



Effectiveness of Mindfulness-based Training Intervention in Psychological Capital and Psychological Well-being of Women Heading Household

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Abstract

Background and Objective: One of the main challenges faced by women heading households is their low level of psychological well-being, for which plenty of training interventions have been executed to enhance this aspect among these individuals. The present study aimed to find out the effect of mindfulness-based training interventions on psychological capital and well-being among women heading households.

Materials and Methods: The current research was performed based on a quasi-experimental method of pretest-posttest design with a control group and a two-month period follow-up. The study statistical community was made up of all women in charge of their families covered by Shiraz City Welfare Center in 2022-2023. The samples (n=30) were selected using a convenience sampling method and allocated to experimental group (n=15) and control group (n=15). For data collection, Ryff's Psychological Well-being Scale (1989) and Luthans' Psychological Capital Questionnaire (PCQ) (2007) were utilized. The experimental group received the mindfulness-based training intervention during eight 90-minute sessions once a week from April 3 to June 4, 2023.

Results: As the covariance analysis indicated, the groups were significantly different in the pretest and posttest ($P < 0.0001$).

Conclusions: The intervention led to an increase in psychological capital and psychological well-being. Overall, the results of the current research demonstrated the impact of the intervention on the psychological capital and well-being of the women heading their families.

Keywords: Mindfulness, Psychological capital, Psychological well-being, Training intervention, Women heads of households

Background

As the World Health Organization defined, the women heading the households are those in charge of supplying their family members with the required material and spiritual life [1]. As put by the Iranian Statistics Center, women who are not regularly present and not supported by an adult man and who are responsible for managing their family economically and socially are called household heading women (Javadian et al., 2019). The number of such women is increasing steadily in Iran, with a noticeable rise in 1966 (7.3%), 1996 (8.4%), 2006 (9.4%), 2011 (12.1%), and 2016 (12.7%) [2].

The majority of women heading households suffer from poverty and lack the necessary earning potential in economic affairs, which results in a decline in their efficiency and psychological health [3, 4]. The assessments of the physical and mental health of these women have shown lower levels in

both areas in comparison to other women. They are also found to be more susceptible to a range of physical and mental illnesses, many of which are linked to psychological disorders [5].

These groups of women have been found to have an increased vulnerability to stress, lacking the necessary skills to effectively address their own issues. Compared to women who are not household heads, they experience higher levels of guilt, depression, anxiety, and worry [6, 7]. Furthermore, the challenges faced by these women can lead to psychological disorders, reducing their psychological capital and ultimately diminishing their psychological well-being [8].

Psychological capital is one of the branches of positive psychology, which is characterized by such personality traits as the individuals' potential to attain success, having the will to achieve goals,

creating positive beliefs about themselves, and enduring problems [9].

Women who head households and possess a strong psychological capital not only cope with stressful situations better but also exhibit lower levels of tension and higher problem-solving abilities. This psychological capital enables them to have a clear understanding of themselves and be less influenced by daily events [9].

The concept of psychological capital is made up of four elements: hope, efficacy, optimism, and resilience. Hope is linked to steadfastness and perseverance to achieve goals, efficacy refers to a person's ability and effort to accomplish success, optimism is the individual's positive view about the present and the future, and resilience is defined as being flexible to achieve one's goals and attain success when facing difficulties and nuisances [9].

Psychological capital is rich in positive charge, exerting significant effects on the capacity and ability of women heading households since the findings of some studies have demonstrated that psychological capital and its elements are related to lots of behavioral and health variables, such as psychological well-being [10].

As one of the critical concepts stressed by positive psychology, psychological well-being refers to optimal performance, which empowers an individual to cope with various pressures in life and adapt to them in a satisfactory manner [11].

Ryff (1989) defined psychological well-being as the effort for perfection in order to realize one's real potential based on six factors: personal growth, autonomy, purpose in life, positive relations with others, self-acceptance, and environmental mastery (Kraiss et al., 2023). An increase in the psychological well-being of women heading households promotes their quality of life and mitigates their psychological distress, leading to a better understanding and evaluation of their situations. This empowerment enables them to deal with difficulties in life [12].

Regarding the significance of psychological capital and psychological well-being among the women heading households, it can be stated that the interventions for promoting the two mentioned components have a special position among this group of women [13]. Besides, in the study conducted by Javaheri Mohammadi et al. (2023), psychological capital had a mediating role in the relationship between mindfulness and the mental health of women [2].

