



## Research Paper: The Relationship between Spiritual Intelligence with Life Satisfaction and General Health among Female Nurses



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### Abstract

Spiritual intelligence is one of the types of intelligence that combines the concepts of intelligence and spirituality in a new sense. People with higher spiritual intelligence seem to have a better status in terms of mental health and life satisfaction. The purpose of the present study was to investigate the relationship between spiritual intelligence and life satisfaction as well as general health among female nurses in Kermanshah. In this cross-sectional analytical study, 109 female nurses of Kermanshah hospitals were selected through convenience sampling method. They completed Spiritual intelligence scale (SIS), Satisfaction with Life Scale (SWLS) and General Health Questionnaire (GHQ-28). Data were analyzed using descriptive statistics and Pearson correlation coefficient running SPSS software. The results revealed that there was a positive and significant correlation between the subscale of perception as well as connection to universe of spiritual intelligence and life satisfaction ( $p < 0.01$ ) and a negative and significant correlation with general health and its subscales ( $p < 0.01$ ). Moreover, there was a positive and significant correlation between the subscale of spiritual life and the reliance on the inner core of spiritual intelligence and life satisfaction ( $p < 0.01$ ) and there was a negative and significant correlation with general health and its subscales ( $p < 0.01$ ). According to the results, it seemed that nurses with higher spiritual intelligence had higher levels of life satisfaction and were in better health condition. Spirituality training and spiritual intelligence courses can provide a source of support against the stress experienced by nurses.

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## 1. Introduction

A little attention was paid to some human needs and dimensions in the past and especially the last century. For example, in the first half of the twentieth century, psychology largely kept itself away from religion. Religion often described as irrational, delusional or as a source of harm, but this image has begun to change in the second part of the twentieth century (Pargament, 2009). In recent years, there has been an increasing trend towards issues such as spirituality and religion. Miller and Thoresen (2003), for example, state that there is evidence that public interest in spirituality is increasing. It is now commonly accepted that whole of person consists of several dimensions: "the physical, social, emotional, intellectual, and spiritual" (Burke et al., 2004, p.58).

Westen (1998 as cited in Miller & Thoresen, 2003) states that spirituality is an important concept that is difficult to define. Although religion and spirituality are often used synonymously and interconnected, there are differences between these two. Religion refers to group aspects and formal methods for expressing one's ideas while spirituality is about individual originality. Religion organizes the spiritual experiences of a group of people within a system of ideas and actions. Religious involvement or religiosity refers to the degree of participation or adherence to the beliefs and practices of an organized religion, while spirituality is a broader conception than religion. Spiritualism (Spirituality) in the first place is a dynamic, personal and experiential process. Spirituality is an intense experience of balance, a sense in which organisms are acting with the greatest possible perfection (Surbone & Baider, 2010). In recent years, a new

concept called spiritual intelligence has introduced.

Today, some researchers believe that along with IQ and EQ, there is a third intelligence called spiritual intelligence (SQ). Spiritual intelligence is one of several types of intelligence which can grow relatively independently (Vaughan, 2002). Spiritual intelligence combines the concepts of "spirituality" and "intelligence" in a new sense, and the intelligence that generates the universality causing integrity (Bagheri et al., 2010). Spiritual intelligence implies a capacity for a deep understanding of existential questions and insights into multiple levels of consciousness. Spiritual intelligence also implies knowledge of the soul as the basis of existence or as a creative life force for evolution. Spiritual intelligence can grow with practice and can help a person distinguish reality from illusion (Vaughan, 2002). The concept of spiritual intelligence involves a type of adaptation and problem-solving behavior that includes the highest levels of growth in different areas of cognition, ethics, emotion, interpersonal, and so on; this helps the individual to maintain harmony with the phenomena around him/her and to achieve internal and external integrity. This intelligence gives a person a general view of life and all experiences and events, enabling him or her to reformulate and reinterpret his/her experiences and deepen his/her knowledge and understanding (Ghobari Bonab et al., 2007). Besides, according to Zohar et al. (2000), spiritual intelligence allows humans to be creative, change the rules, and correct situations. Therefore, spiritual intelligence can have benefits for an individual.

