# Original Article

# Effect of Implementing a Life Skills Program on the Perceptions of Aging and Self-efficacy in Postmenopausal Women: A Field Trial

#### **Abstract**

Background: Complications experienced by women during menopause affect their self-efficacy and can cause a negative attitude toward this period and lifestyle changes. The aim of this study was to investigate the effects of a life skills program on the perception of aging and self-efficacy in postmenopausal women. Materials and Methods: This study was performed as a field trial on 70 postmenopausal women referring to Imam Ali and Navaab Safavi health centers in Isfahan, Iran, in 2018-19. The eligible subjects were randomly divided into experimental and control groups using a number table. The experimental group received the life skills program in five sessions and the control group shared their experiences in two sessions. Data were collected using a demographic characteristics form and the Ageing Perceptions Questionnaire (APQ) and General Self-Efficacy Scale (GSE) and were analyzed using descriptive and inferential statistical tests in SPSS software. Results: The results revealed that the mean score of aging perception immediately and 1 month after the intervention in the experimental group was significantly lower than that in the control group (p < 0.001). There was a significant increase in the self-efficacy score in the experimental group immediately ( $F_{1.67} = 121.89$ , p < 0.001) and 1 month after the intervention ( $F_{1.67} = 121.89$ , p < 0.001) compared to the control group. Conclusions: This life skills program was able to reduce the perception of aging and physical complaints during menopause and improve self-efficacy in women. Therefore, the implementation of this intervention is recommended in women.

**Keywords:** Aging, program, menopause, self efficacy

## Introduction

One of the most critical stages in a woman's life is menopause, which occurs with increasing age in every woman's life.[1] The onset of menopause is within the age range of 45-55 years; its average varies in different societies, but it occurs at the age of 51 years on average.<sup>[2]</sup> Although menopause is a biological process in women, it is not experienced in the same way by everyone; the individual's mental state and emotional, cultural, and social health are involved in this experience.[3] However, some of the symptoms of menopause are so severe that they interfere with women's daily lives and negatively affect their Quality of Life (QOL).[4] Moreover, at this stage of life, the physical and mental health of people declines.<sup>[2]</sup> This period seems to be a challenging time as it is not a change that women are always ready to accept, [5] especially when they experience chronic diseases as a result of this phenomenon.<sup>[6]</sup>

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Different dimensions of their lives will be affected,<sup>[7]</sup> and these changes can cause stress and disability.<sup>[8]</sup> Therefore, with increasing age and the appearance of menopausal symptoms, aging finds a very wide range of meaning;<sup>[6]</sup> thus, in some societies, with the beginning of menopause, women are considered old rather than menopausal.<sup>[5]</sup> The study by Lu *et al.*<sup>[9]</sup> showed that chronic physical changes cause low self-efficacy and this in turn increases stress and anxiety in the individual.

Although some of these symptoms usually appear with age and may not be related to menopause in all cases, it seems that physiological changes during menopause can exacerbate psychological symptoms.[10] Additionally, menopausal problems have a significant impact on women's self-efficacy. This is of particular importance in developmental crises such as menopause. Probably due to the complications experienced during this period, some

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women react to menopause in the form of aging perception, as they often experience aging changes following menopause. To be aware of the state of one's health personal identity, and behavioral consequences and to feel good during middle age, it is essential to have knowledge of the experience and perception of aging. Perception of aging is a measure of each person's satisfaction with their aging and a reflection of a person's adaptation to age-related changes.<sup>[11]</sup> Therefore, to empower women and reduce the negative attitude toward this period of women's lives, it seems essential that they learn life skills.

Furthermore, it seems that the use of life skills or adaptive and positive behaviors in such a way that one can cope with the challenges and necessities of daily life is one of the most basic abilities that one needs to learn. These skills help women go through middle age while maintaining their physical and mental health and be productive seniors for their society in later years. Therefore, it is necessary to develop and strengthen the abilities and skills that guarantee the health of individuals in difficult situations. Learning life skills seems to improve mental health, competence, self-confidence, and accountability, and even reduce physical complaints.

The implementation of a life skills program with the components of problem-solving, stress coping strategies and adjustment, anger management, self-awareness, communication skills, and empathy for postmenopausal women as well as other groups in society is of particular importance. Very few studies have been performed on the impacts of these interventions on women, and very few authentic support and training services are available to Iranians. Therefore, the present study was conducted to investigate the effect of life skills training on aging perception and self-efficacy in postmenopausal women.

