The Relationship between Spiritual Intelligence and Job Performance among Clinical Nurses

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The Relationship between Spiritual Intelligence and Job Performance among Clinical Nurses

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Abstract

Nurses are among the most important human resources of hospitals. Nurses’ performance is affected by several factors including their spiritual intelligence. Spirituality can lead to higher commitment, productivity, and quality improvement in health services. This study aimed to determine the relationship between spiritual intelligence and job performance among nurses in southeast of Iran in 2017. In this cross-sectional study, 204 nurses working in teaching hospitals of Zabol city were assessed. The nurses were randomly selected by cluster sampling. The demographic characteristics were obtained by a checklist. The Job performance Scale and Spiritual Intelligence Scale were further used to assess the intended outcomes. The data was analyzed using Pearson correlation coefficient and multinomial regression. The multinomial regression in Enter mode demonstrated that spiritual intelligence ($r=0.14$), being married ($r=2.17$), and educational level ($r=3.41$) directly and significantly affected nurses’ job performance. On the other hand, higher age ($r=-0.24$) negatively influenced nurses’ job performance. Considering the impact of spiritual intelligence on the job performance among nurses, it is necessary to implement practical measures to upgrade spirituality in nurses.

Keyword: Spiritual intelligence, Job performance, Nursing


**Introduction**

Reaching to the highest level of efficiency (i.e. optimum efficiency) is one of the most important goals in every organization (Hamid and Dehghanizadeh 2012). Besides, human constitutes the most precious resource in all organizations (Roohi et al. 2011). Nurses comprising the largest population in health care centers impart substantial roles in upgrading societies’ health. In fact, the success of health care organizations is impossible without having qualified and proficient nursing staff (Sangari 1996).

Spirituality is one of the factors impacting nurses’ job performance (Pesut and Reimer-Kirkham 2010). Multiple studies have recently been performed addressing the influence of spirituality in promoting functional performance in different organizations (Kaur et al. 2015; Yang 2006). The spirituality is a powerful force not only improving individuals’ compatibility and flexibility in face of problems, but also can upgrade the organizational function (Emamgholian et al. 2015). Incorporating the spirituality, as a novel approach, can positively influence job performance and organizational proficiency (Karimi Moonghi et al. 2011). Spiritual intelligence is defined as a new entity encompassing a combination of individualized capabilities to connect with spiritual sources. Spirituality can provide an effective problem solving and compatibility behavior. Spiritual intelligence has also shown a major role in successful and proficient job management (Lakeh et al. 2013). This sort of intelligence helps individuals to better conceptualize the life and empowers them to recruit spiritual capacities and resources for making important decisions and solving their daily problems (Rahmanian et al. 2018). In fact, spiritual intelligence enables humans to explore and bring up ultimate questions dealing with life purpose and to build up an integrated link between themselves and after life world. Spiritual intelligence further amalgamates outer dimensions of
intelligence and inner aspects of spirituality dedicating an extraordinary capability to individuals to bring spirituality into real life application (Liu et al. 2007).

According to previous studies, multiple factors can impact nurses’ job performance (Hamid and Dehghanizadeh 2012). In addition to psychological, social, environmental, and occupational factors, nurses’ job performance is also under influence of a variety of personal characteristics (Nasiripour et al. 2009). Spirituality is of the most important personal items affecting job performance (Pesut and Reimer-Kirkham 2010). Spiritual intelligence has been used as a coping strategy and problem-solving technique (Miri et al. 2015). In addition, upgrading spiritual intelligence has been associated with improved organizational function (Karimi Moonghi et al. 2011). As there were no study addressing this issue in Iran, this study aimed to determine the relationship between spiritual intelligence and job performance among nurses in educational hospitals in Zabol city during 2017.

Method

The population under study included all the nurses working in Amir-Al-Momenin and Imam Khomeini educational Hospitals of Zabol city. Among these, 204 nurses were selected by cluster sampling during 2017. Each ward in the hospitals was considered as a cluster, and then the nurses were chosen by simple random sampling in each cluster. The sample size was decided as 179 considering the correlation coefficient of 0.185, confidence interval of 95%, and power of 80%. Predicting a probable withdrawal rate of 10%, 204 nurses were finally included (Miri et al. 2015).

The inclusion criteria were working as a nurse in the hospitals and having at least bachelor degree. Incomplete responses to the questionnaires was considered as the exclusion criterion.

Data gathering tools
These were as follows.

1- demographic questionnaire including marital status, age, sex, hospital ward, job experience, and the level of education.

2- The 42-item spiritual intelligence questionnaire introduced and validated by Badi et al in 2000. This scale is comprised of 4 dimensions including religious belief contemplation (12 questions), ability to cope and interact with problems (14 questions), moral individualities (9 questions), and selfishness, love and affection (7 questions). For scoring the questionnaire, each of Likert scale five options (i.e. total agreement, agreement, partial agreement, disagreement, and total disagreement) were assigned with 5, 4, 3, 2, and 1 scores respectively. The validity and reliability of the tool were verified by content validity method and Cronbach alpha coefficient (0.85) respectively (Badie et al. 2010).