Research shows that there is a relationship between the spirituality of

individuals and their physical and mental health. For example, in the research conducted by Bagheri et al. (2010) on 125 nurses in the city of Bushehr, there has been a significant relationship between spiritual intelligence and happiness. Furthermore, in a study on 160 participants in South Korea, there has been a positive and significant correlation between spiritual well-being and life satisfaction (Lee, 2011). In another study, there has been a negative correlation between depression and anxiety and spiritual well-being. Correspondingly, spiritual well-being has been significantly and negatively correlated with fatigue, distress symptoms, memory impairment, as well as lack of appetite, drowsiness, dry mouth, and sadness (Kandasamy et al., 2011).

Nurses face a lot of stress in their daily work environment. For example, in a study in Northern Ireland, nurses are reported to have significant work-related stress (McGrath et al., 2003). This job stress can endanger their physical and mental health. Therefore, it is possible that spiritual intelligence can be helpful for the nurses as a coping strategy. Given that there is no research done on the relationship between spiritual intelligence and life satisfaction in nurses, the first goal of this study is to investigate the relationship between spiritual intelligence and life satisfaction in nurses. There are also very few studies that have examined the relationship between spiritual intelligence and general health dimensions in nurses. Therefore, the second goal of this study is to investigate the relationship between spiritual intelligence and general health and subscales of general health questionnaire such as physical symptoms, anxiety and sleep disturbances,

social dysfunction as well as depression symptoms in them.

## 2. Method

### 2.1. Study population, sample and research design

This study was an analytical-cross-sectional one. The population of this study was all female nurses in the city of Kermanshah in 2021. Three hospitals were randomly selected among hospitals in Kermanshah. Then, 109 nurses were selected using convenience sampling method, responding to spiritual intelligence scale (SIS), satisfaction with life scale (SWLS) and general health questionnaire (GHQ-28).

### 2.2. Tools

**Spiritual Intelligence Scale (SIS):** This scale was standardized by Abdullah Zadeh et al. (2009) on the students. The questionnaire has 29 questions scored in five-options Likert scale, and ultimately two main factors were obtained first of which called perception and connection to universe containing 12 questions and the second factor called spiritual life with reliance on the inner core with 17 questions. The normative sample was 280 participants, 200 of whom were students of Gorgan Natural Resources University and 80 students of Payam Noor University in Buhshehr. Out of which, 184 were female and 96 were male. At first, a preliminary questionnaire of 29 questions was designed by the test constructors and distributed among 30 students. The reliability of the test in the initial phase was 0.84 by the alpha method (Abdullah Zadeh et al., 2009).

**Satisfaction With Life Scale (SWLS):**

This questionnaire, perhaps the most commonly used tool for measuring life satisfaction, was developed by Deiner et al. (1985 as cited in Seyedi Asl et al., 2016). This scale is a short five-item questionnaire scored using Likert scale; each item has seven options that are scored from 1 to 7. In a study on 109 students, the reliability of satisfaction with life scale was 0.83 using Cronbach's alpha and 0.89 with a test-retest method. Likewise, the construct validity of this questionnaire was reported to be appropriate using two questionnaires (Bayani et al., 2007).

**General Health Questionnaire (GHQ):**

This questionnaire was developed by Goldberg (1972 as cited in Abaspour et al., 2014) is the most widely used tool for detecting non-psychotic psychiatric issues. The main advantage of GHQ is that it is easy, short and objective from performer point of view (Khayatan et al., 2022). There are several versions of the GHQ available: There is its 60 items version and shorter ones (containing 30, 28 and 12 items). The 28-items version of this tool (GHQ-28) was developed by Goldberg and Hiller (1979 as cited in Molina et al., 2006). This questionnaire is scored in a four-options Likert method. Finally, a general score and

four sub-scales were obtained (Physical symptoms, anxiety and insomnia, social dysfunction and depression). In a study on 80 psychiatric patients and 80 normal individuals, the criterion validity coefficient was 0.78, the split-half reliability coefficient was 0.90 and Cronbach's alpha was 0.97 (Ebrahimi et al., 2007).

**2.3.Data analysis**

Data were analyzed using descriptive statistics and Pearson correlation coefficient running SPSS software.

**3. Results**

In the present research, 109 nurses from the city Kermanshah were selected as the participants. The mean age of the group was 32.58 with a standard deviation of 5.10. Besides, the mean working experience of this group was 9.55 with a standard deviation of 5.21. Furthermore, out of sample group, 39 subjects (35.78%) were single and 70 (64.22%) were married.

