Investigation of the Relationship Between Spiritual Health and Self-Efficacy in Students of Isfahan University of Medical Sciences

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Abstract

**Background:** In the recent years, spirituality and its effect on people's health have become a subject of interest. Identifying the factors related to spiritual well-being, especially for students as the educated class and future decision-makers of the society, is very important.

**Objectives:** The present study was carried out in order to determine the relationship between spiritual well-being and self-efficacy in students of Isfahan University of Medical Sciences.

**Methods:** This descriptive-correlational study was carried out during year 2014. One-hundred and seventy-five students of medical, health and modern science technology colleges of Isfahan University were selected by random sampling. The data was collected via demographic specification, spirituality well-being and self-efficacy questionnaires, and the information was analyzed by the SPSS software using descriptive statistics, t-test, Pearson and regression correlation coefficient. The significance level was considered lower than 0.01%.

**Results:** In total, 175 students including 75 males and 100 females participated in the study. The mean age of the participants was 23.8 ± 0.29 years. About 70% of the students were single and the remaining were married. With respect to education, 47.7% had Bachelor of Science (BS), 28.4% had Master of Science (MS) and the remaining were PhD students. The mean score of the students under study was 97.5 and the mean score of self-efficacy was estimated as 33.41. There was a positive significant relationship between spiritual well-being and self-efficacy (R = 0.41 and P < 0.0001).

**Conclusions:** In the present study, spiritual well-being had a direct relationship with self-efficacy. As for the importance of spirituality in mental health, it is suggested to make arrangements in order to promote self-efficacy in students.

**Keywords:** Spirituality, Health, Student, Self-Efficacy

1. **Background**

Although spirituality has received much attention for thousands of years, careful attention and its consideration as one of the dimensions of health didn’t start until the last few years (1). Nowadays, spiritual well-being is considered along with other dimensions like physical, mental and social health. Spiritual well-being is characterized by stability in life, proportion and harmony, feeling a close relationship with God, society, environment and oneself and has two dimensions: religious well-being and existential well-being (2).

Spiritual well-being is regarded as a common and typical solution when faced with physical and mental problems. Since students are considered as the most important classes of the society and face various issues in their personal and social lives, and considering the significant and positive effects of spiritual well-being, promoting this aspect of health in students is of great importance. Researchers have studied spiritual well-being of students in the recent years.

Farahaninia’s study on nursing students in 2005 showed that 8.98% of freshman and all seniors had moderate spiritual well-being (3).

In Rahimi’s study, the level of spiritual well-being of nursing and midwifery students of Kerman University of Medical Science was moderate (4).

The relationship between spiritual well-being and other aspects of health has been studied by various researches. For example, Assarroudi et al. (in 2012) showed that spiritual well-being had a positive relationship with different aspects of life quality and satisfaction of nursing staff (5).
Spirituality and religion are something that people sometimes construe as spiritual well-being and religious practices. Many people achieve spirituality by religion. Considering that people are different, what may cause some people comfort and peace may be inefficient for others. Therefore, praying, reading spiritual books or participating religious ceremonies are among sources, which some religious people use to feel less hurt when confronted with tense events (6).

According to Bandura, perceived inefficacy plays an important role in depression, anxiety, stress, hopelessness and other emotional struts. In other words, self-efficacy refers to one’s judgment about one’s own abilities (7). Religious beliefs and spirituality often, as combat strategies, relate to one’s psychology. Studies have shown that these two concepts, spirituality and self-efficacy, are correlated, thus self-efficacy and spiritual well-being are considered as a strong motivation for one’s progress (8).

The study by Asghari et al. in 2014 suggested that self-efficacy and spiritual well-being have a positive and significant correlation (9). Cheung’s study in 2000 also showed that an increase in self-efficacy relates to an improvement in mental health (10).

2. Objectives

Regarding the importance of spiritual well-being of students and considering that most studies have only worked on evaluating spiritual well-being of students and the fact that self-efficacy has not been studied extensively, the present study investigated the relationship between spiritual well-being and self-efficacy in students.

