The Relationship between Spiritual Intelligence and Happiness in Nursing Students studying at Shiraz and Tehran Universities of Medical Sciences

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ABSTRACT

Introduction & Background: Spiritual intelligence has a major role in provision and promotion of mental health. The importance of happiness in social participation, physical and mental health cannot be ignored, and it is one of the most important priorities of psychology. The purpose of the study is to examine the relationship between happiness and spiritual intelligence in the nursing students of Shiraz and Tehran University of Medical Sciences. Methods: This is a descriptive cross-sectional study and the population consisted of nursing students of Shiraz and Tehran University of Medical Sciences. Oxford happiness and spiritual intelligence questionnaires were used in this study and data analysis was conducted using SPSS 22 software. The study population comprised 541 nurses from nursing students of Shiraz and Tehran University of Medical Sciences. Of these, 394 students from Shiraz and 147 from Tehran were selected. Results: The mean score of active wellbeing for 5 happiness components of the two cities was statistically significant (P<0.001). The ratio of problem coping between the scores of spiritual intelligence was significantly different (P<0.001). Also, there was a significant difference between the scores of spiritual intelligences in the employed and non- employed students (p<0.013). Conclusion: According to the results, students with higher levels of spiritual intelligence were happier because these components are linked to mental health. The results of this study can help improve the mental health performance for students in hospitals. It can also consider solutions for improving spiritual intelligence and personal life of university students.

Keywords: Spiritual Intelligence; Happiness; Nursing Students.

INTRODUCTION

Spirituality has recently been recognized as a key aspect of human life. It is defined as an awareness that allows an individual to reflect on life, his origin and destination, which can have a significant impact on health, longevity and disease (Abdulla et al. 2019). It increases the capacity to tolerate life stress, motivating them to make greater efforts to find a solutions and deal with problems (Robinson et al. 2016) and (Sodeify & Tabrizi. 2020). Research has shown that a higher level of spirituality in life can increase happiness and life satisfaction, allowing individuals to cope with life problems (Heydari et al. 2017) and (Lee & Kawachi. 2019) and (White et al. 2011). Happiness is a positive and changing personal emotion that is influenced by one's mental state, internal factors and optimism about events (Dfarhud et al. 2014).

Some studies have suggested that happiness is a positively correlated with motivational variables that promote academic performance, especially in nursing (Tabbodi et al. 2015) and (HOSSEINI et al. 2016). One of the motivational variables that improves academic performance in nurses is spiritual intelligence. It has a positive effect on building nursing students' mental well-being, acting as an important component of nursing and education (arimi Moonaghi et al. 2015).

Spiritual intelligence is a type of intelligence that can lead to perfection a boost personal well-being and sensitivity to wellness. The effect of spirituality and the use of spiritual intelligence allow nurses to resolve their problems with a spiritual attitude, achieving self-healing, well-being and happiness by adopting a spiritual approach (Sahebalzamani et al. 2013) and (Hanefar et al. 2016).

People in search of spirituality engage in activities such as helping others and showing empathy, which can promote happiness. Students come from elite classes in the society, and as the creators of country future, they can integrate profession and spirituality (Damiano et al. 2017). As such, they see their profession not as an occupation but as a mission. During clinical education, and after graduation, nursing students face different challenges in providing patient care (Amirian & Fazilat Pour. 2016). Under these circumstances, an essential resource that may help them is spirituality, for it gives meaning and purpose to life (Canfield et al. 2016) and (Scott Barss. 2020). Moreover, promoting the spiritual intelligence of nurses can help them in their creativity, efficiency, versatility, communication skills and patient approach (Amiri & Amiri. 2019). Along with the vitality of the nursing work environment that deals with life and death of patients, this study seeks to gain deeper insights into their spiritual intelligence and its relationship with happiness. It is because a healthy community of nurses is efficient, and happiness can boost the health of nurses and patients (Seyedeh Roya et al. 2018).

MATERIAL AND METHODS

This is a descriptive cross-sectional study and the research population consisted of 514 nursing students at Shiraz and Tehran University of Medical Sciences. The data collection was conducted using three instruments of demographic information questionnaire, happiness scale and spiritual intelligence scale.

Before distributing the questionnaires, a written informed consent was obtained from the participants. On average, it took 15 min for each student to complete the questionnaire. The first semester students and those who were not willing to participate in the study were excluded.

