises during these sessions and the intervals between the sessions and answer the contemplative questions of the course trainer. Allocating time to isolation and contemplation were among the most fundamental exercises. The participants were asked to train two members of the family or friends at the same time in order to achieve a better understanding of the training materials and present the challenges they faced in the sessions. In each session, the previous sessions were reviewed, and the tasks were emphasized.

The control group was considered on the waiting list of post-intervention. After the training sessions, post-test was performed in the experimental and control groups. Follow-up was further conducted in both groups after 45 days. For ethical considerations, the participants provided written informed consent for participation in the research.

### 2.1. Research instruments

**World Health Organization Quality of Life Questionnaire-Short Form:** It has 26 questions that measure four dimensions, namely physical, psychological, and social health, and physical environment. It is utilized as a comprehensive scale and generally contains the total quality of life and public health levels. The scale was designed by a group of WHO experts in 1997 who adjusted the items of a 100-question form of the questionnaire. The questionnaire is comprised of five items ranging from "never" [1] to "very high" [5]. It should be noted that questions 3, 4 and 26 are reversely scored. The minimum score of scale is 26 and the maximum score is 130. According to the results reported by the creators of the World Health Organization Quality of Life Questionnaire in 15 central centers of this organization, the Cronbach's Alpha coefficient ranged from 0.73 to 0.89 regarding four subscales and the whole scale [22]. Iranian researchers used the test-retest with an interval of two weeks, split-half, and Cronbach's alpha in order to obtain the reliability of 0.77, 0.77, and 0.75 [23]. In the present study, Cronbach's alpha coefficient was 0.86 for the questionnaire.

**Mother-Child Relationship Assessment Questionnaire:** Roth developed the MCRE questionnaire in 1961. The Mother-Child Relationship Assessment Questionnaire is completed by mothers. This instrument is an attitude measurement scale that evaluates mothers' views on four child interaction styles. Categorized under projective tests, this instrument has four subscales, i.e. acceptance, overprotection, leniency, and rejection. Each subscale consists of 12 items; therefore, there are a total of 48 items scored in five points. This scale is an appropriate instrument for researching into areas such as the relationships between maternal feedback and children's behavior, between self-perception and feedback, and between maternal feedback and self-perception [24]. According to Whitman & Zachary [24], the reliability of this questionnaire ranged between 0.41 and 0.57, whereas its validity ranged between 0.28 and 0.68. In Iran, the overall reliability of this scale was reported 0.73 through Cronbach's alpha; however, its subscale reliability was reported 0.77, 0.78, 0.71, and 0.72 for child acceptance, overprotection, over-leniency, and child rejection, respectively [25]. In the present study, Cronbach's alpha coefficient was 0.79 for the questionnaire.

### 2.2. Statistical analyses

The repeated measures ANOVA was used to investigate the effectiveness of self-healing intervention on quality of life and mother-child