Thus, it is a must to improve the two above-stated components in women as the heads of households by implementing some interventions, one of which is mindfulness-based intervention. Mindfulness

impacts the ability to refrain from judgment, purposeful awareness and attention to purpose, and focus on the present time so that non-judgmentally immersing yourself in the present moment leads to processing all dimensions of the existing experience, such as behavioral, cognitive, or physiological issues. Mindfulness helps an individual perceive that although negative emotions may arise, they will not last as a long-lasting and fixed element of their personality. Besides, it provides them the chance to respond to events thoughtfully and reflectively rather than coming up with involuntary and non-reflective responses to events, and in the long run, it results in changing the person's view [14].

The findings extracted from various studies revealed that mindfulness-based interventions influenced the enhancement of psychological well-being in a positive way [15-18]. Kashmiri et al. (2019) found mindfulness played a moderating role in psychological well-being, and mindfulness-based training intervention led to the promotion of psychological well-being [19]. Lengua et al. (2023) reported that mindfulness and psychological well-being were directly correlated [20]. However, few studies have mentioned the effect induced by mindfulness-based training intervention on psychological capital and have focused more on other components, such as the quality of life, resilience, and perceived social support [21-24]. Thus, it is necessary to concentrate on this element among women heading households.

Objectives

Given that women play a crucial role in social development and are responsible for maintaining family health and fulfilling significant roles and duties within the family and society, it is essential for them to be physically and mentally healthy in order to effectively carry out these responsibilities. Women who are heads of households, facing unique challenges, often experience high levels of psychological disorders, such as stress and anxiety. Therefore, it is imperative to assess and address their issues carefully. It is noteworthy to mention that it is possible to increase the psychological well-being and capital of this group of women through implementing mindfulness-based training interventions. Similarly, mindfulness training interventions influencing psychological capital have not drawn enough attention. Therefore, the present study aimed to investigate the impact of mindfulness-based training intervention on enhancing the psychological capital and psychological well-being among the women heading households in Shiraz, Fars Province.

Materials and Methods

This research was based on a quasi-experimental method with a pretest-posttest design and a control group with a two-month period follow-up. The study statistical community consisted of women who were heads of households residing in Shiraz and had medical files in the Welfare Center in Shiraz. Additionally, this group of women had children attending elementary school in the Educational Department of Shiraz, District 2, during the 2022-2023 academic year. Out of this group, 30 women were randomly selected and allocated to either the experimental or control group (n=15 each).

To access statistics after the study design was approved at Marvdasht Azad University, the necessary measures were taken to coordinate with the Shiraz Welfare Center that introduced the researcher to the Educational Department of District 2 in Shiraz. After coordinating with the Head of the Educational Department of District 2 in Shiraz, the samples were selected using a convenient sampling method from the students in SaIran Martyrs School for Girls and Boys. Then, students with mothers serving as household heads were identified from the list, from which women heading households meeting the study's eligibility criteria were selected. The study inclusion criteria were willingness to take part in the study, the age range from 20 to 50 years, low mean score in psychological well-being and psychological capital, and not receiving psychological counseling. The study exclusion criteria were being reluctant to continue cooperating, not taking part in two sessions of intervention, lacking physical ailment or mental disorder, and not taking psychoactive drugs.

In order to comply with the study's ethical principles, an informed consent form was signed by the participants in the intervention sessions, and the participants were also assured that their information was kept confidential. Before implementing the intervention, both groups completed the questionnaires. The experimental group was subjected to mindfulness training intervention during eight 90-minute sessions weekly. At the end of the sessions and two months later, the questionnaires were redistributed among the groups as a posttest to be filled out by the two groups' participants. Descriptive statistics (mean and standard deviation) and inferential statistics

(covariance analysis) were used to analyze the present study data in SPSS-24 software.

Evaluation Tools

Ryff's Psychological Well-being Scale: This instrument, designed by Ryff (1989), is used to measure six dimensions of individuals' psychological well-being patterns. This 18-item short version of the scale is scored using a 6-point Likert scale from "Strongly disagree" to "Strongly agree" (ranging from 1=strongly disagree to 6=strongly agree). Reverse scoring is applied on items 1, 3, 4, 5, 9, 10, 13, and 17, and the total score falls in the range of 18-108. This scale is based on 6 factors, including personal growth (3 items), autonomy (3 items), environmental mastery (3 items), purpose in life (3 items), self-acceptance (3 items), and positive relations with others (3 items). The validity of this questionnaire was measured by Ryff et al., who reported the Cronbach's alpha of 0.93 for self-acceptance, 0.91 for positive relations with others, 0.86 for autonomy, 0.90 for environmental mastery, 0.90 for purpose in life, and 0.87 for personal growth (St. Arnaud et al., 2023). In Iran, Khanjani studied the psychometric properties and factor structure of this scale among students and reported the scale's internal consistency as 0.71 using Cronbach's alpha coefficient method [12].