Pearson correlation analysis was used to investigate the relationship between spiritual intelligence, life satisfaction, general health as well as the subscales of general health questionnaire (Table 1).

Table 1. Results of Pearson correlation analysis

Variable	Spiritual Intelligence	
	Perception and connection to universe	Spiritual life or reliance on the inner core
Life satisfaction	0.266*	0.418**
GHQ Total score	-0.434**	-0.383**
GHQ Physical symptoms	-0.224*	-0.310**
GHQ Anxiety and insomnia	-0.297**	-0.303**
GHQ Social dysfunction	-0.385**	-0.560**
GHQ Depression	-0.541**	-0.386**

P<0.01 \*\*

P<0.05 \*

According to [Table 1](#), there was a positive and significant correlation between the first subscale of spiritual intelligence (perception and connection to universe) ( $p < 0.05$ ) and the second subscale of spiritual intelligence (spiritual life or reliance on the inner core) ( $p < 0.01$ ) and life satisfaction. There was also a negative and significant relationship between the two subscales of spiritual intelligence questionnaire and total score of general health and subscales of general health questionnaire.

#### 4. Discussion

This study was the first study to examine the relationship between spiritual intelligence and life satisfaction. The first finding from this research was that there was a positive and significant relationship between the two subscales of spiritual intelligence and life satisfaction in female nurses in Kermanshah. [Naderi and Haghshenas \(2009\)](#) in a study on elderly found a significant relationship between spiritual intelligence and their life satisfaction. In a study, [Brillhart \(2005\)](#) found that levels of life satisfaction were related to levels of spirituality. In another study it was found that there was a positive correlation between spiritual well-being and life satisfaction ([Lee, 2011](#)). [Jafari et al. \(2010\)](#) also concluded that religious and existential well-being significantly predicted life satisfaction. [Berman et al. \(2004\)](#) highlighted that high scores on the intrinsic religiosity scale were strongly associated with high scores on the level of life satisfaction. [Chlan et al. \(2011\)](#) stressed that the use of spiritual and religious coping was significantly associated with the higher life satisfaction. Therefore, the results obtained from this study are consistent with

the results of similar studies mentioned. Individuals with a high spiritual intelligence score exceed the limits of the body and matter, experiencing the peak of consciousness and using spiritual sources to solve problems; moreover, features such as humility, compassion, mercy and forgiveness can be found in them. With these features and a positive view of this world, these people were happy with their lives and try to improve it ([Naderi & Haghshenas, 2009](#)).

Another finding of this study was that both subscales of spiritual intelligence had a negative and significant correlation with the total score of general health questionnaire as well as all four subscales of it including physical symptoms, anxiety and insomnia, social dysfunction as well as depression. This finding is also confirmed in other research on spiritual intelligence and general health ([Akbari Zadeh et al., 2011](#); [Moalemi et al., 2009](#)). In another study, a negative correlation was found between depression and spiritual well-being ([Lee, 2011](#)). [Ghobari Bonab et al. \(2010\)](#) demonstrated a negative and significant relationship between the five subscales of spirituality and mental health; they also found a positive and significant relationship between the subscales of negative experiences of spirituality and mental health. It can be said that people with higher spiritual intelligence in stressful situations can react more effectively using stress coping strategies. Spiritual intelligence also implies the ability to utilize spiritual resources and capacities to increase adaptability and, consequently, mental health ([Hayman & Lashani, 2011](#)).

## 5. Conclusion

Finally, it can be concluded that spiritual intelligence plays an important role in feeling satisfied with life and promoting general health of nurses who suffer from severe work stress and can be helpful to them as a coping strategy. As Vaughan (2002) said, this intelligence can grow, so interventions and training programs can be designed for nurses to strengthen this type of intelligence, to take steps to maintain and improve their health and to make them satisfied with their lives.

This research had limitations. The sample group was limited to female nurses in Kermanshah. Therefore, it is suggested that the same analysis should be considered for male nurses, as well. The number of research samples was also low, so it would be better to use more participants in future research. In addition, due to the type of research, it was not possible to deduce the causal relationship. Researchers suggest that other research be done to determine the exact effect of spiritual intelligence on life satisfaction and general health.

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## Conflict of Interest

The Authors declare that there is no conflict of interest with any organization. Also, this research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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