**Table 1**
A summary of self-healing sessions (Latifi & Marvi, 2018).

| Sessions | Content of sessions |
|---|---|
| First | Meeting the group members and establishing the therapeutic relation, determining the purposes and rules of sessions, introducing occasional stresses, and teaching the management of occasional stresses, describing the body immune system.<br>Task 1: to examine the moods and preparing a more complete list of worries, problems and stresses by the group members. |
| Second | Describing physiological stresses, hidden stresses or destructive cellular stresses and false memory.<br>Task 2: self-examination and examining the existing stresses and practical performance of proper breathing and relaxation for at least once a day (the audio file of the muscular-respiratory is presented to members. |
| Third | Teaching to distinguish between real and false problems, memorization considering the failures, conflicts, frustrations, and confusions of person.<br>Task 3: memorization through the memorization file about traumas and very effective incidents of life during all periods of life, shocks and PTSD considering the individual viewpoint, the practical exercise: meditation with rose. |
| Fourth | Finding the roots of destructive cellular memories in 12 groups, introducing the unforgiveness, harmful actions, wrong beliefs and negative feelings.<br>Task 4: beginning to gain a more accurate knowledge of the dimensions of hidden beliefs and destructive cellular memories and concentrating on unforgiveness group. |
| Fifth | Performing the glass elevator technique, memorization about traumas, traumas and very effective incidents of life during all periods of life, shocks and PTSD considering the individual viewpoint.<br>Task 4: performing the empty chair technique at home with the rest of memories, examining whether the emotions and resulted beliefs are healthy or unhealthy, contemplating about forgiveness, reading forgiveness materials. |
| Sixth | Describing the puzzle of negative and positive feelings and teaching forgiveness techniques<br>Task 6: continuing the mental challenge about the reduction of grudge and revenge feelings, introspection for the recognition of miserable me syndrome, examining unhealthy thoughts and believed lies, and recognizing problematic feelings, (anger, lust, pride, fear, grief, shame) and accepting the power of will, freedom and choice, and the responsibility for the consequences of personal behavior. |
| Seventh | Describing the harmful actions group, and false and destructive habits, and teaching the practices of empowering the will and problem solving and changing the circumstances.<br>Task 7: examining the role of miserable me syndrome in destructive habits, registering the used successes and skills alongside the three preventative groups. |
| Eighth | Introducing and explaining 1–4 self-healing codes including love, happiness, peace and patience.<br>Task 8: beginning the plan for creating and strengthening the 4 healing codes in daily life, and exercising the special healing codes and registering the successes and improvement. |
| Ninth | Introducing and explaining 5–9 self-healing codes including kindness, righteousness, trust, humbling, self-restrain and teaching the reverse memorization technique.<br>Task 9: beginning the plan for creating and strengthening the 4 healing codes in daily life, and exercising the special healing codes and exercising the reverse memorization technique and registering the successes and improvement. |
| Tenth | Describing the role of true demanding heartily, the effects of praying and focusing on demands in the course of life, and describing the scientific evidence related to prayer in self-healing, teaching the practical exercises of general healing codes.<br>Task10: spending specific loneliness times praying, establishing relationship with God, praying (strengthening the spirituality, silence exercises, the isolation and physical and mental self-awareness, reviewing the effective exercises for people, acting based on self-worth system + creative imagination, positivity toward future. |
| Eleventh | teaching the moderate lifestyle, modifying the lifestyle through the recognition of false habits and harmful actions, modifying the sleep pattern, food, eating, drinking and entertainment, travel, exercise, hygiene and cleaning habits.<br>Task 11: the practical performance of healing code along with praying and true concentrating sentences, beginning the modification of lifestyle through the recognition and reduction of false habits. |
| Twelfth | improving quality of life regarding health, hygiene, intimacy and relationships (parents, spouse, children, relatives and others, educational growth, financial development, job improvement, improvement of home, neighborhood, society, social and useful activities.<br>Task 12: continuing the exercises of spiritual improvement, the recognition of dissatisfaction of particular fields, and acting to reducing the dissatisfaction. |
| Thirteenth | Modification of inner conversation, reconsidering individual stresses, emphasizing constant self-care against physical and mental harms, managing the emotions and relations.<br>Task 13: continuing previous exercises and modifying the inner conversation and self-care |
| Fourteenth | Planning for eternity, spiritual purposefulness of life, increasing inner needlessness (to be useful and to take care of oneself and others, introspection and allocating time to self-examining and isolation, reviewing the entire therapy sessions, emphasizing the continuity of practicing healing codes.<br>Task 14: continuing previous exercises and recognizing the shortcuts to peace and spirituality for self. |

interaction among female breadwinners. SPSS Statistics version 24.0 was further used for analyzing the data.