Luthans' Psychological Capital Questionnaire: It is a 24-item instrument primarily developed by Luthans et al. (2007) to measure 4 subscales, namely efficacy (items 1 to 6), hope (items 7 to 12), resilience (items 13 to 18), and optimism (items 19 to 24). It is scored on a 6-point Likert scale from "Strongly disagree" to "Strongly agree" (ranging from 1=strongly disagree to 6=strongly agree), and items 13, 20, and 23 are scored reversely. This instrument was validated by Luthans et al., who reported Cronbach's alpha of 0.72 for the subscales of hope, 0.71 for resilience, 0.75 for efficacy, and 0.88 for optimism [23]. In Iran, Zarei Manojan et al. (2020) reported the questionnaire's total reliability as 0.92, as evaluated by Cronbach's alpha coefficient method [25].

Mindfulness-based Therapy: Mindfulness-based therapy sessions, adopted from the mindfulness protocol of Baer et al. (2006), were held every week from April 3 to June 4, 2023, during eight 90-minute sessions weekly for two months (four sessions per month) after undergoing some minor changes and being approved by several professional experts (table 1).

Table 1. Summary of objectives and content of mindfulness training sessions of Baer et al. (2006)

| Session | Training objectives | Training content |
|-----------------------|--|---|
| First | The purpose of holding training courses | Introduction, communication, trust building, details on the educational goals, explanations about the sessions |
| Second, third, fourth | Introducing psychological well-being and how important it is | Familiarity with psychological well-being and the definition of well-being and its importance in improving satisfaction and the quality of life |

Table 1 Continue

| | | |
|-----------------|---|---|
| Fifth to eighth | Familiarity with mindfulness and its elements, training about observation, description, non-judgment, conscious awareness towards empathy | Defining mindfulness, making the members familiar with self-awareness skills, recognizing the dimensions of mindfulness, introducing emotional self-awareness, correct self-evaluation, understanding one's strong and weak points and limitations, defining communication and reviewing its importance in life, recognizing strong and superficial relations, various communication styles, multiple skills of mindfulness in effective communication, non-judgmental attitude, observation, verbal and non-verbal components of the party involved, conscious action, emotional experience and types of emotions, introducing physical and cognitive dimensions of emotions |
|-----------------|---|---|

Results

In this research, 30 subjects participated in two groups: the experimental group (n=15 subjects) and the control group (n=15 subjects). The mean age of the participants was obtained at 44.87 ± 5.71 years in the experimental group and 44.73 ± 4.46 years in the control group. Most of the participants in both groups were divorced, housewives, and had high school education or were diploma holders. Table 2 displays the descriptive indicators in the two study groups in terms of the test stage.

Table 2 shows the means and standard deviations of the variables of psychological well-being and psychological capital in the experimental and control groups. Accordingly, although these scores were similar in the pretest, they changed in the posttest stage.

For surveying the effect of mindfulness training components on the psychological capital and psychological well-being of the mothers heading the families, the analysis of covariance (ANCOVA) was applied. Before the analysis, some of the most important underlying assumptions of this test were examined.

Kolmogorov-Smirnov test was utilized to test the normal distribution of the dependent variable's data, the results of which indicated its normal distribution ($P > 0.05$). The equality of the variance-covariance matrices of dependent variables in the groups was checked by Box's M test. The significance level of Box's M test was $P > 0.05$,

according to which the variance-covariance matrices of the dependent variables were concluded to be the same in the study groups.

In order to assess the equality of variances for errors, Levene's test (Levene, 1960) was applied. The results of Levene's test showed the following: for psychological capital ($F=3.106, P=0.08$) and for psychological well-being ($F=0.004, P=0.94$). To check the assumption behind the homogeneity of regression slope, the interaction effect of the group's independent variable with the dependent variables was used in the pretest stage. The significance level of the ANOVA test was > 0.05 . Thus, the assumption for homogeneity of regression slope was held for performing covariance analysis. Table 3 displays the results of ANCOVA for the psychological well-being variables.