## **Materials and Methods**

This field trial (IRCT20200227046628N) was performed in two groups and three stages (before, immediately after, and 1 month after the intervention) from July 2018 to December 2019, on 70 postmenopausal women referring to the comprehensive health centers of Imam Ali and Navaab Safavi in Isfahan, Iran. The participants were selected using convenience sampling method based on the client information registration system in 2 selected centers and the study continued with 70 people [Figure 1]. Finally, a list was prepared, and using a number table, individuals with even and odd numbers were placed in the experimental group and control group, respectively.

Taking into account a probability of sample loss of 10%,  $Z_1$  was the Confidence Interval (CI) that was considered to be 95%, and  $Z_2$  was test power that was 80%. In addition, the least difference between the mean of changes in the groups was considered to be 0.70. The sample size was calculated to be 35 subjects in each group. It should be

noted that the study started with 35 participants in the experimental group, but during the intervention, 1 subject was excluded from the study due to absence from two sessions. Furthermore, the study inclusion criteria included the ability to communicate, minimum literacy, no history of specific physical or mental disorders, physical and mental ability to participate in the study, age of 46–55 years, onset of menopause in at least the previous year, lack of a crisis (death, or divorce) during the last 6 months, being married, and having children. The exclusion criteria were absence from 2 sessions, lack of participation in the study due to physical reasons, menopause following surgery, and oophorectomy.

It should be noted that before starting the study, a 4-h session was held with the postmenopausal women who had referred to the selected centers for receiving services or care during this period in order to discuss the menopausal process and their experiences, ideas, and perceptions regarding this period. The women mostly complained about fear and anxiety, physical complications, perception of ending of femininity, disability, self-loathing, and decreased performance, and most of them saw these changes as a sign of the onset of aging and reduced ability. Therefore, the aging perception concept seems to be the main background for women's experiences of menopause. Thus, these findings led to the investigation of the 2 variables of perception of aging and self-efficacy of postmenopausal women in this study.

To collect data, a demographic information form, the Ageing Perceptions Questionnaire (APQ) by Barker et al.,[17] and the General Self-Efficacy Scale (GSE) by Schwarzer and Jerusalem<sup>[18]</sup> were used. The demographic information form includes 8 questions regarding age, marital status, education level, employment status, duration of menopause, residential status, income level, and insurance coverage. The APQ consists of two parts and seven subscales. The first part includes 32 items scored based on a 5-point Likert scale ranging from 1 to 5 [strongly disagree (1), disagree (2), no idea (3), agree (4), and strongly agree (5)]. The second part consists of 17 statements with yes and no answers with a score of 1 and 0, respectively. Higher scores in this questionnaire indicate a greater aging perception. The reliability of the APQ in Iran, taking into account all subscales, has been reported as 0.80 by Haghi et al.[19] The GSE consists of 10 items scored on a 4-point Likert scale ranging from 1 to 4 (completely incorrect, hardly correct, almost correct, and absolutely correct). Each subject's score on the grading scale is equal to the sum of their scores on all items. In this questionnaire, scores of 10-15, 15-25, and 25 and above indicate a low level, moderate level, and high level of self-efficacy, respectively. The reliability of the GSE scale in Iran was reported as 0.82 by Rajabi using Cronbach's alpha method.[20] The collected data were analyzed using descriptive statistics, analysis of covariance (ANCOVA),

Dibaj, et al.: Life skills program, perceptions of aging, self-efficacy

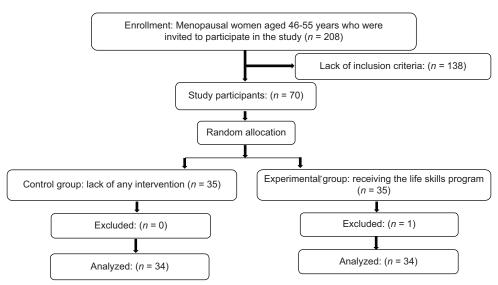


Figure 1: Study consort diagram

and t-test in SPSS software (version 20; IBM, Armonk, New York).

The life skills program was designed with the consideration of attitude and the expression of emotions, abilities, and the physical and especially psychological needs of this section of society during menopause and based on previous studies.[21] Subsequently, it was approved by 4 faculty members of the School of Nursing and Midwifery of Isfahan University of Medical Sciences, Iran. This intervention was performed by the researcher using group work method in 5 weekly, 60-min sessions for 2 months with the components of self-knowledge, management of stress and negative thoughts, empathy, interpersonal skills and effective communication, adaptation, and problem-solving skills. However, the emphasis was on skills such as adaptation, management of stress and negative thoughts, and problem-solving [Table 1]. At the beginning of each session, in order to attract attention and express the importance of the content, a question was asked about the content of that session and its relationship with menopause. At the end of the same session, the question was answered with the help of the participants. Finally, as the homework specified at the end of each session, the participants were asked to practice the materials discussed in each session on a daily basis until the next session.

