Original Article

Evaluation of emotional intelligence training efficiency aimed at improving the quality of life, reducing symptoms of anxiety and depression among the elderly in Tehran nursing home

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Abstract

Introduction: Emotional intelligence as an emerging concept is something that refers to status and role of feelings and emotions and dealing with them in human. It is known as a variable associated with quality of life, anxiety and depression. The purpose of present study is evaluation of emotional intelligence training efficiency on improving the quality of life, reducing symptoms of anxiety and depression among residents of private nursing homes in Tehran.

Materials and Methods: This clinical study was conducted on 24 elderly persons of private nursing homes and convenience sampling method was used to sampling. The Beck Depression and anxiety Inventories and SF-36 questionnaire were selected as research tools. In this study, the experimental group were trained in emotional intelligence, while the control group did not received any training. The results were analyzed by SPSS.

Results: Emotional intelligence training has a positive and significant impact on improving the quality of life, mental symptoms and reducing symptoms of anxiety and depression among the elderly in nursing home.

Conclusion: The results indicate that emotional intelligence as an important and moderating variable can make a decisive impact on improving the quality of life, reducing symptoms of anxiety and depression in the elderly.

Keywords: Anxiety, Depression, Elderly, Emotional intelligence, Quality of life

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Introduction

According to the projections of the United Nations Population Division (2006), the proportion of the elderly population in the world will increase from 1.5% in 2006 to 21.8% in 2050 (1). In Iran, according to the general population and housing census, the population of the elderly has increased nearly 4 times (6 million), and most of these elderly people live in urban areas. Official estimates indicate that if the current trend continues, the elderly population will reach 15 million people by 1405 (2). Therefore, our country is also among the countries with an elderly population, because according to the definition of the United Nations, if the ratio of the elderly population in a country is more than 7%, that country has an elderly population, and this is important considering the problems of this group. Age and the increasing trend of its growth rate require future planning to control issues related to this group of population (3).

Also, the topic of intelligence as a basic characteristic that shows individual differences in humans has been of interest since the beginning of the written history of human life. From the beginning of the study of intelligence, its cognitive aspects such as memory, problem solving and thinking have been emphasized, while today non-cognitive aspects of intelligence such as emotional ability have also been taken into account, from this non-cognitive aspect as a variable to predict a person's ability to succeed and adapt in Life is mentioned (4).

Emotional intelligence is a topic that refers to the place and role of emotions, feelings and emotions and their regulation in humans, and it is a form of social intelligence that is the ability to control and manage one's own and others' emotions and emotions, as well as distinguish between them and use this information for guidance. It includes cognition and behavior (5). On the other hand, with increasing age, especially in old age, due to physiological limitations, possible financial problems, forced retirements, death of relatives, less efficiency, etc., the quality of life decreases and anxiety and depression increase. Now, in this research, we are looking for, considering the moderating role of emotional intelligence in the variables related to mental health, is it possible to benefit from emotional intelligence training in order to improve the quality of life and reduce the symptoms of anxiety and depression or not?

In a study conducted on 180 cardiac patients in Mashhad, Soltani Shaal et al. found that emotional intelligence directly and indirectly affects the quality of life of cardiac patients and that people with higher emotional intelligence have better quality of life (6).

In a research conducted on 403 undergraduate students of Shiraz University, Yousefi and Hajer found that at the level of emotional intelligence components from the perspective of a hybrid approach, the optimism component of emotional intelligence can affect all four dimensions of quality of life, i.e. physical health, mental health, and social relationships and predict the quality of people's living environment in a positive and meaningful way, and further came to the conclusion that most of the components of emotional intelligence predict the quality of life (7). Hosseinian et al. based on the variables of emotional intelligence and spiritual intelligence, they concluded that most of the components of emotional intelligence have a significant positive relationship with the quality of life subscales, and data analysis using the multiple regression method showed that the components of emotional intelligence significantly predict the quality of life (8). Mashhadi, Soltani Shurbakhorlou and Hashemi concluded in their research that by increasing general emotional intelligence and the components of emotional clarity and mood modification, students' anxiety symptoms decrease, but no connection was found between the component of paying attention to emotions and anxiety symptoms, and they found that in general, people who have anxiety more had less understanding of the nature of their emotions, and on the other hand, they have less ability to overcome negative emotional experiences, and these results can explain the problem of these people in emotional adaptation, which is an indicator of damage to the structure of emotional intelligence for these people (9). Khanjani, Hosseini Nesab and Sadeghi in their research titled "Evaluation of the relationship between emotional intelligence and depression and anxiety of teenage girls of Meshkinshahr" concluded that there is a significant negative relationship between emotional intelligence and anxiety and depression. As emotional intelligence