As Table 3 shows, the results of ANCOVA revealed the study groups being significantly different in terms of autonomy ($F=73.35, P<0.001$), personal growth ($F=45.075, P<0.001$), purpose in life ($F=48.786, P<0.001$), self-acceptance ($F=136.656, P<0.001$) and psychological well-being ($F=28.975, P<0.001$). Table 4 presents the ANCOVA results for the variable of psychological capital.

Table 4 shows that the results of covariance analysis (ANCOVA) displayed the two groups significantly differing in terms of efficacy ($F=113.541, P<0.001$), hope ($F=115.437, P<0.001$), resilience ($F=63.874, P<0.001$), optimism ($F=17.568, P<0.001$), and psychological capital ($F=75.116, P<0.001$).

Table 2. Mean and standard deviation of psychological well-being and psychological capital and their components in two study groups

| Variable | Pretest | | Posttest | |
|--------------------------------|---------------|--------------------|---------------|--------------------|
| | Control group | Experimental group | Control group | Experimental group |
| | Mean±SD | Mean±SD | Mean±SD | Mean±SD |
| Autonomy | 8.40±1.40 | 8.33±1.71 | 8.80±1.14 | 14.00±2.03 |
| Environmental mastery | 8.80±1.32 | 8.93±1.57 | 8.33±1.58 | 8.00±1.64 |
| Personal growth | 7.80±1.32 | 8.60±1.40 | 8.53±0.53 | 11.53±1.50 |
| Purpose in life | 11.93±0.88 | 7.73±1.09 | 7.86±1.18 | 11.53±1.59 |
| Self-acceptance | 8.33±1.17 | 8.66±1.54 | 4.60±1.54 | 11.40±1.91 |
| Positive relations with others | 8.73±1.27 | 8.80±1.26 | 8.86±2.06 | 12.06±2.60 |
| Psychological well-being | 54.00±5.91 | 55.06±6.68 | 50.66±7.94 | 64.86±6.46 |
| Efficacy | 8.53±2.82 | 11.20±5.00 | 9.60±3.04 | 23.60±4.22 |
| Hope | 8.40±3.04 | 10.20±4.48 | 8.56±3.04 | 22.53±4.12 |
| Resilience | 11.46±2.61 | 13.73±14.18 | 12.53±2.61 | 21.53±4.06 |
| Optimism | 16.40±3.04 | 18.40±4.30 | 15.46±2.32 | 19.46±4.03 |
| Psychological Capital | 44.80±11.16 | 54.53±18.39 | 47.20±10.84 | 88.20±16.38 |

Table 3. ANCOVA results of the mean psychological well-being and its components

| Factors | | Sum of Squares | Test statistics | Mean of Squares | η | Power | Sig. |
|--------------------------------|---------|----------------|-----------------|-----------------|--------|-------|-------|
| Autonomy | Group | 203.47 | 73.35 | 203.47 | 0.731 | 1.00 | 0.001 |
| | Pretest | 1.50 | 73.35 | 1.50 | 0.020 | 0.110 | 0.460 |
| | Error | 74.89 | | 2.77 | | | |
| Environmental mastery | Group | 0.744 | 0.278 | 0.744 | 0.010 | 0.80 | 0.602 |
| | Pretest | 1.079 | 0.403 | 1.079 | 0.015 | 0.094 | 0.531 |
| | Error | 72.255 | | 2.676 | | | |
| Personal growth | Group | 53.949 | 45.075 | 53.949 | 0.625 | 1.00 | 0.001 |
| | Pretest | 3.151 | 2.632 | 3.151 | 0.089 | 0.347 | 0.116 |
| | Error | 32.316 | | 1.197 | | | |
| Being purposeful in life | Group | 97.044 | 48.786 | 97.044 | 0.644 | 1.00 | 0.001 |
| | Pretest | 1.758 | 0.884 | 1.758 | 0.032 | 0.148 | 0.355 |
| | Error | 53.708 | | 1.989 | | | |
| Self-acceptance | Group | 320.133 | 136.656 | 320.133 | 0.835 | 1.00 | 0.001 |
| | Pretest | 21.949 | 9.370 | 21.949 | 0.258 | 0.839 | 0.005 |
| | Error | 63.251 | | 2.343 | | | |
| Positive relations with others | Group | 76.133 | 13.434 | 76.133 | 0.332 | 0.942 | 0.001 |
| | Pretest | 1.657 | 0.292 | 1.657 | 0.01 | 0.082 | 0.593 |
| | Error | 153.010 | | 5.667 | | | |
| Psychological well-being | Group | 1420.788 | 28.957 | 1420.788 | 0.517 | 0.999 | 0.001 |
| | Pretest | 144.321 | 2.941 | 144.321 | 0.098 | 0.380 | 0.098 |
| | Error | 1324.746 | | 49.065 | | | |