## 3. Results

The participants included 30 female-headed households, aged between 32 and 44 years old. The mean and standard deviation (SD) age of the participants in the experimental and control groups were 37.66 ± 5.95 and 38.40 ± 5.03 years respectively. In this study, 43.33% had a middle school, 33.33% had high school education, and 23.34% had a college education. Moreover, 30% of women had one child, whereas 43.3% and 23.3% of them had two and three children. Only one of the women had four children. Moreover, 80% of them had one child aged under seven years, whereas 20% had two children under seven years. Furthermore, 33.3% of these women had to become breadwinners due to the death of their husbands; however, 20% assumed that role because of their husbands' addiction, and 16.7% shouldered the responsibility due to their husbands' sickness. Finally, 30% of women became breadwinners in their families due to divorce. he demographic variables of the participants are shown in Table 2.

The mean and standard deviation (SD) of quality of life and mother-child interaction for the experimental group were 57.46 ± 2.53 and 160.86 ± 8.74 in the pre-test, 84.33 ± 3.92 and 160.86 ± 8.74 in the post-test, and 86.40 ± 3.24 and 195.73 ± 8.63 in follow-up phases, respectively. The mean ± SD of quality of life and mother-child interaction for the control group were 56.40 ± 4.06 and 133.40 ± 18.68 in the pre-test, 56.60 ± 3.39 and 130.80 ± 16.58 in the post-test, and 57.26 ± 4.00 and 130.73 ± 16.50 in follow-up phases, respectively. Table 3 shows the mean and standard deviation (SD) of components of quality of life and mother-child interactions in the experimental and control groups in the pre-test, post-test, and follow-up.

Shapiro-Wilk test was used to examine whether the distribution of the pre-test scores was normal. The results showed that the distribution of data was normal. To examine the Homogeneity of variances, Levene's test was applied, by which the homogeneity between the Covariate and independent variables was confirmed. Considering the significant value of Mauchly's test for subscales of quality of life and mother-child interactions, the hypothesis was not confirmed; hence, Greenhouse and Geyser correction test was applied.

According to Table 4 and the significance of intragroup factors, there was a significant difference between pretest, posttest, and follow-up measurements of QoL and mother-child interaction as well as physical health, mental health, social relationships, environment, child acceptance, overprotection, and rejection ($p < 0.05$). Considering the significance of intergroup sources, it can be stated that there was a significant

**Table 2**
Demographic characteristics of the participants.

| Age | Experimental group | | Control group | | Total | |
|---|---|---|---|---|---|---|
| | Frequency | Percent | Frequency | Percent | Frequency | Percent |
| 32–36 years | 4 | 13.00 | 3 | 10.00 | 7 | 23.33 |
| 36–40 years | 6 | 20.00 | 6 | 20.00 | 12 | 40.00 |
| 40–44 years | 5 | 16.67 | 6 | 20.00 | 11 | 36.67 |
| Total | 15 | 50.00 | 15 | 50.00 | 30 | 100.00 |
| Marriage period | | | | | | |
| Less than 5 years | 3 | 10.00 | 2 | 6.67 | 5 | 16.67 |
| 6–15 years | 5 | 16.67 | 4 | 13.33 | 9 | 30.00 |
| 16–25 years | 2 | 6.66 | 3 | 10.00 | 5 | 16.67 |
| More than 20 years | 5 | 16.67 | 6 | 20.00 | 11 | 36.66 |
| Total | 15 | 50.00 | 15 | 50.00 | 30 | 100.00 |
| Education | | | | | | |
| Middle school | 6 | 20.00 | 7 | 23.34 | 13 | 43.33 |
| High school | 6 | 20.00 | 4 | 13.33 | 10 | 33.33 |
| College education | 3 | 10.00 | 4 | 13.33 | 7 | 23.34 |
| Total | 15 | 50.00 | 15 | 50.00 | 30 | 100.00 |

**Table 3**
Mean and standard deviation (SD) of components of quality of life and mother-child interactions in experimental and control groups in the pre-test, post-test, and follow-up phases.

