A Proposed Framework for Psychological Well-Being Based on the Spiritual Intelligence Dimensions in the Elderly

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Abstract

Background and Objectives: Aging is a sensitive period in human life. The present study aimed to provide a framework for psychological well-being based on the spiritual intelligence dimensions in the elderly.

Methods: The present research was a descriptive correlational study. The study population consisted of the elderly living in the retirement homes of Ahvaz, Iran, in 2019. A total of 320 individuals were selected by convenience sampling method. Data were collected using King’s (2009) Spiritual Intelligence Questionnaire and Ryff’s (2002) Psychological Well-being Questionnaire. The collected data were analyzed using the Pearson correlation coefficient and the structural equation.

Results: As evidenced by the obtained results, psychological well-being of the elderly showed a significant positive relationship with the subscales of critical existential thinking (r=0.34, P=0.001), personal meaning (r=0.41, P=0.001), transcendental awareness (r=0.38 and P=0.001), conscious state expansion (r=0.48, P=0.001) and the overall score of spiritual intelligence (r=0.62, P=0.001). In addition, it was observed that spiritual intelligence had a significant direct impact on psychological well-being (β=0.669) and the predictive power of psychological well-being was obtained by spiritual intelligence (R²=0.508).

Conclusion: The obtained results indicated the importance of the relationship between spiritual intelligence and psychological well-being in the elderly. Therefore, in order to improve the elderly's psychological well-being, it is essential to focus on promoting spiritual intelligence.

Keywords: Spiritual intelligence, Psychological well-being, Elderly.

Introduction

In recent decades, declining fertility, improved health, and increased life expectancy lead to an increase in shares of older people in the population (1). Today, life expectancy has surpassed the age of 66, adding 1.7% to the world population every year, this increase is 2.5% for the 65-year-old population (2). The growing population of the elderly posed many challenges to communities (3). On the other hand, in recent years, several psychologists have adopted a different theoretical approach to the concept of psychological health (4). They considered psychological health equivalent to positive mental functioning and have replaced it with psychological well-being (5). These scholars do not consider lack of illness to be sufficient for feeling healthy, they believe that life satisfaction, functional interaction, positive feeling, a good relationship with oneself, others, and God are features of a healthy person (6). In addition, Ryff believes that psychological well-being is a person's effort to develop his/her potential real abilities (8,7). Psychological well-being is a multidimensional concept that includes self-acceptance, building a positive relationship with others, autonomy, environmental mastery, having purposeful life, and individual growth (9).
Recently, psychologists introduced spiritual intelligence as an important construct in psychological well-being (10). Findings of a study conducted by Saad, Hatta, and Mohamad have shown that spiritual intelligence is a cognitive-motivational construct that facilitates problem-solving and goal achievement abilities (11). Spiritual intelligence as one of the multiple intelligences (12) develops independently and requires different ways of understanding and unifying the imaginary life in the person’s mind with real-world life (13). In addition, spiritual intelligence is a set of mental abilities based on the non-material aspects which are associated with excellence, personal meaning, the essence of being, and a high level of awareness (14).

Results of a study carried out by Sotoudeh et al. (2016) pointed to the positive relationship of psychological well-being with spiritual intelligence and moral intelligence (15). In addition, Heydari et al. indicated that spiritual intelligence showed a significant positive relationship with psychological well-being and happiness (16). Moreover, Sahebalzamani et al. reported that spiritual intelligence, psychological well-being, and purposeful living were positively correlated (17). In studies conducted by Mortazavi et al. and Jafari and Hesampour, spiritual intelligence signified a relationship with satisfaction and quality of life in the elderly (18, 19). Furthermore, Pereira et al. demonstrated the relationship of spiritual intelligence with mental function and psychological well-being of the elderly (20).