Table 4. ANCOVA results of the mean psychological capital and its components

| Dimensions | | Sum of Squares | Test statistics | Mean of Squares | η | Power | Sig. |
|-----------------------|---------|----------------|-----------------|-----------------|--------|-------|-------|
| Efficacy | Group | 1455.603 | 113.541 | 1455.603 | 0.808 | 1.00 | 0.001 |
| | Pretest | 33.057 | 2.579 | 33.057 | 0.087 | 0.341 | 0.120 |
| | Error | 346.143 | | 12.820 | | | |
| Hope | Group | 1460.356 | 115.437 | 1460.356 | 0.810 | 1.00 | 0.001 |
| | Pretest | 37.632 | 2.975 | 37.632 | 0.099 | 0.834 | 0.096 |
| | Error | 341.568 | | 12.651 | | | |
| Resilience | Group | 656.244 | 63.874 | 656.244 | 0.703 | 1.00 | 0.001 |
| | Pretest | 50.068 | 4.873 | 50.068 | 0.153 | 0.567 | 0.036 |
| | Error | 277.399 | | 10.274 | | | |
| Optimism | Group | 159.035 | 17.568 | 159.035 | 0.394 | 0.981 | 0.001 |
| | Pretest | 59.051 | 6.523 | 59.051 | 0.195 | 0.692 | 0.017 |
| | Error | 244.416 | | 9.052 | | | |
| Psychological capital | Group | 13166.033 | 75.116 | 13166.033 | 0.736 | 1.00 | 0.001 |
| | Pretest | 672.371 | 3.836 | 672.371 | 0.124 | 0.472 | 0.061 |
| | Error | 4732.429 | | 175.275 | | | |

Discussion

This study aimed to survey the effectiveness of mindfulness-based training intervention in promoting psychological capital and psychological well-being among the women heading the households in Shiraz, Fars Province. The study findings reported that the training intervention had an effect on psychological well-being. This finding was in agreement with those reported in other studies [15-18]. To explain this result, we can state that in mindfulness-based therapy, the person becomes aware of oneself and takes action to anticipate and create a novel approach to life. In this new approach resulting from mindfulness, the person seeks new goals in their life, through which the individual discovers more effective communication styles with others, all of which result from mindfulness-based training.

Another finding of the present research was that mindfulness influenced the factors of autonomy and personal growth, the finding which is in line with those reported by some studies [22, 26, 27]. To elaborate on this finding, considering the components as autonomy, personal growth, and

environmental mastery, mindfulness-based training teaches the individual to learn some techniques to accept oneself with no judgment, to live in the moment, and to come up with a new insight about one's life.

Another finding of the current research indicated the effect of mindfulness on environmental mastery and self-acceptance, the finding which is consistent with other studies [28-30]. The reason for this finding can be described as follows: mindfulness-based therapy involves the practice of mindful meditation, which aims to enhance an individual's sense of hope, strength, flexibility, honesty, and self-acceptance. As a result of this therapy, the individual has the opportunity to gain a deeper understanding and acceptance of themselves, leading to improved self-regulation and self-awareness, as well as the ability to recognize and forgive their own shortcomings.

Finally, based on the current study findings, mindfulness exerted an impact on dimensions such as being purposeful in life and positive relations with others, the finding which is in agreement with those of other studies [31, 32]. The mindfulness-

based training approach promotes women's self-awareness and helps them to recognize their strengths and weaknesses and create a positive attitude in their beliefs. Thus, it leads to increasing emotional management skills and effectively coping with negative emotions. In fact, constant implementation of mindfulness-based training interventions increases the household-headed women's knowledge and awareness about their bodies, feelings, and thoughts. Furthermore, mindfulness is a psychoanalytical approach that involves teaching individuals to acknowledge and accept uncontrollable aspects of life through conscious breathing and thinking. This therapeutic approach promotes mental well-being, decreases inaccurate beliefs, and mitigates attributional styles, anxiety, and psychological distress.