3. Methods

3.1. Demographic Information (Age, Gender, Marital Status and Educational Level)

This study has been approved by Isfahan University of Medical Sciences. This study was a descriptive-correlational research. After receiving a letter from the faculty vice-chancellor for research, all the students studying at medicine, health and modern science technology colleges of Isfahan University were selected as selective samples. Considering the inclusion criteria, 175 students of medicine, health and modern science technology colleges of Isfahan University were selected randomly. After an introduction and receiving the required information about the study, the researcher provided the students with a pack including the questionnaires and consents and asked them to complete the questionnaires. The inclusion criteria included, being students in the field of medicine, health and modern science technology colleges, and showing an interest to participate in the study. Exclusion criteria were, filling out the questionnaire incompletely, and not being interested in taking part in the study. The tool for collecting the data was a questionnaire including questions related to:

1. Demographic information (including: age, gender, educational level and marital status)
2. Ellison and Paloutzin spiritual well-being scale
3. General self-efficacy questionnaire

Ellison and Paloutzin spiritual well-being scale, which was designed by Ellison and Paloutzin in 1982 (11) has 20, six-choice items on a Likert scale including the following choices “strongly disagree, disagree, relatively disagree, relatively agree, agree, strongly agree”. Ten of the items measured existential well-being. The total score of spiritual well-being was the sum of these two sub-groups in the range of 20 - 120. Spiritual well-being is divided to three sub-groups; low (20 - 40), modest (41 - 99) and high (100 - 200). Ellison-Paloutzin well-being scale is a standard questionnaire and has been evaluated in Iran by Abbasi in 2005. Reliability was determined as 82% and the Cronbach’s alpha coefficient of validity was 0.75 and both have been confirmed (12).

The general self-efficacy scale was developed in 1979. At first, it had 20 items with two separate sub-scales, called general self-efficacy and social self-efficacy. In 1981, it was changed to a 10-item scale. It has been translated to a number of languages and its validity and reliability have been confirmed in Iran (13). For scoring this test, each item can be scored from 1 to 4 and the range of the question is classified based on a Likert scale: always, sometimes, seldom and never. The maximum and minimum scores in this scale are 10 and 40, respectively. A higher score indicates greater self-efficacy.

The inclusion criteria were being interested in taking part in the intervention, and studying at medicine, health and modern science technology colleges of Isfahan University. Exclusion criteria included: filling out the questionnaire incompletely, and not being interested in participating in the study and leaving the study.

To obey ethical principles, the questionnaire was completed anonymously. Also, consent forms were filled by the respondents. Some explanation was provided about the confidentiality and optionality of participating in the study. After collecting the data, it was entered in the computer and analyzed using the SPSS 16 software. To analyze the data in this study, descriptive, chi-square and Pearson-Spearman correlation tests were used. The significance level was considered lower than 0.05.
4. Results

Overall, 175 students from three faculties of Isfahan University of Medical Science completed the questionnaire: 35 (20%) at the faculty of medicine, 89 (50%) at the faculty of health and 51 (30%) at the faculty of modern technologies of medical sciences. The average age of the participants was 23.8 ± 0.29. Among the participants, 42.6% were male and the rest were female. About 70% of the students were single and the remainder was married. Considering education, 47.7% had BS, 28.4% had MS and the remaining were PHD students (P < 0.001).

The mean score of spiritual well-being of the students was estimated as 97.5 ± 17.07 and the mean score of self-efficacy was 33.41 ± 3.9.

Comparing boys and girls, showed that the mean score of spiritual well-being of females was significantly higher than males (P < 0.001).

There was no positive significant difference regarding self-efficacy between male and females students (P = 0.85).

Table 1 depicts spiritual well-being and self-efficacy status of the students and correlation information about how spiritual well-being and self-efficacy relate to each other is displayed in Table 2.

| No. (%) | No. (%) |
|---------|---------|
| **Spiritual well-being** | | |
| High | 89 (50.9) |
| Moderate | 83 (47.2) |
| Low | 4 (2.3) |
| **Self-efficacy** | | |
| High | 119 (67.6) |
| Moderate | 55 (31.2) |
| Low | 2 (1.2) |

The other items had no significant differences between spirituality well-being and demographic variables; in the regression model, gender (male) was the only variable, which had a significant effect on spiritual well-being (P = 0.000) and self-efficacy (P = 0.001) (Table 3).

According to the results of t-test analysis, spiritual well-being in married students was M = 97/96 and in single students, M = 97/37. (P = 0/83). Also, the self-efficacy of married students was M = 32/73 and in single students M = 33/96 (P = 1/60) (Table 4).

5. Discussion

This study was conducted to investigate the relationship between spiritual well-being and self-efficacy among 175 students of Isfahan University of Medical Sciences. The finding of the study showed that spiritual well-being of most of the students was in the range of high and moderate.

This corresponds with the study of Rahimi et al. (4) and Hsiao (14). High scores in spiritual well-being might be due to cultural and religious conditions of Iran’s society. In the present study, female’s mean score of spiritual well-being was more than males and this finding corresponds to Sayd-shohadai’s study (15).