### **Ethical considerations**

After the approval of the study by the ethics committee of Isfahan University of Medical Sciences with the code IR.MUI.RESERCH.REC.1398.042, an official permit was received from the School of Nursing and Midwifery of Isfahan University of Medical Sciences. Before the intervention, all the participants were informed of the study goal and method and the voluntary nature of the research, and were assured of the confidentiality of their information.

Table 1: Objectives of life skills sessions in postmenopausal women

Sessions	Objectives
	Life skills
1	Menopause, its process, complications, and problems, Familiarity with life skills
2	Self-awareness and self-knowledge skills, stress management and coping skills (Imaging and Relaxation)
3	Skills of empathy and its necessity in communicating intimately with others, learning active listening techniques
4	Interpersonal skills (anger management, self-assertion, honesty, and eye contact), How to communicate effectively
5	Adaptation skills, Problem solving skills, Conclusion

Written informed consent was obtained from all the participants.

# **Results**

In this study, the mean (SD) of age in the experimental and control groups was, respectively, 51.71 (2.50) and 51.57 (2.47) years, and duration of menopause in the experimental and control groups was, respectively, 3.38 (0.53) and 3.63 (0.57) years. Therefore, there was no significant difference in age (p = 0.82) and duration of menopause (p = 0.75) between the experimental and control groups. In addition, most of the women in both the experimental (73.50%) and control groups (71.40%) were married. Most of the women in both the experimental (76.50%) and control (82.80%) groups were homemakers. Regarding education level, most women in the experimental group (44.10%) had a diploma and a majority of women in the control group (48.60%) middle-school education. The income of the families in the experimental (67.60%) and control groups (80%) was as much as necessary. Women in both the experimental (91.20%) and control (87.50%) groups had insurance coverage. The results showed no significant differences between the two groups. Therefore, given the statistical results, the experimental and control groups were identical in terms of demographic characteristics.

Moreover, the repeated measures ANOVA test indicated that the mean score of the aging perception subscales in the experimental group differed significantly at the 3 study stages (p < 0.05). However, in the control group, no significant difference was observed in this regard among the three study stages (p > 0.05). The Least Significant Difference (LSD) post hoc test showed that the mean score of aging perception in the subscales of rapid and gradual time course, periodic time course, emotional aspects, negative control, and negative and objective consequences in the experimental group immediately and 1 month after the intervention was significantly less than before the intervention (p < 0.05). Nevertheless, there was no significant difference in the mean score of aging 1 month after the intervention compared to immediately after the intervention (p > 0.05). The mean score of aging perception in the subscales of positive control and positive outcomes immediately and 1 month after the intervention was significantly higher than before the intervention (p < 0.05), but no significant difference was observed in this score 1 month after the intervention compared to immediately after the intervention (p > 0.05) [Table 2].

Furthermore, the mean score of self-efficacy in the experimental group differed significantly at the 3 study stages (p < 0.05) [Table 3]. However, in the control group, there was no significant difference among the three study stages (p = 0.18). In addition, the LSD post hoc test showed that the mean self-efficacy score in the experimental group immediately ( $F_{1.67} = 121.89, p < 0.001$ ) and 1 month after the intervention ( $F_{1.67} = 121.89, p < 0.001$ ) was significantly higher than before the intervention.

# **Discussion**

The purpose of this research was to investigate the effect of implementing a life skills program on the perceptions of aging and self-efficacy in postmenopausal women. This effect was found to have persisted 1 month after the intervention. The results of the present study revealed that the life skills program reduced the perception of aging and promoted self-efficacy in postmenopausal women. To support this finding, the results of some studies can be applied. This finding is in line with that of the study by Farokhi *et al.*<sup>[22]</sup> They showed that learning life skills significantly improve psychosocial abilities, and ultimately increases the individual's self-efficacy and self-esteem. Solhi *et al.*<sup>[23]</sup> reported a significant increase in self-efficacy and social, individual, and cultural abilities.

The results of the study by Ashoori *et al.*<sup>[24]</sup> also revealed that life skills facilitate adaptation, health, and prevention

of the impacts of stress, and that learning life skills improve self-efficacy and self-esteem. A study by Srikala and Kishore showed that people who participated in a life skills program had significantly higher self-esteem levels and were better able to use adaptive coping strategies in the face of adversity.<sup>[25]</sup> This finding is also consistent with that of the studies by Sagone et al.[26] and Sagone and Indiana<sup>[27]</sup> on the impact of life skills on self-efficacy and resilience in adolescents; they stated that life skills help to manage positive emotions in girls. Other studies showed that educational intervention plans help people remember the abilities, knowledge, and skills necessary to have a successful, healthy, and stress-free life.[28,29] Therefore, this decrease in perception of aging and increased self-efficacy in women compared to before the intervention can be due to the fact that the aging perceptions and decreased self-efficacy of the menopausal women were related to their lack of information in this regard. Generally, the present study was effective in reducing women's perception of aging and increasing their self-efficacy. Thus, health care providers, especially nurses, can play an important role in supporting women by considering and implementing this program.