| Scales | Phase | Experimental group | | Control group | |
|---|---|---|---|---|---|
| | | M | SD | M | SD |
| Quality of life | Pre-test | 57.46 | 2.53 | 56.40 | 4.06 |
| | Post-test | 84.33 | 3.92 | 56.60 | 3.39 |
| | Follow-up | 86.40 | 3.24 | 57.26 | 4.00 |
| Physical health | Pre-test | 13.60 | 2.02 | 13.66 | 1.67 |
| | Post-test | 26.00 | 1.77 | 13.73 | 1.33 |
| | Follow-up | 26.66 | 1.71 | 14.00 | 1.46 |
| Mental health | Pre-test | 11.46 | 1.76 | 11.93 | 1.66 |
| | Post-test | 20.40 | 1.72 | 12.06 | 1.53 |
| | Follow-up | 22.53 | 1.99 | 11.93 | 1.66 |
| Social relationships | Pre-test | 5.46 | 1.24 | 5.06 | 1.09 |
| | Post-test | 11.02 | 1.24 | 5.33 | 0.97 |
| | Follow-up | 11.20 | 1.01 | 5.66 | 1.17 |
| Environmental health | Pre-test | 21.46 | 1.76 | 19.73 | 2.54 |
| | Post-test | 23.40 | 1.80 | 19.20 | 2.45 |
| | Follow-up | 25.06 | 1.53 | 19.60 | 2.77 |
| Mother-child interaction | Pre-test | 139.00 | 10.93 | 133.40 | 18.68 |
| | Post-test | 160.86 | 8.74 | 130.80 | 16.58 |
| | Follow-up | 195.73 | 8.63 | 130.73 | 16.50 |
| Child acceptance | Pre-test | 27.73 | 3.12 | 29.00 | 1.69 |
| | Post-test | 40.40 | 2.97 | 28.60 | 1.95 |
| | Follow-up | 43.46 | 2.69 | 28.46 | 1.99 |
| Overprotection | Pre-test | 42.53 | 3.34 | 35.86 | 9.84 |
| | Post-test | 50.86 | 3.13 | 35.33 | 8.17 |
| | Follow-up | 53.73 | 2.40 | 35.40 | 8.22 |
| Over-leniency | Pre-test | 46.40 | 5.40 | 35.20 | 11.34 |
| | Post-test | 44.53 | 5.40 | 34.66 | 10.56 |
| | Follow-up | 45.46 | 5.31 | 34.37 | 10.56 |
| Child rejection | Pre-test | 36.33 | 3.71 | 34.33 | 8.40 |
| | Post-test | 18.06 | 3.15 | 32.30 | 6.80 |
| | Follow-up | 16.06 | 3.26 | 32.21 | 8.30 |

difference between the experimental group and the control group in terms of QoL, mother-child interaction, and its dimensions ($p < 0.01$). The intragroup eta coefficient indicated that 93% of intragroup changes of QoL and 92% of intragroup changes of mother-child interaction were affected by self-healing intervention. Moreover, 91% and 75% of intergroup changes in QoL and mother-child interaction were affected by self-healing intervention. The Bonferroni test was conducted to analyze differences between pretest, posttest, and follow-up phases in the effectiveness of self-healing intervention (Table 5).

According to Table 5, self-healing intervention improved components of QoL and mother-child interaction as well as dimensions of physical health, mental health, social relationships, environment, child acceptance, overprotection, and rejection from pretest to posttest ($p < 0.01$). As a result, self-healing intervention was successful in improving QoL and mother-child interaction among female breadwinners. Nevertheless, it could much affect leniency ($p > 0.05$). Given the insignificance of differences between posttest and follow-up, it can be stated that the effectiveness of self-healing intervention remained constant after it was over.

## 4. Discussion

The present study aimed to investigate the effectiveness of self-healing (the healing codes) intervention on quality of life and mother-child interaction among female breadwinners. The results indicated significant differences between pretest, posttest, and follow-up measurements of QoL and mother-child interaction. In other words, self-healing intervention improved QoL and mother-child interaction among female breadwinners. This finding is consistent with the research results of Shukuhy et al. [8], Latifi et al. [19], Zarean & Latifi [20], Nameni et al. [26], and Shahbazi and Latifi [27] on the effectiveness of self-healing intervention in psychological fields with different statistical samples.