Considering psychological capital, the results of the present study reported that mindfulness-based therapy had effects on increasing psychological capital and efficacy, hope, resilience, and optimism [33, 34], the finding which was constant with those of other studies [21, 22, 24]. The results of the current study can be explained by the fact that mindfulness impacts the development of a non-judgmental attitude, purposeful awareness, and attentiveness to the present moment. By emphasizing the present moment, individuals are able to better understand and navigate their cognitive, emotional, and behavioral experiences. Mindfulness bestows a person's self-awareness with the power to influence outcomes, be a better decision-maker, have more self-confidence, and understand things from multiple perspectives free from assumptions and biases. [35, 36]

Similarly, it can be stated that considering this issue, the training based on non-judgmental and conscious action to display empathy towards people can bring about increasing positive relations with others, and since psychological capital encompasses the social aspect of a person, such as optimism and resilience, such an individual can have more reliable relations in their interactions. In fact, this training helps the person to find optimistic beliefs and be optimistic to take action to solve their problems. On the other hand, regarding the individual's self-efficacy, the training based on psychological capital identifies their weaknesses, and by removing such shortcomings and replacing them with the person's positive strong points, it promotes the individual's autonomy, self-acceptance, and personality growth.

Conclusions

To sum up, the findings of the current study show that mindfulness-based intervention was

effective in psychological well-being and its factors and in psychological capital and its components. This result can represent the key role of interventions such as mindfulness in enhancing the mental health of the women playing the role of household heads. Consequently, in accordance with the present study findings, it can be concluded that the mindfulness-based intervention can improve the mental state of the women heading the households. This finding can be a foundation for developing training and treatment interventions aimed at boosting and strengthening the health status of the women heading the households. It could also assist psychologists in utilizing this treatment method to improve the health of these women. However, this research suffers from some limitations, which include short-term follow-up of the effect of the implemented training intervention, small sample size, limited age group, and information collection using questionnaires. Finally, according to the present study findings, it is suggested that this research be carried out on a larger sample of women. Likewise, this therapy can be implemented among other vulnerable women as well.

Compliance with ethical guidelines

This paper was derived from PhD thesis in psychology, which was done in Marvdasht Branch, Islamic Azad University (IR.IAU.M.REC.1402.006), and the ethics certificate from Iran National Committee for Ethics in Biomedical Research was 1856015. In order to comply with the study's ethical principles, efforts were made to collect the data after getting the participants' informed consent. Moreover, the participants were assured about the confidentiality of their personal information.

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Authors' contributions

The first author was the main researcher of this study. The second author was the guide, and the third and fourth authors were also the advisors of the thesis.

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Conflicts of Interest

None has been declared.

References

1. Darahki A, Nobakht. Investigating the economic and social status of Iranian women heads of households: a secondary analysis. *Paish*.2021;20(4): 427-37. [\[Link\]](#)
2. Javaheri Mohammadi Z, Rasouli R, Pourshahriari M S. The mediating role of psychological capital in the relationship between mindfulness and mental health of pregnant women. *Rooyesh* 2023; 11 (11) :15-26. [\[Link\]](#)
3. Stivers L. Empowerment of Female-Headed Households: A Christian Ethical Response. *Journal of the Society of Christian Ethics*. 2022;42(1):169-88. [\[Link\]](#)
4. Vo DH, Ho CM. Determinants of wealth outcomes in female-