Foo & Lo (2018) found that spiritual intelligence can predict psychological well-being in the elderly (21). Furthermore, Kirtani & Aminabhavi showed that well-being in the elderly is affected by spiritual intelligence (22). In addition, Desai displayed that spiritual intelligence and psychological well-being in the elderly are mutually related (23). The elderly constantly face many challenges and problems in maintaining their health. In addition, the Iran's age structure is transitioning from a young country to an aging one (24). Although, currently the elderly constitute a small percentage of the population, with a rapid decline in fertility in recent decades, an increase in the number and percentage of elderly in the coming years is anticipated. Consequently, future planning is needed to address the problems of this population (25, 26). On the other hand, evaluating the quality of the social relationship and mental health in the elderly requires appropriate methods and careful planning. Importantly, all previous studies only examined the relationship between spiritual intelligence and psychological well-being in the elderly. However, to the best of the researchers' knowledge, no study has examined the predictability of psychological well-being based on spiritual intelligence dimensions in the elderly using a structural model. Therefore, the present study aimed to provide a framework for psychological well-being based on the dimensions of spiritual intelligence in the elderly.

**Methods**

The current research was a cross-sectional correlational study. The population of the study consisted of all 1,906 elderly people residing in the retirement homes of Ahvaz, Iran, in 2018. A total of 320 participants were selected based on the Cochran’s formula.

Inclusion criteria entailed: with an age range of 66-75 years, acceptable cognitive ability as diagnosed by the centers’ physician and psychiatrist, participants who were supported by care centers, retired, with minimum education of junior high school, non-use of psychiatric drugs, and provision of written consent.

Exclusion criteria entailed: withdrawal from filling the questionnaires, incomplete questionnaires, and incidence of physical/psychological illnesses diagnosed by a psychiatrist working in the center.

After obtaining the necessary permissions from the Islamic Azad University of Ahvaz and authorities of the Ahvaz Elderly retirement homes, the participants were selected through convenience sampling method. In addition, before submitting the questionnaires to the elderly, research goals and the ways of collaboration were explained.
All ethical codes were considered and only the elderly who were willing to participate in the present research were selected. Moreover, the participants were ensured of terms of confidentiality. The current research has also been registered under the ethics code of IR.IAU.AH.REC.1398.021 at the Islamic Azad University of Ahvaz, Iran. The obtained data were analyzed by descriptive statistics using mean and standard deviation, as well as inferential statistics using the Pearson correlation and structural equations in SPSS (version 25) and Amos (version 23) softwares.

Measuring instruments

1. Spiritual Intelligence Questionnaire
   This questionnaire was created by King in 2009 (27) and it has 24 items, including four subscales of critical existential thinking, personal meaning production, transcendental awareness, and conscious state expansion. Moreover, it scored on the basis of a five-point Likert scale (1=strongly disagree to 5=strongly agree).
   King confirmed the construct and concurrent validity and reported the questionnaire’s reliability using Cronbach's alpha of 0.88, 0.89, 0.93, 0.94, and 0.97 for critical existential thinking, personal meaning production, transcendental awareness, conscious state expansion, and the overall spiritual intelligence questionnaire. Furthermore, Shahsavar et al. confirmed the construct and concurrent validity and reported the questionnaire’s reliability using Cronbach's alpha for critical existential thinking, personal meaning production, transcendental awareness, conscious state expansion, and the overall spiritual intelligence questionnaire. In the present study, the instrument’s reliability for the overall score was calculated at 0.87 by Cronbach’s alpha method.

2. Ryff’s Psychological Well-being Questionnaire
   This questionnaire was developed by Ryff in 2002 (29) with 18 items and six subscales of self-acceptance, positive relationships with others, autonomy, environmental mastery, purpose in life, and personal growth. In addition, it is scored using a six-point Likert scale (1=strongly disagree to 6=strongly agree).
   Ryff confirmed the construct and concurrent validity of the instrument. He reported its reliability in various studies using Cronbach's alpha for the subscales of autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, self-acceptance, and the overall Ryff’s Psychological Well-being questionnaire (0.73, 0.70, 0.86, 0.79, 0.84, 0.87, and 0.89, respectively).