Instruments

Data collection instrument consisted of two questionnaires, Oxford happiness questionnaires with 29 standard items that covers 5 areas (life satisfaction, dignity, active well-being, Self-satisfaction, and positive mood) with a Cronbach's alpha of 0.91. The total scores of items ranges from 0 to 87 (Alipour & Agah heris. 2007).

The 42-item spiritual intelligence scale covers 4 domains: general thinking, coping strategy, Morality and Love. This questionnaire is scored on a 5-point Likert scale ranging from strongly agree to strongly disagree. The items are scored according to the negative load and the concept of questions. The minimum and maximum scores of questionnaires are between 42 and 210. The reliability of the questionnaire was obtained by Cronbach's alpha method (0.85) and classical method (0.78) for the questionnaire. Data analysis was conducted using SPSS software (Badie et al. 2010).

Statistical Analysis

ANOVA, T-test, and Pearson correlation were used to analyze variables related to spiritual intelligence and happiness. A significance level of P<0.05 was considered.

OBSERVATIONS AND RESULTS

In this study, 541 nursing students studying at Shiraz and Tehran University of Medical Sciences were surveyed. Of these, 394 (72.8%) were from Shiraz and 147 (27.2%) from Tehran. The mean score of total spiritual intelligence was 145.9329 ± 14.98448 and the mean score of happiness was 58.7930 ± 12.6065 for the study population. As for the level of education, 404 (74.7%) of nurses had a bachelor's degree, 112 (20.7%) had a master's degree and 25 (4.6%) had a doctoral degree. Regarding gender, 226 (41.8%) of participants were male and 315 (58.2%) were female. Among the participants, 438 (81%) were 18-25 years old, 62(11.5%) were 25-30 years old, 26 (4.8%) were 30-35 years old, 9 (1.7%) were 35-40 years old and 6 (1.1%) were 40-45 years old.

According to the t-test, the mean score of active well-being was statistically significant (P<0.001) for 5 factors of happiness in the two cities of Shiraz and Tehran (Table 1).

Variables		Frequency	Mean	SD	P-value
Happiness	Shiraz	394	61.3274	12.23755	0.201
	Tehran	147	59.7143	14.94465	
Life satisfaction	Shiraz	394	17.9365	3.90387	0.936
	Tehran	147	17.9048	4.66308	
Dignity	Shiraz	394	14.2944	3.26437	0.132
	Tehran	147	13.7755	4.2536	
active well-being	Shiraz	394	9.6091	2.60544	0.000
	Tehran	147	8.4830	3.28624	
Self-satisfaction	Shiraz	394	8.8147	1.91782	0.400
	Tehran	147	8.9796	2.28895	
Positive mood	Shiraz	394	6.7792	1.58699	0.281
	Tehran	147	6.6054	1.86003	

Table 1: The mean score and frequency of 6 happiness factors in Shiraz and Tehran student

According to the Chi-square test, the problem coping ratio was significantly different between 4 components of spiritual intelligence (thinking, coping, mortality, and love) in the two cities of Shiraz and Tehran (P<0.001) (Table 2).

Variables		City		P-value
		Shiraz	Tehran	
Thinking	0	19 (4.8%)	13 (8.8%)	0.078
	1	375 (95.2%)	134 (91.2%)	
Coping strategy	0	96 (24.4%)	64 (43.5%)	0.000
	1	298 (75.6%)	83 (56.5%)	
Morality	0	128 (32.5%)	53(36.1%)	0.434
	1	266 (67.5%)	94(63.9%)	
Love	0	222 (56.3%)	79 (53.7%)	0.588
	1	172 (43.7%)	68 (46.3%)	

Table 2: Spiritual intelligence for 4	4 components of spiritua	l intelligence in Shiraz and Tehran	student.

Pearson correlation coefficient showed a significant linear relationship between spiritual intelligence and happiness (P<0.001, r=0.399). According to Table 3, the mean score of spiritual intelligence and happiness in both sexes (men and women) was not statistically significant. Also, the mean score of spiritual intelligence in the two cities of Shiraz and Tehran was statistically significant (P=0.002). The mean happiness score in the two cities was not significantly different (P=0.212) (Table 4).