- headed households in Vietnam. *Feminist Economics*. 2023;29(2):154-91. [DOI: 10.1080/13545701.2023.2174567]
5. Ardi MN, Tulab T, Yurista DY, Sariroh A. Determinants of Family Resilience in Female-Headed Families on the North Coast of Java. *Jurnal Ilmiah Al-Syir'ah*. 2022;20(2):237-50. [DOI:10.30984/jis.v20i2.1860]
 6. Bowie SL, Banks S, Dopwell DM, Martin KB. A differential analysis of depressed mood symptomology among welfare-reliant African American and Latinx women heads of household. *Journal of Poverty*. 2022;26(7):606-21. [DOI: 10.1080/10875549.2021.1929659]
 7. Lahiri-Dutt K, Pattnaik I. Women Headed Households in Agriculture: Report from West Bengal, India. *Ecology, Economy and Society—the INSEE Journal*.2022; 5(1): 223-229. [DOI: 10.37773/ees.v5i1.590]
 8. Mostafapour V, Hossein Thabit F, Barjali A. The effectiveness of group-based positivity training on increasing the happiness and quality of life of women heads of households. *Women and Family Studies*.2019;12(45): 62-78.] DOI: 10.30495/jwsf.2020.555365.1195]
 9. Niknam M, Azimi M. The effectiveness of Lutans psychological capital intervention on the psychological well-being and hardness of female heads of the household. *Police-social researches of women and family*.2021;9(2), 615-40. [Link]
 10. Zare F, Manshai G, Kheshtiarai N. The effectiveness of quality of life enrichment training on self-worth and psychological capital of women heads of households. *Journal of Applied Family Therapy*.2021; 8(2): 310-31. [DOI: 10.22034/afj.2022.313078.1241]
 11. Duyan M, Ilkim M, Zelik T. The Effect of Social Appearance Anxiety on Psychological Well-Being: A Study on Women Doing Regular Pilates Activities. *Pakistan Journal of Medical & Health Sciences*. 2022 Mar 30;16(02):797. [DOI: 10.53350/pjmhs22162797]
 12. Khanjani M, Sohrabi F, Aazami Y. The Effectiveness of Resilience and Stress Management Training Program on Psychological Well-being, Meaning of Life, Optimism, and Satisfaction of Life in Female-Headed Households. *IJPN*. 2018; 6 (2) :1-11. [Link]
 13. Sapranaviciute-Zabazlajeva L, Sileikiene L, Luksiene D, Tamosiunas A, Radisauskas R, Milvidaitė I, Bobak M. Lifestyle factors and psychological well-being: 10-year follow-up study in Lithuanian urban population. *BMC Public Health*. 2022;22(1):1011. [DOI: 10.1186/s12889-022-13413-4]
 14. Gupta K, Patel AK. Mindfulness-based Therapy for management of Female Sexual Dysfunction and Psychological Well-being. In *Acceleration of the Biopsychosocial Model in Public Health*. IGI Global .2023 : 111-136. [DOI: 10.4018/978-1-6684-6496-0.ch006]
 15. Ajilchi B, Mohebi M, Zarei S, Kisely S. Effect of a mindfulness programme training on mental toughness and psychological well-being of female athletes. *Australas Psychiatry*. 2022 Jun;30(3):352-56. [DOI: 10.1177/10398562211057075] [PMID]
 16. Jones P, Drummond P. Construction and evaluation of a mindfulness-based quality of life and well-being program (MQW) in a randomized trial. *Current Psychology*. 2023;42(17):14782-803. [DOI: 10.1007/s12144-021-02672-w]
 17. Zheng Y, Zhou J, Zeng X, Jiang M, Oei TP. A new second-generation mindfulness-based intervention focusing on well-being: a randomized control trial of mindfulness-based positive psychology. *Journal of Happiness Studies*. 2022;23(6):2703-24.[DOI: 10.1007/s10902-022-00525-2]
 18. Sulosaari V, Unal E, Cinar FI. The effectiveness of mindfulness-based interventions on the psychological well-being of nurses: A systematic review. *Appl Nurs Res*. 2022;64:151565. [DOI: 10.1016/j.apnr.2022.151565] [PMID]
 19. Kashmiri M, Jalali P, Fathi Ashtiani A. The moderating role of mindfulness in the relationship between depression, anxiety and stress with psychological well-being. *Psychology Quarterly*.2018; 23(2): 13980416190648.[Link]
 20. Lengua LJ, Thompson SF, Calhoun R, Long RB, Price C, Kantowitz-Gordon I, Shimomaeda L, Nurius PS, Katz LF, Sommerville J, Booth-LaForce C. Preliminary Evaluation of the Effectiveness of Perinatal Mindfulness-Based Well-Being and Parenting Programs for Low-Income New Mothers. *Mindfulness*. 2023;14(4):933-52. [DOI: 10.1007/s12671-023-02096-6]
 21. Hosseini Tabaghdehi L. The effectiveness of mindfulness training On the self-resilience and perceived social support of Women as heads heads of households. *Women and Family Studies*. 2022 Nov 22;15(57):153-68. [DOI:10.30495/jwsf.2022.1939544.1605]