   In addition, Khanjani et al. confirmed its construct and concurrent validity. Its reliability by Cronbach's alpha for autonomy, environmental mastery, personal growth, positive relationship with others, purpose in life, self-acceptance, and the overall score were reported at 0.70, 0.69, 0.82, 0.77, 0.79, 0.88, and 0.89, respectively (30). In the present study, the instrument’s reliability for the overall score was estimated at 0.86 using Cronbach's alpha.

Result

The participants consisted of 320 elderly people, out of whom 84 (26.25%) cases had junior high school education, 136 (42.50%) diploma, 71 (22.19%) associate degree, and 29 (9.06%) subjects had an undergraduate degree.

Table 1. Results of the descriptive indices of the research variables

| Variables                        | Number | Mean  | Standard deviation |
|----------------------------------|--------|-------|--------------------|
| Critical existential thinking    | 320    | 10.72 | 2.58               |
| Personal meaning production      | 320    | 10.43 | 2.62               |
| Transcendental awareness         | 320    | 13.87 | 2.89               |
| Conscious state expansion        | 320    | 10.03 | 2.76               |
| Spiritual intelligence           | 320    | 72.39 | 10.34              |
| Self-acceptance                  | 320    | 11.18 | 1.67               |
| Positive relationships with others| 320   | 8.06  | 1.45               |
| Autonomy                         | 320    | 9.74  | 2.02               |
| Environmental mastery            | 320    | 7.76  | 1.48               |
| Purpose in life                  | 320    | 10.84 | 1.36               |
| Personal growth                  | 320    | 10.36 | 2.89               |
| Psychological well-being         | 320    | 65.11 | 9.73               |

In addition, 95 (29.69%) subjects were within the age range of 66-68 years, 107 (33.44%) cases were 69-71 years old, 57 (17.81%) participants were between 72 and 74 years of age, and 61 (19.06%) subjects fell in 75-77 age group.
In the default analysis of normality of the data, the Kolmogorov-Smirnov test results were not significant for none of the variables; therefore, the assumption of normality was confirmed.

Table 1 presents the descriptive indices results, including mean and standard deviation of spiritual intelligence subscales and the psychological well-being of the research variables.

In Table 2, based on the results of the Pearson correlation, the psychological well-being of the elderly showed a significant relationship with critical existential thinking ($r=0.34, P=0.001$), personal meaning production ($r=0.41, P=0.001$), transcendental awareness ($r=0.38, P=0.001$), conscious state expansion ($r=0.48, P=0.001$), and overall score of spiritual intelligence ($r=0.62, P=0.001$).

According to Table 3, the root mean square error of approximation value was measured at 0.021. In addition, the chi-square value (1.756) was between 1 and 3 and the goodness-of-fit index, comparative fit index, and normed fit index indices are approximately $p \geq 0.9$ indicating that the proposed framework for measuring the research variables is an appropriate model.

Table 3. Fit indices derived from data analysis

| Test | Descriptions | Acceptable values | Obtained values |
|------|--------------|-------------------|----------------|
| $\chi^2/df$ | Relative chi-square | $<3$ | 1.756 |
| RMSEA | Root mean square error of approximation | $<0.1$ | 0.021 |
| GFI  | Goodness-of-fit index | $>0.9$ | 0.993 |
| NFI  | Normed fit index | $>0.9$ | 0.987 |
| CFI  | Comparative fit index | $>0.9$ | 0.989 |

Spiritual intelligence has a direct and significant effect on psychological well-being ($\beta=0.569, p<0.001$). Moreover, spiritual intelligence ($R^2=0.508$) was predictive of psychological well-being (Fig 1).

Discussion

Mental health and psychological well-being of the elderly is of great importance. Therefore, the present study aimed to provide a framework for psychological well-being based on the spiritual intelligence dimensions in the elderly. The results showed that spiritual intelligence had a positive and significant relationship with psychological well-being.