To explain the reason for the effectiveness of self-healing intervention, it can be stated that female breadwinners have destructive cellular memories just like other people. Consciously or unconsciously, these memories entail stress in the body, put cells on defense, imbalance the autonomic nervous system and put it on the fight-or-flight mode, causes turmoil in an individual, and weaken the healing codes. Unreasonable fears, believed lies, and unhealthy thoughts can act like tumors inside cellular memories and decline QoL in different dimensions of people's lives; as a result, they perform poorly. Perception of the absence of a husband as the most important reliable pivot of a woman can make her feel a dramatic decline in security, activate destructive cellular memories too much, and severely decrease her ability to manage life and interact with her children properly.

The shrink tries to turn the focus and commitment of women breadwinners from futile expectations (like bad thoughts and negative emotions) to help them act in line with their search for a desirable life and to help these people pursue what they are after. We can clarify by saying that breadwinning women face issues that may threaten their QoL as with their physical, mental/psychological, social, behavioral, and financial life, which may contribute to low-quality life for their households. All human beings go through painful feelings and intrusive thoughts in the face of which they must learn to live a rich, full, and productive life [28]. Self-healing training sessions help relieve stress, boost self-management abilities, and provide flexibility to cope with stressful situations and to attain required physical and mental health skills. And if the skills necessary to overcome obstacles based on self-healing are improved, so are adaptability and stress management in

**Table 4**
Repeated measurement results of quality of life and mother-child interactions in the pre-test, post-test, and follow-up phases.