 22. Sedghi P , Cheraghi A. The effectiveness of mindfulness training on the psychological well-being and resilience of female household heads. *Journal of Family Studies*. 2019;14(4): 549-62. [Link]
 23. Chiracă A, Cosma GA, Stepan AR, Cosma MA, Corlaci I, Călugăru EDC, Voinea F, Zăvăleanu M, Burileanu HA, Avramescu T. Psychological capital, quality of life, and well-being in mother caregivers of individuals with down syndrome. *Front Psychol*. 2023;14:1145104. [DOI: 10.3389/fpsyg.2023.1145104] [PMID] [PMCID]
 24. Jafari Shalkoohi A, Asadi Majreh S, Akbari B. The Effectiveness of Mindfulness Training on Resiliency and Cognitive Emotion Regulation Strategies in Pregnant Women. *Knowledge & Research in Applied Psychology*. 2020 Jul 22;21(2):43-53. [DOI: 10.30486/jrsp.2019.574441.1466]
 25. Zarei Manojan N, Hosseinchari M, Jocar B, Sheikhu-Islami R. Psychometric characteristics of psychological educational capital questionnaire in adolescents. *Educational Measurement Quarterly*. 2020;10(40): 31-53. [DOI: 10.22054/jem.2020.49790.2005]
 26. Oh VKS, Sarwar A, Pervez N. The study of mindfulness as an intervening factor for enhanced psychological well-being in building the level of resilience. *Front Psychol*. 2022; 13:1056834. [DOI: 10.3389/fpsyg.2022.1056834] [PMID] [PMCID]
 27. Rezaeian H, Rasooli R, Askarbiuky S, Asldehghan F. The Effectiveness of Psychological Empowerment on the Improvement of Well-Being and Quality of Life in Householder Women. *Socialworkmag* 2019; 7 (4) :5-14. [Link]
 28. Lahtinen O, Aaltonen J, Kaakinen J, Franklin L, Hyund J. The effects of app-based mindfulness practice on the well-being of university students and staff. *Curr Psychol*. 2023; 42(6):4412-21. [DOI: 10.1007/s12144-021-01762-z] [PMID] [PMCID]
 29. Da Silva CCG, Bolognani CV, Amorim FF, Imoto AM. Effectiveness of training programs based on mindfulness in reducing psychological distress and promoting well-being in medical students: a systematic review and meta-analysis. *Syst Rev*. 2023;12(1):79. [DOI: 10.1186/s13643-023-02244-y] [PMID] [PMCID]
 30. Saban KL, Collins EG, Mathews HL, Bryant FB, Tell D, Gonzalez B, Bhoopalam S, Chroniak CP, Janusek LW. Impact of a Mindfulness-Based Stress Reduction Program on Psychological Well-Being, Cortisol, and Inflammation in Women Veterans. *J Gen Intern Med*. 2022;37(Suppl 3):751-761. [DOI: 10.1007/s11606-022-07584-4] [PMID] [PMCID]
 31. Taziki T, Momeni M, Karmi J, Gholamali A. The effect of mindfulness-based intervention on the quality of life and psychological well-being of mothers of intellectually disabled students. *Psychology of exceptional people*. 2022; 12(45), 1-26. [DOI: 10.22054/JPE.2022.58755.2282]
 32. Bahreini Z, Kahrazehi F, Nikmanesh Z. The Effectiveness of Mindfulness-Based Cognitive Therapy on Psychological Well-Being and Positive and Negative Emotions in Adolescent Girls with Body Dysmorphic Syndrome. *IJRN*. 2022; 8 (2) :64-79. [DOI: 10.22034/IJRN.8.2.7]
 33. Javadian R , Mirzaei Fatehabad H, Afrasiabi H. Qualitative study of the reasons and contexts of non-participation of women heads of households in empowerment programs. *Strategic Researches of Iran's Social Issues*. 2019; 8(2): 65-86. [DOI:10.22108/srsp.2019.115072.1358]
 34. St. Arnaud KO, Sharpe D. Entheogens and spiritual seeking: The quest for self-transcendence, psychological well-being, and psychospiritual growth. *Journal of Psychedelic Studies*. 2023;7(1):69-79. [DOI: 10.1556/2054.2023.00263]
 35. Lee EK, Wong B, Chan PH, Zhang DD, Sun W, Chan DC, Gao T, Ho F, Kwok TC, Wong SY. Effectiveness of a

- mindfulness intervention for older adults to improve emotional well-being and cognitive function in a Chinese population: A randomized waitlist-controlled trial. *International Journal of Geriatric Psychiatry*. 2022;37(1). [DOI: [10.1002/gps.5616](https://doi.org/10.1002/gps.5616)]
36. Kraiss JT, Ten Klooster PM, Chrispijn M, Stevens A, Doornbos B, Kupka RW, Bohlmeijer ET. A multicomponent positive psychology intervention for euthymic patients with bipolar disorder to improve mental well-being and personal recovery: A pragmatic randomized controlled trial. *Bipolar disorders*. 2023; 25(8):683-95. [DOI: [10.1111/bdi.13313](https://doi.org/10.1111/bdi.13313)]