Table 3: The mean score of spiritual intelligence and happiness in both male and female students

Variables		Frequency	Mean	SD	P-value
Spiritual	Women	313	144.7220	15.86106	0.348
intelligence	Men	226	145.9513	13.73211	
Happiness	Women	313	89.2364	14.07836	0.126
	Men	226	90.9867	11.56373	

Table 4. The mean score of s	piritual intelligence and happiness :	in Shiraz and Tehran students
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Variables		Frequency	Mean	SD	P-value
Spiritual	Shiraz	394	139.0842	11.33474	0.002
Intelligence	Tehran	147	142.9524	16.18952	
Happiness	Shiraz	394	90.3706	12.27442	0.212
	Tehran	147	88.7891	15.04023	

The mean score of spiritual intelligence were significantly different in the two groups of employed and nonemployed nurses with the employed group gaining a higher score (P=0.013). The mean score of happiness was not significantly different between the two groups (P=0.713) (Table 5).

Table 5: Mean score of spiritual intelligence in the two groups of employed and unemployed nurses					
Variables		Frequency	Mean	SD	P-value
Spiritual	Employed	127	142.6220	14.29059	0.013
Intelligence	Unemployed	412	139.3738	12.41462	
Happiness	Employed	127	90.3150	14.45173	0.713
	Unemployed	412	89.8261	12.65729	

According to the t-test, the mean scores of spiritual intelligence and happiness were not significantly different between the two groups of students living in and out of dormitory (Table 6).

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Variables		Frequency	Mean	SD	P-value	
Spiritual	dormitory residents	334	139.3623	12.79466	0.086	
Intelligence	Non- dormitory residents	204	141.3382	13.10655		
Happiness	Dormitory residents	335	89.6597	12.91812	0.500	
	Non- dormitory residents	205	90.4439	13.39604		

 Table 6: Mean scores of spiritual intelligence and happiness in the two groups of students living in and out of dormitory (Table 6)

One-way analysis of variance (ANOVA) showed that the mean score of spiritual intelligence at different educational levels was statistically significant (P=0.036). The comparison of the two groups based on Bonferroni test results showed that only students with bachelors' ($11.90 \pm 139.27\%$) and master's (15.86 ± 142.08) degree were significantly different in the mean score of spiritual intelligence (p-value = 0.033). One-way ANOVA revealed that the mean score of happiness was significantly different between students with varying levels of education (P=0.018).

The comparison the two groups based on Bonferroni test results suggested that students with a bachelor's (12.56 ± 89.73) and doctoral (12.03 ± 95.76) degree were significantly different in the mean score of happiness (p-value = 0.017). Accordingly, the mean score of happiness was estimated in master's (89.40 ± 14.85) and doctoral (95.76 ± 12.03) students ((p-value =0.018).

DISCUSSION

The findings of the study revealed a significant difference between the mean score of active well-being between Shiraz and Tehran students according to 5 components of happiness. (Yoo & Kim. 2019) reported that happiness improves the academic achievement of medical student. (Wade et al. 2018) showed that spiritual well-being was in a linear relationship with happiness (22). That is, as an ability that enables peoples to achieve understanding and knowledge, spiritual intelligence lays the basis for life achievements (Skrzypińska. 2020) and (Munawar, and Tariq. 2018). Another study demonstrated that happiness is an effective factor in improving mental and physical health, creating a sense of satisfaction and security in life (Rizvi & Hossain. 2017) and (Abdel Khalek. 2014).

The comparison of the groups showed that the mean score of happiness was significantly different between the bachelor's and doctoral students. This result is not consistent with those reported by (Mehrdadi et al. 2016), according to which there was not any relationships between education and happiness, which could be attributed to the age group of his sample.

The study also showed that the coping strategy ratio was significantly different between in Shiraz and Tehran students in four factors of spiritual intelligence including general thinking, problem solving, morality and love. (Amirian & Fazilat Pour. 2016) reported that spiritual intelligence helps resolve issues such as developing an adaptive role and overcoming crises and emptiness in life.

There was also a significant positive relationship between spiritual intelligence and happiness scores. Research shows that peoples with a higher level of spiritual intelligence are happier (Abdollahpour & Khosravi. 2018) and (liabadi et al. 2018). Activities performed by people in search of spirituality such as helping others and showing compassion can boost happiness (Krause et al. 2018). Since nurses work in an environment that deals with death and life issues, being happy and having a delightful spirit can motivate them in their care of patients (Takeda et al. 2020).