In line with the findings of the current research, the results of a study conducted by Sotoudeh et al. showed that there is a positive and significant relationship between spiritual and moral intelligence with psychological well-being (15). Moreover, the findings of a study conducted by Heidari et al. indicated that spiritual intelligence had a significant and
positive relationship with psychological well-being and happiness (16).

In addition, Pereira et al. demonstrated that spiritual intelligence had a relationship with psychological functioning and mental well-being in the elderly (20). Moreover, Foo and Lo indicated that spiritual intelligence can predict psychological well-being in the elderly (21). Kirtani and Aminabhavi showed that well-being in the elderly is influenced by spiritual intelligence (22).

According to Upadhyay (30), spiritual intelligence enables individuals to give meaning to the discomforts, stresses, and unavoidable failures that occur in their lives and bear these difficulties with the help of believing in the transcendental realm. People in better spiritual health condition experience less personal conflicts, emptiness, depression, and despair at the face of difficulties, and better endure the hardships of life (18). Desai showed that spiritual intelligence and psychological well-being in the elderly are mutually correlated (23).

Spiritual intelligence promotes psychological status through giving meaning to life and raising awareness so that one can find a purpose in life and build positive relationships (31). Consistent with the findings of this study, Rahman and Shah emphasized that people with higher critical existential thinking have greater personal and social development, a deeper level of communication with themselves, others, and God (32).

In addition, Ebrahim Pour and Karimi found that conscious state expansion can elucidate the meaning of life and provide beneficial solutions by the enhancement of autonomy, purpose in life, and mastery of life leading to improved psychological well-being (33).

Nursing studies have shown that spirituality is present in every aspect of nursing and caring. Moreover, based on the holistic view of nursing, human beings are multidimensional beings with the spirituality dimension locating at the center of these dimensions and has a significant impact on their health (34).

The spiritual dimension is the quest for the meaning of life and bonding with the almighty who helps the individuals pursue their goals (35). It can be concluded that a higher level of religiosity and spiritual intelligence enables a person to understand the source of existence and meaning of life (spiritual life). Therefore, the elderly are less prone to psychological distress and they better maintain their psychological well-being (36).

In other words, components of spirituality (e.g., transcendental awareness and personal meaning production of life) empowers the elderly to cope with a sense of hopelessness and negative view of life, which directly enhances their environmental mastery and autonomy. Cognitive beliefs of individuals with greater spiritual intelligence help them in issues, such as thinking about human existence. These factors have an influence on individuals' responses to psychological stress and subsequently reduce negative self-attitudes. That causes an increase in the psychological well-being of the elderly.

The use of self-reporting instruments for data collection, performing convenience sampling method, and sample population limited to the elderly people living in the retirement homes in Ahvaz in 2019 were the limitations of the present research.

**Conclusion**

The obtained results showed that spiritual intelligence had a significant and direct effect on psychological well-being. It means that with increased spiritual intelligence, the psychological well-being of the elderly increases and other way round. In addition, it was observed that spiritual intelligence can predict psychological well-being, and positive changes in spiritual intelligence can be of great importance in enhancing the elderly's psychological well-being. The components of spiritual intelligence, such as transcendent awareness, personal meaning production, and critical existential thinking have a positive impact on the prevention from mental illnesses and improving psychological well-being, and increasing life satisfaction in the elderly.

Based on the findings of the present study, spiritual intelligence plays an important role in increasing the psychological well-being of the elderly. Therefore, it is recommended to...
mental health professionals and people working in the elderly-related fields to increase the spiritual intelligence of the elderly living in the retirement homes through designing and implementing appropriate methods.

In addition, retirement homes should have educational programs for psychological well-being, life satisfaction, and awareness-raising. In addition, they should educate the middle-aged and prepare them for aging and coping with the limitations of this critical period. Furthermore, other researchers are advised to examine the mediating role of social variables (e.g., perceived social support) and emotional variables, such as the role of emotional processing involved in the relationship between spiritual intelligence and psychological well-being in the elderly.

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Conflict of interest
The authors declare that there are no conflicts of interest regarding the publication of the present research.

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