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The Relationship between Spiritual Intelligence and Resilience with Self-efficacy of Clinical Performance in Nurses Working in Shoushtar Educational Hospitals

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ABSTRACT

Introduction: Nurses as the main core of the treatment team have critical roles in improving the health of the community. Several factors such as spiritual intelligence and resilience control the behavior of nurses. The main objective of this study is to determine the relationship between spiritual intelligence and resilience with the self-efficacy of clinical performance in nurses working in Shoushtar educational hospitals.

Materials and Methods: The present cross-sectional analytical study was conducted on 92 nurses working in Shoushtar educational hospitals. Nurses were selected by census sampling method. The data collection tools included a demographic information form, spiritual intelligence self-report inventory (SISRI), Conner-Davidson resilience scale (CD-RIS), and the self-efficacy of clinical performance. Data were analyzed using descriptive statistics (mean and standard deviation), linear regression, and Spearman correlation coefficient in SPSS software ver. 16.

Results: The results show that there is a significant relationship between spiritual intelligence ($p<0.001$) and resilience ($p<0.001$) with self-efficacy of clinical function.

Conclusion: It seems that paying attention to the areas of spirituality and resilience is of particular importance. Therefore, there is a need for spirituality education and resilient skills for nurses to increase their self-efficacy and their performance.

Key words: Spiritual intelligence, Resilience, Self-efficacy, Clinical performance, Nurse

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INTRODUCTION

Nurses, as the core of the treatment team, play a very important role in improving community health [1]. They have a large share of healthcare workers worldwide and cover over 80% of health-related services [2]. Also, with their critical behavior and function, nurses play an essential role in maintaining care quality and promoting the health status of society [3]. Several factors play a role in nursing behaviors and performance [4]. Self-efficacy as a factor related to the perception or judgment of a person about his ability to perform specific activities plays a major role in the occurrence of a person's behavior and function [5,6]. In other words, self-efficacy as a specific and dynamic behavior identifies individuals' perceptions of their abilities in a particular environment [7]. Individuals who have sufficient self-esteem are more likely to be able to meet the needs of specific situations than those who are not self-sufficient. For this reason, self-efficacy is important in the clinical setting [5]. Self-efficacy in clinical practice means judgment about the ability to manage care independently [8]. The perception of each person's effectiveness in the workplace can affect his performance and performance. Hence, if health workers have a high self-efficacy to provide services, they are expected to be more likely to achieve the desired outcomes [5]. Hagbaghery et al. showed that self-efficacy with clinical skills is enough for a nurse to be more effective in dealing with obstacles and problems [9]. For this reason, paying attention to the problem of self-efficacy in employee performance requires identifying its predictive factors. One of the factors that can affect employee self-efficacy is spiritual intelligence [5]. This concept has been the subject of intense interest to psychologists and mental health professionals over the last few decades [10]. According to the World Health Organization (WHO), human beings are biological, psychological, social, and spiritual creatures, with

spirituality being one of their most important dimensions [11]. Spiritual intelligence is referred to as a set of individual capabilities related to solving existential problems and finding meaning and purpose in everyday life [12]. Spiritual intelligence includes the highest level of growth in the cognitive, ethical, emotional, and interpersonal areas that make the individual fully reach the internal and external integrity [13]. In fact, spiritual intelligence helps people become more stable and relate more deeply with worry and anxiety. It has been evidenced that spiritual exercises increase one ' s awareness of multiple levels of consciousness and have a positive effect on individual performance [14]. For example, Miri et al. showed that high spiritual intelligence in nurses could improve their adaptation to the environment and improve the quality of care for patients [15]. Another important factor in the self-efficacy of nurses' clinical practice is resilience. Today, the issue of resilience has a special place in mental health [16]. Resilience as the ability to deal successfully with threatening conditions is associated with achieving a higher level of equilibrium [17]. Resilience can be seen as an adaptive capacity that results in the person ' s constructive participation with the environment [18]. Resilience can be associated with various factors such as self-esteem and the control of negative emotions when facing a person's life challenges to reduce the negative and destructive effects of life-pressures [10]. These definitions indicate that resilience is dependent on individual and social factors and is recognized as an important challenge in the performance of nurses [19]. In this regard, nurses can increase resilient skills in order to be able to cope with their professional and functional problems, taking into account potential resilience capacities, namely, overcoming negative experiences, and turning them into positive experiences [20]. People with high resilience usually have a strong sense of progress that makes them able to solve performance-related issues [21]. Amini et al. showed that nurses working in special sectors had a lower degree of resilience than other hospitals [20]. Considering the importance of self-efficacy in clinical practice and the functional role of nurses in providing health-related services and the lack of a study on the relationship between the variables studied, the present study aimed to determine the relationship between spiritual intelligence and resilience with self-efficacy of clinical performance in nurses working in Shoushtar educational hospitals.