Also, in the study of Kandasamy et al. (16), female’s spiritual well-being was more desirable than males. It can be concluded that, in Islamic societies, religious beliefs among females are stronger than males.

Also, corresponding with the findings of Mesbah’s study on the students of Tehran University in 2007 (17) and Dixon’s study in 1992 (18), male students showed more significant self-efficacy than female students, while specifying this fact requires further studies. It is suggested to study the attitudes of these two genders towards future in future studies.

The results of the present study did not show a signification relationship between spiritual well-being and education and this corresponds with the study of Highfield (19), while it does not correspond with the study of Sayd-shohadai (15) and Rezaei et al. (20). These results indicate that some students can improve their spiritual well-being during educational courses, because the students that study in higher levels of education have higher spiritual well-being scores.

According to the results of the present study there is a significant and positive relationship between spiritual well-being and self-efficacy. In Rasi’s study (21), which investigated religious tendency and self-efficacy, it was found out that there is a significant positive relationship between these two variables corresponding to the results of the present study. This means that if self-efficacy is related to spiritual well-being, then anyone that has a high spiritual well-being score should have high self-efficacy and a positive attitude about their self-ability.

The results of our study corresponded with Asghasri’s study in 2014 (9) and Duggleby’s study (22) in 2009, which focused on the development of self-efficacy beliefs.

According to Bandura, when feeling stressed, those who see themselves efficient and capable to confront difficulties, try harder to overcome and cope with difficulties, but those who see themselves inefficient and incapable
Table 2. Correlation Coefficient Between Spiritual Well-Being and Self-Efficacy of the Students Under Study

| Predictor Variable       | Criterion Variable | Correlation Coefficient | Significant Level | Number |
|-------------------------|--------------------|--------------------------|-------------------|--------|
| Spirituality well-being | Self-efficacy      | 0.41                     | \( P \leq 0.001 \) | 175    |

Table 3. Results of Regression Analyses of Spiritual Well-Being and Demographic Variables of the Students Under Study

| Variables        | Unstandardized Coefficients | Unstandardized Coefficients |
|------------------|------------------------------|----------------------------|
|                  | B                            | S.E                        | t                | P Value |
| Age              | 0.54                         | 0.43                       | 1.24             | 0.21    |
| Gender           | Male                         | -12.44                     | 2.75             | -4.52   | 0.000  |
|                  | Female                       | Ref                        | 0                | 0       | 0      |
| Marital status   | Single                       | 1.37                       | 3.17             | 0.43    | 0.665  |
|                  | Married                      | Ref                        | 0                | 0       | 0      |
| Degree           | BSc                          | -5.82                      | 3.71             | -1.56   | 0.119  |
|                  | MSc                          | -6.16                      | 4.61             | -1.33   | 0.184  |
|                  | PhD                          | Ref                        | 0                | 0       | 0      |
| Self-efficacy    | 6.13                         | 2.37                       | 2.58             | 0.001   |

*Dependent variable: spiritual well-being.

Table 4. The Difference Between Spirituality Well-Being and Self-Efficacy Score According to Marital Status

| Variables        | Number | Mean ± SD | df   | t    | P     |
|------------------|--------|-----------|------|------|-------|
| Spiritual well-being |       |           |      |      |       |
| Married          | 52     | 97.96 ± 19.60 |     | -0.20| 0.83  |
| Single           | 121    | 97.37 ± 15.95 |     |      |       |
| Self-efficacy    |        |           |      |      |       |
| Married          | 121    | 33.96 ± 3.80  |     | 1.47 | 0.34  |
| Single           | 52     | 32.73 ± 4.30  |     |      |       |

give up easily and feel anxious, depressed and hopeless (23).

There was a positive significant relationship between gender and spiritual well-being; spiritual well-being scores in female students were higher than boys, this result is compatible with the study of Rahimi (2013) (24) and Heidarzadeghan (2014) (25). This result can explain the fact that in Islamic societies, religious beliefs in females are stronger than in males. The other finding was the positive significant relationship between self-efficacy and spiritual health, this result is compatible with the studies of Smith (2010) (26), Adegbola (2007) (27) and Heidarzadeghan (2014) (25); this means that if students have a high spiritual well-being score, they can do everything by themselves and are powerful people.

According to the results, there was no positive significant relationship between spiritual well-being, self-efficacy and marital status. This does not correspond with the study of Heidarzadeghan (25), while it is compatible with Asghari’s study (9).

Among the limitations of this research, we can point to the limitation of investigating the students of only three faculties because of time limit. Participants’ tiredness, low level of trust and responsibility to answer the questions of the study were among other limitations of this research.

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