increases, anxiety and depression decrease (10). In their research, Shahni Yilaq et al found that emotional intelligence training has been useful in reducing students' (social) anxiety, and they explain the results in such a way that high emotional intelligence makes people respond adaptively in dealing with stressful factors. With the tension factor, they apply the problem-oriented method and, considering the relationship between emotional intelligence and creativity, reinterpret negative events and avoid the process of mental rumination and deal with the phenomenon in a positive way (11). Esmaili et al. (2007), in the research "Effect of training emotional intelligence components on mental health" came to the conclusion that training emotional intelligence components had a positive effect on the mental health of the experimental group compared to the control group, among which the most positive effect respectively in the field of anxiety, depression and aggression and has had the least effect in the field of psychosis and morbid panic (12). Slasky and Cartwright found that teaching emotional intelligence to people improves their general health and reduces their physical symptoms of depression, insufficient social interaction, anxiety and insomnia and leads to an increase in their mental health (13). Shot, Maalouf, Tortinson, Hollar and Rook, in their meta-analytic research, found that there is a significant and positive relationship between emotional intelligence and mental health (anxiety, depression, etc.) and people who have higher emotional intelligence have more mental health and they use more favorable methods and strategies when dealing with problems, as a result, they are less exposed to diseases (14).

Also, Shatt, Maalouf, Babik, Kunston, Grayson and Jedlica in their research on emotional intelligence found that emotional intelligence has a significant positive and determining relationship with quality of life and social interactions and a significant negative relationship with depression and loneliness (15).

Hansen and Bianchi in a research about the role of emotional intelligence and the personality of a person with major depression state that people with higher emotional intelligence are less exposed to depression because they can use cognitive strategies to protect themselves to prevent depression (16).

Fernandez-Brockal, Alkaid, Eksterma and Pizarro in a research about the role of emotional intelligence in anxiety and depression among teenagers state that there is a significant relationship between emotional intelligence and anxiety and depression in teenagers and emotional intelligence as a supportive variable in order to prevent It prevents anxiety and depression (17).

Materials and Methods

The research method of the present study is an intervention type with a control group. The sampling method is accessible, and in this research, 24 elderly people living in a private nursing home in Tehran were selected and then two groups of 12 people were randomly tested and tested before the emotional intelligence training of both groups. They completed Beck's quality of life, anxiety and depression questionnaire, and then the experimental group received emotional intelligence training, but the control group did not receive any training, and at the end, both groups completed the mentioned questionnaire again.

Research instruments

A) Quality of Life Questionnaire (SF-36): It is a general tool for measuring the quality of life related to health, which was prepared by Weir and Sherburne and includes 36 questions in two main physical and mental dimensions, which measures eight domains related to health, and in both sick and healthy group is used. Currently, the 36-question form is one of the most widely used tools for measuring health status and quality of life in the world due to its short and comprehensive nature. Form 36 is a question consisting of expressions in the form of eight subscales, including physical function, playing a physical role, physical pain, general health, energy and vitality, social function, playing an emotional role, mental health, and also a statement about change in health status and a five-point Likert scale from excellent to poor and yes and no is used to answer the different questions of this tool. The scoring method of the 36-question form is a separate score for each of the subscales and a score for the two general parts of physical health and mental health based on its special guide. The maximum score for each section or subscale is 100

and the minimum score is 0, where high scores indicate better health status and low scores indicate poorer health status. In 2006, Ishaghi et al. reported the validity and reliability of the questionnaire for the elderly using the method of internal consistency above 0.70 and Cronbach's alpha coefficient of 0.70 (18).In 2003, Ahmadi et al obtained Cronbach's alpha coefficient for internal consistency and validity of 0.84 and 0.86, respectively. In 2004, Montazeri et al. also evaluated the reliability of the quality questionnaire using statistical analysis of internal consistency, its validity test using the method of comparing known groups and convergent validity (19).

B) Beck Depression Inventory Second Edition (BDI-II): This questionnaire is a 21-item self-report questionnaire to measure the severity of depression in adolescents and adults, which was revised in 1996 to be more consistent with the DSM-VI criteria for depression. In this questionnaire, the answers are graded between 0 and 3. The cut points are such that the score is 0 to 13 non-depressed; 14 to 19 mild to moderate depression; 20 to 28 moderate to severe depression; and 29 to 63 severe depression. Higher scores indicate more severe depressive symptoms. BDI-II has a correlation with Hamilton Depression Rating Scale (HRSD), r=0.71+, and its one-week retest reliability is 0.93 (20).

C- Beck Anxiety Questionnaire (BAI): It is a self-report questionnaire that was prepared to measure the intensity of anxiety in adolescents and adults, and it contains 21 statements, with four options for each statement. Each statement is a reflection of one of the symptoms of anxiety. Therefore, the range of anxiety scores will be from 0 to 63, if the score is in the range of 0 to 7, the subject has no anxiety, if it is 8-15, it is mild anxiety, if it is 16-25, it is moderate anxiety, and if it is 63-26, the anxiety is severe. Based on studies conducted abroad, five types of content validity, concurrent, simple, diagnostic and factorial, have been measured for it, all of which indicate the high performance of this tool in measuring anxiety (21).The studies carried out inside the country show that this questionnaire has high reliability, its internal consistency coefficient (Cronbach's alpha) is 0.92, its reliability is 0.75 with a one-week interval, and the correlation of its questions is from 0.3 to 0.76 is variable (22).