| Scales | Within and between subjects' effects | Source | SS | df | MS | F | p | $\eta_p^2$ |
|---|---|---|---|---|---|---|---|---|
| Quality of life | Within-subjects | Phase | 4046.15 | 1.30 | 3108.36 | 407.00 | 0.01 | 0.93 |
| | | Group × Phase | 3777.48 | 1.30 | 2901.97 | 379.98 | 0.01 | 0.93 |
| | | Error | 278.35 | 36.44 | 7.63 | | | |
| | Between-subjects | Group | 8448.71 | 1 | 8448.71 | 298.52 | 0.01 | 0.91 |
| | | Error | 792.44 | 28 | 28.30 | | | |
| Physical health | Within-subjects | Phase | 839.62 | 1.41 | 595.43 | 231.19 | 0.01 | 0.89 |
| | | Group × Phase | 786.02 | 1.41 | 557.42 | 216.43 | 0.01 | 0.88 |
| | | Error | 278.35 | 36.44 | 7.63 | | | |
| | Between-subjects | Group | 1545.87 | 1 | 1545.87 | 319.41 | 0.01 | 0.91 |
| | | Error | 135.51 | 28 | 4.84 | | | |
| Mental health | Within-subjects | Phase | 562.02 | 1.32 | 423.33 | 182.23 | 0.01 | 0.86 |
| | | Group × Phase | 550.28 | 1.32 | 414.49 | 178.42 | 0.01 | 0.86 |
| | | Error | 101.68 | 37.17 | 2.32 | | | |
| | Between-subjects | Group | 947.37 | 1 | 947.37 | 160.27 | 0.01 | 0.85 |
| | | Error | 165.51 | 28 | 5.91 | | | |
| Social relationships | Within-subjects | Phase | 188.68 | 1.24 | 151.50 | 96.02 | 0.01 | 0.77 |
| | | Group × Phase | 138.95 | 1.24 | 111.56 | 70.70 | 0.01 | 0.71 |
| | | Error | 55.02 | 34.87 | 1.57 | | | |
| | Between-subjects | Group | 344.17 | 1 | 344.17 | 183.75 | 0.01 | 0.86 |
| | | Error | 52.44 | 28 | 1.87 | | | |
| Environmental health | Within-subjects | Phase | 47.28 | 1.45 | 32.45 | 14.66 | 0.01 | 0.34 |
| | | Group × Phase | 65.06 | 1.45 | 44.66 | 20.17 | 0.01 | 0.41 |
| | | Error | 90.31 | 40.79 | 2.21 | | | |
| | Between-subjects | Group | 384.40 | 1 | 384.40 | 34.18 | 0.01 | 0.55 |
| | | Error | 314.88 | 28 | 11.24 | | | |
| Mother-child interaction | Within-subjects | Phase | 14670.28 | 1.01 | 14592.88 | 324.61 | 0.01 | 0.92 |
| | | Group × Phase | 17661.62 | 1.01 | 17568.43 | 390.79 | 0.01 | 0.93 |
| | | Error | 1265.42 | 28.14 | 44.95 | | | |
| | Between-subjects | Group | 46013.61 | 1 | 46013.61 | 85.46 | 0.01 | 0.75 |
| | | Error | 15074.17 | 28 | 538.36 | | | |
| Child acceptance | Within-subjects | Phase | 1160.28 | 1.02 | 1132.78 | 179.07 | 0.01 | 0.86 |
| | | Group × Phase | 1306.95 | 1.02 | 1275.98 | 201.71 | 0.01 | 0.87 |
| | | Error | 181.42 | 28.68 | 6.32 | | | |
| | Between-subjects | Group | 2035.37 | 1 | 2035.37 | 172.60 | 0.01 | 0.86 |
| | | Error | 330.17 | 28 | 11.79 | | | |
| Overprotection | Within-subjects | Phase | 579.62 | 1.01 | 575.05 | 17.80 | 0.01 | 0.38 |
| | | Group × Phase | 692.42 | 1.01 | 686.96 | 21.28 | 0.01 | 0.43 |
| | | Error | 911.28 | 28.22 | 32.29 | | | |
| | Between-subjects | Group | 4737.87 | 1 | 4737.87 | 33.36 | 0.01 | 0.54 |
| | | Error | 3975.77 | 28 | 141.99 | | | |
| Over-leniency | Within-subjects | Phase | 10.28 | 1.01 | 10.16 | 4.09 | 0.06 | 0.12 |
| | | Group × Phase | 0.68 | 1.01 | 0.68 | 0.27 | 0.60 | 0.01 |
| | | Error | 70.35 | 28.35 | 2.48 | | | |
| | Between-subjects | Group | 2700.54 | 1 | 2700.54 | 12.45 | 0.01 | 0.31 |
| | | Error | 6171.77 | 28 | 216.84 | | | |
| Child rejection | Within-subjects | Phase | 4380.80 | 1.01 | 4358.10 | 316.61 | 0.01 | 0.91 |
| | | Group × Phase | 5077.42 | 1.01 | 5051.12 | 370.44 | 0.01 | 0.93 |
| | | Error | 383.77 | 28.14 | 13.63 | | | |
| | Between-subjects | Group | 2361.34 | 1 | 2361.34 | 11.67 | 0.01 | 0.29 |
| | | Error | 5661.55 | 28 | 202.19 | | | |

later-life situations, which is endorsed by the findings of this study [19].

False beliefs cause stress in the body, put cells on defense, and suddenly change the autonomic nervous system into fight-or-flight mode. In fact, false beliefs such as "I'm not lovable.", "I'm disappointed.", "Something will go wrong.", "People take advantage of me.", "I'm a bad person.", and "People tend to control me." are like tumors inside cellular memories that would spread disease all over your life. These negative thoughts make people forget their abilities and overestimate problems. This process leads to despair, impatience, poor performance, and a sense of inefficiency among people. The self-healing approach increases people's self-esteem and improves their performance by enhancing positive memory, mitigating negative memory, modifying lifestyles, developing spiritual excellence, visualizing ethics, and modifying intrinsic conversations. It also decreases destructive cellular beliefs gradually by using the reverse memory retrieval technique and reminding people of their strengths throughout various stages of life such as being important, being able to take care of tasks, being loved and caressed, and finally benefiting from health that is the greatest blessing from God. People then feel higher levels of self-efficacy and hopefulness as a result of improved performance and positive feedback from the environment of feelings. Therefore, they become more patient in the face of problems and experience higher levels of resilience. It can be concluded that the self-healing method is efficient in improving psychological capital.