MATERIALS AND METHODS

The present cross-sectional analytical study was performed on all nurses working in Shoushtar educational Khatamolanbia (105 nurses) and Alhadi (15 nurses) hospitals. All nurses working in these two educational hospitals were enrolled using census sampling method. The criteria for entering the study included written informed consent, clinical work record of at least six months, and having a bachelor's or master's degree. Also, the criteria for exclusion from the study included incomplete completion of questionnaires and the occurrence of severe physical illness or severe cognitive impairment. Among all employed nurses in two educational hospitals, only 28 people did not participate in the study. Finally, 92 nurses completed questionnaires and delivered to the researcher. The data collection tools included a demographic information form, spiritual intelligence self-report inventory (SISRI), Conner-Davidson resilience scale (CD-RIS), and the self-efficacy of clinical performance [22]. The demographic information form included age, sex, marital status, educational level, work record, and employment status. The spiritual intelligence self-report inventory (SISRI) was a tool made by King [23] that has 24 items. This scale has four dimensions of Critical Existential Thinking (CET), Personal Meaning Production (PMP), Transcendental Awareness (TA), and Conscious State Expansion (CSE). The scoring of the questionnaire is based on a Likert scale with 5 degrees: "I totally agree" (score 4), "agree" (score 3), "neither agree nor disagree" (score 2), "I disagree" (score 1), and "totally disagree" (score 0). The total score of the questionnaire is between 0 and 96 [23]. The reliability of this questionnaire was calculated by King [23] using Cronbach's alpha (0.95). In addition, Khodabakhshi et al. calculated Cronbach's alpha for each of the CET (0.75), PMP (0.79), TA (0.66), and CSE (0.80) [10]. The Conner-Davidson Scale (CD-RIS) contains 25 items. The scoring method of this questionnaire is a Likert scale of 5 degrees from a completely false (score 0) to a perfectly correct (score 4) item. The total score of the questionnaire is in the range of 0-100, with a cut point of 50. A score above 50 represents a high resilience rate and vice versa [24,25]. Li et al. using the internal consistency method reported Cronbach's alpha of 0.91 for this questionnaire [26]. The self-efficacy of clinical performance questionnaire was developed by Cheraghi et al. [22]. This 37-item scale is a tool based on the nursing processes that has four dimensions: patients' review (12 questions), diagnosis and planning of care (9 items), run self-care program (10 questions), and self-care appraisal evaluation (6 questions). Cheraghi et al. obtained the reliability of this questionnaire using Cronbach's alpha coefficient of 0.96 [22]. The researcher referred to Khatamolanbia and Alhadi educational hospitals after obtaining necessary written permission from the faculty deputy of the faculty and coordinated with the authorities. The researcher then introduced her and presented a brief description of the research objectives. After obtaining written informed consent from the nurses, they submitted questionnaires to each of them. Finally, the research samples were answered in the presence of the researcher. Descriptive statistics such as mean and standard deviation were used to present descriptive information of demographic data. Also, the Spearman correlation coefficient and linear regression tests were performed to analyze the collected data. All of these analyses were performed in SPSS software ver. 16.