The limitations of the present study were individual differences of the learners, the motivation of individuals to attend sessions, the correct use of the learned methods, the events and stresses of everyday life, and the way individuals adapt to these issues. Since this study was carried out on humans, and it was not possible to control all human aspects in the study, including physiological, psychological, social, and economic factors, these factors are considered as the limitations of the study. Another limitation was the short study duration because a long time is required to teach psychology in order to have a significant impact on a person's lifestyle.

#### **Conclusion**

This study showed that the life skills learning program and its components resulted in the positive perception of people towards themselves, reduced perception of aging, and promotion of self-efficacy in women during menopause, which can have a positive effect on the performance of postmenopausal women. Menopausal women welcomed the information and practical program because such a program places more emphasis on providing information about menopause, support, training, coping, and communicational skills in order to decrease the pressure on the women. Therefore, it is suggested that the results of this study, in addition to being widely evaluated in other areas, be used to promote self-efficacy and reduce the perception of aging in postmenopausal women.

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Table 2: Comparison of the mean score of aging perception subscales in the experimental and control groups at the
three stages of the study (before, immediately after, and one month after the intervention)

Group	Aging perception subscales	Before the intervention	Immediately after the intervention	One month after the intervention	Repeated measures ANOVA**		
		Mean (SD*)	Mean (SD)	Mean (SD)	F	df	р
	Fast and gradual time course	19.53 (2.25)	16.88 (1.89)	16.41 (2.01)	35.78	2	< 0.001
	Periodic time course	17.32 (3.17)	13.18 (3.27)	12.62 (3.40)	43.99	2	< 0.001
Experimental	Emotional aspects	19.27 (4.94)	11.53 (2.45)	10.65 (2.58)	61.68	2	< 0.001
	Positive control	16.94 (3.82)	21.50 (2.35)	21.79 (2.68)	34.50	2	< 0.001
	Negative control	13.18 (3.11)	8.29 (1.57)	7.68 (1.85)	47.50	2	< 0.001
	Positive consequences	11.97 (1.93)	14.15 (0.93)	14.29 (0.76)	34.47	2	< 0.001
	Negative consequences	17.62 (3.24)	12.97 (1.68)	12.50 (2.05)	49.24	2	< 0.001
	Objective	52.60 (22.10)	25.95 (12.96)	20.24 (11.05)	79.17	2	< 0.001
	Fast and gradual time course	20.23 (2.30)	20.29 (2.35)	20.29 (2.23)	0.51	2	0.61
	Periodic time course	17.86 (3.19)	17.97 (3.16)	18.11 (3.19)	2.29	2	0.12
Control	Emotional aspects	19.37 (3.84)	19.29 (3.59)	19.37 (3.56)	0.70	2	0.50
	Positive control	17.06 (3.99)	16.83 (3.79)	16.74 (3.78)	2.46	2	0.10
	Negative control	13.86 (3.81)	13.86 (3.59)	13.89 (3.60)	0.10	2	0.90
	Positive consequences	11.54 (1.80)	11.44 (1.64)	11.41 (1.66)	1.37	2	0.27
	Negative consequences	18.11 (2.71)	17.94 (2.57)	17.91 (2.43)	1	2	0.38
	Objective	50.10 (21.80)	49.94 (22.99)	49.92 (23.02)	0.56	2	0.58

<sup>\*\*</sup>ANOVA: Analysis of variance; \*SD: Standard deviation

Table 3: Comparison of the mean score of self-efficacy in the experimental and control groups among the three study stages (before, immediately after, and one month after the intervention)

Group	Before the Immediately after intervention the intervention		One month after the intervention	Repeated measures ANOVA**		
	Mean (SD*)	Mean (SD)	Mean (SD)	$\overline{F}$	df	<i>p</i>
Experimental	23.93 (5.69)	32.67 (3.63)	34.38 (3.34)	121.89	2	>0.001
Control	22.65 (5.59	22.73 (5.57)	22.81 (5.61)	1.82	2	0.18

<sup>\*\*</sup>ANOVA: Analysis of variance; \*SD: Standard deviation

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#### **Conflicts of interest**

Nothing to declare.

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