Self-healing is a process in which a person performs self-healing exercises by himself. An exercise is to modify intrinsic conversations regarding unreasonable fears and false beliefs. People have incorrect beliefs which could lead to despair, discomfort, and impatience. In the form of prayers and requests from God, these exercises try to show people another aspect of life by treating destructive cellular memories and images, curing false memory and beliefs, and identifying hidden fears. People who consider death to be the end of life for themselves and the world will seek all of their wishes and desires [20]. These people want to calculate other people's and their own behavioral reactions materially; however, they are unable to fulfill these dreams due to the limited capacity of the world and that of humans. Hence, they mostly become nervous and impulsive individuals who cannot tolerate tension from unfortunate events.

Regarding the effectiveness of decisive factors in this approach on

**Table 5**
Bonferroni post-hoc test for paired comparison of quality of life and mother-child interactions in the post-test and follow-up phases.

| Scales | Phase A | Phase B | Mean difference (A-B) | SE | p |
|---|---|---|---|---|---|
| Quality of life | Pre-test | Post-test | −13.43 | 0.71 | 0.01 |
| | | Follow-up | −14.90 | 0.62 | 0.01 |
| | Post-test | Follow-up | −1.46 | 0.31 | 0.07 |
| Physical health | Pre-test | Post-test | −6.23 | 0.39 | 0.01 |
| | | Follow-up | −6.70 | 0.40 | 0.01 |
| | Post-test | Follow-up | −0.46 | 0.09 | 0.10 |
| Mental health | Pre-test | Post-test | −5.03 | 0.33 | 0.01 |
| | | Follow-up | −5.53 | 0.40 | 0.01 |
| | Post-test | Follow-up | −0.50 | 0.18 | 0.08 |
| Social relationships | Pre-test | Post-test | −2.96 | 0.29 | 0.01 |
| | | Follow-up | −3.16 | 0.30 | 0.01 |
| | Post-test | Follow-up | −0.20 | 0.12 | 0.32 |
| Environmental health | Pre-test | Post-test | −1.20 | 0.34 | 0.01 |
| | | Follow-up | −1.73 | 0.39 | 0.01 |
| | Post-test | Follow-up | −0.53 | 0.21 | 0.08 |
| Mother-child interaction | Pre-test | Post-test | −27.13 | 1.53 | 0.01 |
| | | Follow-up | −27.03 | 1.45 | 0.01 |
| | Post-test | Follow-up | 0.10 | 0.11 | 1.00 |
| Child acceptance | Pre-test | Post-test | −7.63 | 0.57 | 0.01 |
| | | Follow-up | −7.60 | 0.55 | 0.01 |
| | Post-test | Follow-up | 0.03 | 0.04 | 1.00 |
| Overprotection | Pre-test | Post-test | −5.40 | 1.29 | 0.01 |
| | | Follow-up | −5.36 | 1.25 | 0.01 |
| | Post-test | Follow-up | 0.03 | 0.10 | 1.00 |
| Over-leniency | Pre-test | Post-test | 0.70 | 0.35 | 0.18 |
| | | Follow-up | 0.73 | 0.35 | 0.13 |
| | Post-test | Follow-up | 0.03 | 0.03 | 0.97 |
| Child rejection | Pre-test | Post-test | −14.80 | 0.82 | 0.01 |
| | | Follow-up | −14.80 | 0.83 | 0.01 |
| | Post-test | Follow-up | 0.01 | 0.04 | 1.00 |