RESULTS

The present study showed that the mean age and age range of the subjects were 33.14 years ± 9.8 years and 22 years-51 years, respectively. Among 92 participants in

the study, 82.6% were female and 59.7% were single. 78.2% of them had a bachelor's degree and 47.8% had a work experience of less than 5 years. About 52.1% of nurses were dissatisfied with their income status (Table 1).

Table 1: Frequency distribution of nurses studied based on demographic data

Variables		Frequency (%)
Sex	Female	76 (82.6)
	Man	16 (17.4)
Marital Status	Single	55 (59.7)
	Married	37 (40.3)
Level of Education	Bachelor	72 (78.2)
	Master	28 (21.8)
	Official	15 (16.3)
Employment Status	Corporative	34 (36.9)
	Contractual	43 (46.8)
	Under 5 years	44 (47.8)
Work Experience	6 years-10 years	27 (29.4)
	11 years and more	21 (22.8)
	Satisfied	17 (18.5)
Income Level	Ordinary	27 (29.4)
	Dissatisfied	48 (52.1)

The mean score of spiritual intelligence, resilience, and self-efficacy of clinical performance in nurses were 74.5 ± 8.1, 62.1 ± 7.1, and 142.4 ± 19.8, respectively. The results showed that the nurses working in educational hospitals in Shoushtar had high spiritual intelligence and high resilience and moderate to high self-efficacy of clinical performance. The Spearman correlation coefficient was used to determine the correlation between research variables. Table 2 shows that there is a significant relationship between spiritual intelligence ($r=0.32$, $p<0.001$) and resilience ($r=0.38$, $p<0.001$) with self-efficacy of clinical function.

Table 2: Correlation matrix between research variables using Spearman correlation coefficient

Variables	Resilience	CET	CET	TA	CSE	Spiritual Intelligence	Patient review	Diagnosis and Care Planning	Run Self-care Program	Self-care Appraisal Evaluation	Self-efficacy of Clinical Performance
Resilience	1										
CET	0.025**	1									
PMP	0.29**	0.43**	1								
TA	0.18**	0.51**	0.49**	1							
CSE	0.25**	0.44**	0.43**	0.49**	1						
Spiritual Intelligence	0.35**	0.67**	0.78**	0.77**	0.75**	1					
Patient review	0.38**	0.26**	0.21**	0.23**	0.20**	0.33**	1				
Diagnosis and Care Planning	0.21**	0.1	0.08	0.12*	0.09	0.14**	0.39**	1			
Run Self-care Program	0.19**	0.09	0.16**	0.06	0.14**	0.17**	0.33**	0.37**	1		
Self-care Appraisal Evaluation	0.24**	0.08	0.20**	0.18*	0.11*	0.21**	0.16**	0.25**	0.28**	1	

Self-efficacy of Clinical Performance	0.38**	0.24**	0.25**	0.22**	0.21**	0.32**	0.81**	0.79**	0.55**	0.47**	1
*Significant at the level of 0.05											
**Significant at the level of 0.01											

The results of linear regression showed that among the dimensions of spiritual intelligence, only transcendental awareness and (β=0.204, p<0.001) and conscious state expansion (β=-0.181, p<0.001) and also resilience (β=0.417, p<0.001) played a significant role in predicting the self-efficacy of clinical performance. This is despite the fact that other aspects of spiritual intelligence did not play a role in predicting the self-efficacy of clinical performance (Table 3).