There was a significant difference between employed and non-employed groups in the spiritual intelligence score. That is, the mean score of spiritual intelligence was higher in the employed students. Studies on spiritual intelligences in nursing have showed that working in a ward, job experience, and education are significantly correlated (Akbarizadeh et al. 2013). This association was also confirmed by (Mehrdadi et al. 2016).

According to the results, the mean score of spiritual intelligence and happiness in both sex groups (men and women) was not statistically significant. (Pant & Srivastava. 2019) found that there is no relationship between gender and spiritual intelligence, which is in disagreement with the findings of (Akbarizadeh et al. 2013).

CONCLUSIONS

The spiritual intelligence is a key factor for improving nursing performance in patient care, as it raises the level of happiness and life satisfaction in nurses. Hence, it is recommended to acquaint students with concepts such as spiritual intelligence and spiritual care during their studies. In Muslim countries, spiritual intelligence is a good measure of happiness in the medical staff and a good tool for improving satisfaction.

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CONFLICT OF INTEREST

None to be declared.

BIBLIOGRAPHY

- 1. Abdulla, A, Hossain, M, Barla, C, 2019. Toward Comprehensive Medicine: Listening to Spiritual and Religious Needs of Patients. Gerontol Geriatr Med, 5(2): 233-372.
- 2. Robinson, M, Thiel, M, Shirkey, K, Zurakowski, D, Meyer, E, 2016. Efficacy of Training Interprofessional Spiritual Care Generalists, Journal of palliative medicine; 19(8): 814-821.
- 3. Sodeify, R, Tabrizi F, 2020. Midwifery. Nursing Students' Perceptions of Effective Factors on Mental Health: A Qualitative Content Analysis; 8(1): 34-48.
- 4. Heydari, A, Meshkinyazd, A, Soudmand, P,. 2017. The Effect of Spiritual Intelligence Training on Job Satisfaction of Psychiatric Nurses, Iranian journal of psychiatry; 12(2): 128-133.
- 5. Lee, MA, Kawachi, I. 2019. The keys to happiness: Associations between personal values regarding core life domains and happiness in South Korea. PloS one; 14(1): e0209821.
- 6. White, M, Peters, R, Schim, S, 2011. Spirituality and Spiritual Self-Care: Expanding Self-Care Deficit Nursing Theory. Nursing Science Quarterly; 24(1): 48-56.
- 7. Dfarhud, D, Malmir, M, Khanahmadi, M. 2014. Happiness & Health: The Biological Factors- Systematic Review Article. Iranian journal of public health; 43(11): 1468-1477.
- 8. Tabbodi, M, Rahgozar, H, Makki, Abadi, M, 2015. Proceedings SS. The relationship between happiness and academic achievements; 4(1): 241-246.
- 9. Hosseini, M, F, noorabadi, z, alamdarloo, A. 2016. Relationship between happiness and productivity among nurses; 4(1): 241-246.
- 10. Karimi Moonaghi, H, Gazerani, A, Vaghee, S, Gholami, H, Salehmoghaddam, A, Gharibnavaz, R. 2015. Relation between spiritual intelligence and clinical competency of nurses in Iran. Iranian journal of nursing and midwifery research; 20(6): 665-669.
- 11. Sahebalzamani, M, Farahani, H, Abasi, R, Talebi, M. 2013. The relationship between spiritual intelligence with psychological well-being and purpose in life of nurses. Iranian journal of nursing and midwifery research; 18(1): 38-41.
- 12. Hanefar, S, Sa'ari, C, Siraj, S, 2016. A Synthesis of Spiritual Intelligence Themes from Islamic and Western Philosophical Perspectives. Journal of Religion and Health; 55(6): 2069-2085.
- 13. Damiano R, DiLalla L, Lucchetti G, Dorsey J. 2017. Empathy in Medical Students Is Moderated by Openness to Spirituality. Teaching and learning in medicine; 29(2): 188-195.
- 14. Amirian, M, Fazilat Pour, M. 2016. Simple and Multivariate Relationships Between Spiritual Intelligence with General Health and Happiness. J Relig Health; 55(4): 1275-88.
- 15. Canfield, C, Taylor, D, Nagy, K, Strauser, C, VanKerkhove, K, Wills, S, 2016. Critical Care Nurses' Perceived Need for Guidance in Addressing Spirituality in Critically III Patients. American journal of critical care: an official publication, American Association of Critical-Care Nurses; 25(3): 206-211.
- 16. Scott Barss, K., 2020. Spiritual Care in Holistic Nursing Education: A Spirituality and Health Elective Rooted in T.R.U.S.T. and Contemplative Education. Journal of holistic nursing: official journal of the American Holistic Nurses' Association; 38(1): 122-130.
- 17. Amiri, Z, Amiri, H. 2019. The Relationship between Spiritual and Emotional Intelligence and the Quality of Nursing Care in Nurses Working in Ayatollah Taleghani Hospital in Kermanshah in 2018. muk-sena; 5(1):82-93.
- 18. Seyedeh Roya, M, Kourosh, A, Farhad, R, Mahin, R. 2018. The level of happiness among nurses and its' relation to some demographic factors in Zanjan province-2017. Hayat; 24(3): 233-43.
- 19. Alipour, A, Agah heris, M, 2007. Reliability and validity of the oxford happiness inventory among iranians; 3(12): 126-147.
- 20. Badie, A, Savari, E, Bagheri Dashtbozorg, N, Latifi Azadegan, V, 2010. Development and reliability and