the mental improvement of participants, it can be stated that creative visualization, reverse retrieval of memories, glass elevator, lifecycle checklist, meditation, avoidance of grudges, identification of intrinsic puzzles for positive and negative feelings, self-identification, reality of life, development of a role in the acceptance of current situation, and modification of intrinsic conversations regarding fears and unhealthy thoughts affect the improvement process. When their attempts at managing and improving life and social relationships are in vain after a while, they feel disappointed and frustrated gradually. Probably, participating in self-healing sessions emphasizing the methods of improving self-esteem, modifying bad and detrimental habits, highlighting will improvement techniques (decision, meditation, assessment, punishment, and reward), learning problem-solving methods, learning situational stress management, teaching balanced lifestyles, improving QoL in healthy and hygienic environments, increasing intimacy and relationships, and beneficial social activities emphasizing continuous meditation, self-love, and management of emotions and communications have helped people feel higher levels of self-efficacy in addition to establishing more appropriate relationships and performing more useful activities.

To explain the effectiveness of self-healing in the process of improving physical diseases, the following items should be taken into account. Physiological problems and symptoms of the body system were analyzed to alleviate physiological stress through respiratory-muscular relaxation exercises, temple meditation, rose meditation, luminous body scan, and specific healing code exercises practically.

Regarding the positive role of the therapeutic intervention in improving the mother-child relationship among female breadwinners, it can be stated that an important training task is to develop and enhance healing codes including love, meaning that an individual allows the process to drive the loved ones toward the world and let them experience their true selves completely. In this case, the individual has truly expressed love. The course focused on happiness, peace, patience, affection, decency, trust, modesty, and continence. The process of finding memories was also analyzed concerning failures, conflicts, and their effects on the weakness of the abovementioned characteristics to create and enhance codes in practical plans developed for individuals. Apparently, enhancing healing codes, on the one hand, and emphasizing the training of spiritual excellence techniques, deepening the faith in God (an infinite power), trusting and relying upon God (and letting go of the problems that are not in our hands), saying prayers, emphasizing the spiritual purposiveness of life, increasing intrinsic richness (being beneficial and caring to oneself and others), looking deep inside oneself, explaining the establishment of triangular relationships instead of linear relationships, and setting aside time for meditation, on the other hand, have been efficient in increasing the resilience of female breadwinners in the face of hardships and life problems and improving the mother-child relationships.

This study faced certain limitations such as using a unisex statistical sample including only women. Moreover, the target population came from Isfahan, which is a city in Iran with specific cultural backgrounds. Therefore, caution should be taken into account in generalizing results to other populations.

## 5. Conclusion

The self-healing intervention program improved the components of QoL and mother-child interaction among female breadwinners. The self-healing approach can rehabilitate people and help them perform better by identifying and mitigating destructive cellular memories and their outcomes, creating and enhancing healing codes, modifying lifestyles, developing spiritual excellence, correcting intrinsic conversations, helping perceive the fact that what people experience in this world results from their thoughts, and practicing meditation, prayers, and God-like thinking. It is suggested that future studies be conducted on other statistical populations to use the results as a basis for comparison in a meta-analysis. It is also suggested that future studies employ other therapeutic approaches along with the self-healing technique to compare and analyze their effectiveness. The novel self-healing approach should also be used in a statistical population consisting of socially-damaged individuals (e.g., young delinquents, wives of addicts, etc.) to improve QoL. It is also recommended to conduct lengthier studies with long-term and multistage follow-up phases to analyze the durability of effectiveness and stability of changes left by this model in the lives of female breadwinners.

## Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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## Credit authorship contribution statement

**Fahimeh Zarean**: Conceptualization, Investigation, Resources, Supervision, Project administration, Writing - review & editing, Conceptualization, Methodology, Data curation, Writing - original draft. **Zohreh Latifi**: Investigation, Validation, Writing - original draft, Formal analysis.

## Declaration of competing interest

The authors declare that they have no conflict of interest.

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