The summary of emotional intelligence training is as follows:

The first session, the importance of emotional intelligence; The second session, the number and types of emotions; The third session, the benefit of emotions; The fourth session, emotional intelligence; The fifth session, ways to increase emotional intelligence; The sixth session, identifying the emotional states of oneself and others; The seventh session, understanding emotions and effective use of emotions; The eighth session, controlling and regulating the emotional states of oneself and others.

Results

The scores of quality of life in experimental group and controls were 54.35 ± 9.25 and 54.50± 8.12, respectively in pre-test. While, these scores in post-test were 61.05 ± 8.07, and 55.34 ± 7.99, in experimental and control groups, respectively. The scores of anxiety in experimental group and controls were 26.30 ± 4.11 and 25.27 ± 3.96, respectively in pre-test. While, these scores in post-test were 20.60 ± 3.49, and 24.93 ± 4.33, in experimental and control groups, respectively. The scores of depression in experimental group and controls were 31.40 ± 4.42 and 30.84 ± 4.60, respectively in pre-test. While, these scores in post-test were 24.30 ± 2.71, and 30.12 ± 4.53, in experimental and control groups, respectively.

Tables 1-3 indicate the covariance of single-variable of quality of life, anxiety, and depression.

Table 1. The covariance of single-variable of quality of life

Source	Sum of squares	DF	Mean squares	F	P	Effect size	Power
Fix	75.224	1	75.224	28.129	0.000	0.597	0.999
Quality of life (pre-test)	1238.644	1	1238.644	463.175	0.000	0.961	1.000
Group	205.375	1	205.375	76.797	0.000	0.802	1.000
Error	50.811	19	2.674				
Total	74915.500	22					

Table 2. The covariance of single-variable of anxiety

Source	Sum of squares	DF	Mean squares	F	P	Effect size	Power
Fix	0.916	1	0.916	0.186	0.671	0.010	0.070
Anxiety (pre-test)	223.362	1	223.362	45.484	0.000	0.705	1.000
Group	144.352	1	144.352	29.395	0.000	0.590	0.999
Error	93.305	19	4.911				
Total	12020.320	22					

Table 3. The covariance of single-variable of depression

Source	Sum of squares	DF	Mean squares	F	P	Effect size	Power
Fix	1.736	1	1.736	0.200	0.660	0.000	0.071
Depression (pre-test)	238.042	1	238.042	27.352	0.000	0.590	0.999
Group	252.423	1	252.423	29.004	0.000	0.604	0.999
Error	165.358	19	8.703				
Total	17398.220	22					

Discussion

The results of the research showed that emotional intelligence training had a positive effect on the quality of life of the elderly living in nursing homes. This finding is in agreement with the findings of Soltani Shall et al. (6), Yousefi and Sabri (7), Vanta, Nicola and Ted, (23), Zinder et al. It is aligned.The relationship between emotional intelligence and quality of life can be explained in such a way that high emotional intelligence is related to several psychological components such as health-related behaviors (27), increased empathy, optimism, boldness (28) and reduced depression and distress (29). Factors help to increase the quality of life by affecting the reduction and moderation of stress and other related variables.Also, people with high emotional intelligence see worrying and stressful events as a challenge and an opportunity to learn, not a threat to security. This influence on the amount of perceived stress as well as more effective methods of dealing with the stress of the elderly causes them to experience fewer physiological and emotional disorders and naturally have a higher quality of life. The findings also showed that emotional intelligence training had a positive effect on reducing the anxiety symptoms of elderly people living in nursing homes. These results are in agreement with the research findings of Shot et al. (15), Fernandez et al. (17), Menin et al. (30), Samferald et al. Sova (34), Mashhadi et al. (9), Khanjani et al. (10) are consistent. The results can be explained in this way that a person with higher emotional intelligence has the real ability to recognize, process and use important information from his emotions; Therefore, this possible explanation can be put forward that the higher a person's emotional intelligence is, because the person's ability to recognize, evaluate and adjust emotional information about himself and others is higher, in the same proportion his ability to control negative emotions such as anxiety and prevent negative influence. These emotions and emotions will be more on the behavior.

The obtained results also showed that training based on emotional intelligence has been effective in improving depression symptoms of elderly residents of private nursing homes in Tehran. The results are consistent with the research of Khanjani et al. (10), Hansen and Bianchi (16), Fernandez et al. (17), Mavroli et al. (35). People who have higher emotional intelligence act in a balanced way in the face of tension. While they are optimistic about life events, they have close relationships with others and try to regulate their mood, which makes them happy. Optimism that exists in high emotional intelligence people can act as a support factor against stress and other life issues (36), which can contribute to the reduction of depression symptoms. According to Downs' studies, people with higher emotional intelligence cope with problems in a logical way by separating multiple sources of stress and distinguishing the content of

issues related to themselves and others, and are less involved in the inefficient cycle of negative thoughts that lead to depression. Therefore, emotional intelligence training People can develop the psychological capacity to separate, explain and deal with life's problems and events in them, and this affects depression (37).

Conclusion
The obtained results indicate that emotional intelligence can have a decisive effect on improving the quality of life, reducing the symptoms of anxiety and depression in the elderly as an important modulating variable.

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