Table 3: Linear regression results of spiritual intelligence and resilience dimensions in predicting nurses' clinical efficacy

Variable		B	Std. Error	β	t	Sig.
Constant		34.56	10.81	-	3.24	0.001
Dimensions of Spiritual Intelligence	CET	-0.128	0.217	-0.011	-0.421	0.55
	PMP	-1.119	0.308	-0.029	-0.0194	0.79
	TA	0.389	0.314	0.204	4.143	0.001
	CSA	0.344	0.252	-0.181	-3.194	0.001
Resilience		0.386	0.125	0.417	4.311	0.001

DISCUSSION

The aim of this study was to investigate the relationship between spiritual intelligence and resilience with self-efficacy of clinical performance in nurses working in Shoushtar educational hospitals. The obtained results revealed that most nurses had high spiritual intelligence. The results of Rezaei et al., who investigated the relationship between spiritual intelligence and self-efficacy of midwifery clinical practice, showed that most midwives in the study had moderate to high spiritual intelligence [5]. In another study, Karimi-Moonaghi et al. showed that the nurses of educational hospitals in Mashhad had high spiritual intelligence [27]. This result is consistent with the present study. Yang et al. examined spiritual intelligence in Chinese nurses and reported that spiritual intelligence was low in most nurses [28]. This result is not consistent with the present study. An explanation for the difference between this issue and the present study may be the differences in the cultural and spiritual values of the society studied in their research as well as the number of a sample size of research. The results of this study showed that there was a significant relationship between spiritual intelligence and self-efficacy of nurses' clinical practice. Esmaeili et al. investigated the relationship between self-efficacy and spiritual intelligence among family caregivers of elderly people with Alzheimer's disease. They found that spiritual intelligence is related to self-efficacy positively and significantly [29]. This result is in line with the results of the present study. Miller et al. showed that there is not a significant relationship between spiritual intelligence and self-efficacy of patients [30]; which is not consistent with the findings of this study. The reason for this controversy with the results of this study can be the difference in the type of instrument for measuring spiritual intelligence and self-efficacy. The results of regression analysis showed that among spiritual intelligence component, only transcendental consciousness and state of consciousness development were able to predict self-efficacy of clinical practice. This result is in accord with the results of Sarihi et al., who showed that spiritual intelligence is associated with the development and transfer of knowledge and continuous learning [31]. The subject of spiritual intelligence has entered into other areas of the humanities, including the field of performance, not only in individual fields but also in psychological areas. The main motivation for the recent studies in the field of spirituality is to observe its effect on improving individual and organizational performance [32]. The results of this study demonstrate the high resilience of nurses; which is consistent with the study by Nikmanesh et al. These researchers assessed the role of self-efficacy and spiritual intelligence in predicting the resilience of nurses, and showed the high resilience of nurses [33]. Providing the conditions for developing nurses' self-efficacy and performance beliefs and reducing the stresses in their work environment can increase the resilience of the treatment staff. In addition, the findings of this study showed that there was a positive and significant correlation between resilience and clinical self-efficacy. Sagone et al. showed that high resilience in people is usually associated with high self-efficacy [34]. Also, the results of a study by Sharma revealed that there is a positive and significant correlation between resilience with psychological well-being and self-efficacy [35]. In other studies, it was found that people with higher self-efficacy expectations were more likely to find suitable solutions to their problems. This means that believing in self-empowerment can shape a person's attitude, attitude, and performance in order to utilize all the capacities and potentials in order

to survive in stressful situations. One of the limitations of this study is the value of the Quran and religion in Iran. Therefore, nurses may respond to the spiritual intelligence questionnaire based on the concept and value of the Quran. Other limitations of this study can be noted that the nurses were in a state of stress when completing the questionnaires. Furthermore, other types of intelligence may affect spiritual intelligence, preventing the proper control of this intelligence.

CONCLUSION

Based on the results of this research, spiritual intelligence and resilience have a significant relationship with the self-efficacy performance of clinical nurses. The results show the high significance of paying attention to the areas of spirituality and resilience. Hence, it is recommended conducting continuous training on spirituality and resilience skills for nurses at regular intervals for enhancing their self-efficacy and their performance in improving health services.

ETHICAL CONSIDERATIONS

This paper was the result of the first author's research project (Mr. Hatami) with No. Sh9707 and the code of ethics IR.SHOUSHTAR.REC.1397.010 from Shoushtar Faculty of Medical Sciences.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this manuscript.

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