validity of the spiritual intelligence scale. National Psychology Conference; Tabriz, Iran: Payam Nour University; 18(2): 38-50.

- 21. Yoo, D, Kim, D,. 2019. The relationship between students' perception of the educational environment and their subjective happiness. BMC medical education; 19(1): 409-420.
- Wade, J, Hayes, R, Wade, J, Bekenstein, J, Williams K, Bajaj J. 2018. Associations between Religiosity, Spirituality, and Happiness among Adults Living with Neurological Illness. Geriatrics (Basel, Switzerland); 3(3): 141-159.
- 23. Skrzypińska, K. 2020. Does Spiritual Intelligence (SI) Exist? A Theoretical Investigation of a Tool Useful for Finding the Meaning of Life. J Relig Health; 4(2): 28-37.
- 24. Munawar, K, Tariq, O. 2018. Exploring Relationship Between Spiritual Intelligence, Religiosity and Life Satisfaction Among Elderly Pakistani Muslims. Journal of Religion and Health; 57(3): 781-795.
- 25. Rizvi, M, Hossain, M, 2017. Relationship Between Religious Belief and Happiness: A Systematic Literature Review. J Relig Health; 56(5): 1561-1582.
- 26. Abdel Khalek, A. 2014. Religiosity health and happiness: significant relations in adolescents from Qatar. The International journal of social psychiatry; 60(7): 656-661.
- 27. Mehrdadi, A, Sadeghian, S, Direkvand Moghadam, A, Hashemian, A, 2016. Factors Affecting Happiness: A Cross-Sectional Study in the Iranian Youth. Journal of clinical and diagnostic research: JCDR; 10(5): Vc01-vc3.
- 28. Abdollahpour, S, Khosravi A, 2018. Relationship between Spiritual Intelligence with Happiness and Fear of Childbirth in Iranian Pregnant Women. Iranian journal of nursing and midwifery research; 23(4): 88-97.
- 29. Aliabadi, P, Mahani, M, Omidi, A, Khoshab, H, Arab, M, Haghshenas, A, 2018. The Relationship between Spiritual Intelligence and Happiness in Students of Bam University of Medical Sciences; 15(1): 45-50.
- 30. Krause, N, Ironson, G, Hill, P,. 2018. Religious involvement and happiness: Assessing the mediating role of compassion and helping others. The Journal of social psychology; 158(2): 256-70.
- 31. Takeda, S, Nakayama, S, Uddin, M, Hiramoto, A, Inoue, M, 2020. Correlation Between Subjective Happiness and Pleasant Activities at Workplace in Nursing Staff for Older Individuals in Japan. Community Mental Health Journal; 56(4): 776-783.
- 32. Akbarizadeh, F, Jahanpour, F, Hajivandi, A, 2013. The relationship of general health, hardiness and spiritual intelligence relationship in Iranian nurses. Iranian journal of psychiatry; 8(4): 165-177.
- 33. Pant, N, Srivastava, S,. 2019. The Impact of Spiritual Intelligence, Gender and Educational Background on Mental Health Among College Students. Journal of Religion and Health; 58(1): 87-108.