3- The job performance questionnaire: Peterson questionnaire (1922) was used for measuring job performance. This scale includes 15 questions scored in a five-grade Likert scale (very low to very high). Three examples of the statements include: “How fast do you perform your duties?”, “How much do you effectively cooperate with your colleagues?”, and “How much are your efforts and endeavors in performing your duties?” (Paterson 1922). The reliability and validity of this questionnaire have been reported as 0.74 and 68% respectively by Dehghanzadeh et al in a study on 196 nurses in 2012 (Hamid and Dehghanizadeh 2012).

For data gathering, the researcher visited the hospitals and explained the aims of the study to the nurses (mentioning to them that there was no need to writing their names on the questionnaires). After that, the questionnaires were distributed among the nurses. Ethical considerations (i.e. confidentiality of the information and the right to refuse or withdraw from the study) were
considered. This study was a result of a research proposal (the code of 16-1029) approved by the Research and Technology Deputy of Zabol University Medical Sciences. The study was approved by the Ethical Committee of Zabol University of Medical Sciences.

**Statistical analysis**

The data was analyzed by descriptive statistics, Pearson correlation coefficient, and multinomial regression. The confidence interval was considered as 95%.

**Results**

Totally, 204 nurses participated in the study. The median age of the participants was 28 years old with the range of 25 to 32 years. The majority of them were single (77, 37.7%) and had bachelor degree (189, 92.6%). The demographic features of the participants have been demonstrated in table 1.

The median job performance score of the studied nurses was obtained 53 with the minimum of 12 and maximum of 60. Moderate level spiritual intelligence was noted in 96% of the nurses. The detailed data has been shown in table 2.

For predicting nurses’ job performance regarding the assessed variables and after adjusting the data by Box-Cox transformation method, simultaneous multinomial regression was used. Scrutinizing the independency assumption of the variables using Durbin-Watson statistic revealed that the assumption was met (the value of 1.61). This assumption is met when the value of the statistic lies within 1.5-2.5.

Multinomial regression model by Enter mode revealed that spiritual intelligence, marital status, level of education, and age predicted nurses’ job performance score. As seen in table 3, the
determination coefficient was obtained as 0.159 indicating that spiritual intelligence, marital status, education level, and age explained 16% of the variance observed in nurses’ job performance score. The remained variance; however, is supposed to be dependent on variables other that those studied here.

The regression model further showed that nurses’ performance decreased by advance in age. Furthermore, a positive and direct association was observed between spiritual intelligence and nurses’ function in this model. In addition, we found that being married and having master degree predicted better performance score among the nurses (table 3).

**Discussion**

In present study, 98.5% of the studied nurses showed moderate and moderate-high spiritual intelligence scores. This finding was in accordance with the results of Akbarizadeh et al (2012)(Akbarizadeh et al. 2012), and Miri et al (2015) (Miri et al. 2015). On the other hand, the results of Yang et al who evaluated spiritual intelligence among nurses in China showed that 82% of nurses had low level spiritual intelligence(Yang 2006). This controversy can be partly explained considering the religious atmosphere prevailing in Iranian society and also by the juxtaposition of spiritual intelligence in parallel to religious beliefs which can synergize each other effects(Raghib et al. 2008).

According to our results, nurses with master degrees had higher job performance respective to nurses with bachelor degree. In line, Macclasi et al reported that nurses’ weak, moderate and good functions can be effectively predicted by their educational levels(McCloskey and McCain 1988). Significant and direct relationship has been also reported between nurses’ performance and their specialized knowledge level in other studies(Darvish et al. 2014).
No significant relationship was seen between nurses’ job performance and gender in present study. The studies of Lee et al (1997)(Lee and Alvares 1977) and Darvish et al (2014)(Darvish et al. 2014) also indicated that nurses’ job performance was not influenced by gender.

Regarding the results of present study, job performance was decreased by an advance in age. This was in accordance with the findings of several studies highlighting a significant relationship between age and job performance(Avolio et al. 1990; McDaniel et al. 1988). However, there was no association between age and performance in another report(Zakerian S A 2018).

There was a meaningful association between job performance and marital status among nurses in present study. In this manner, married nurses delivered more appropriate job functions. In contrast, Zakerian et al (2018) noted no significant association between these determinants(Zakerian S A 2018).

Overall, it seems that some individual features such as the level of education can definitely influence job performance among nurses. However, verifying the impacts of other features on the job performance needs more studies, in particular longitudinal ones.

We here found a statistically significant and direct association between spiritual intelligence and nurses’ job performance. Studies have shown that spirituality can promote creativity, honesty, trust, as well as improve job perspectives, morality, and work ethics which ultimately increase job performance (Adamson 2014; Kaur et al. 2013). Spirituality boosts nurses’ commitment and ethics in work place so they dedicate more efforts in accomplishing their duties, improving performance, and augmenting organizational efficiency(Arshadi). With the institutionalization of spirituality in work environment, nurses will remain more loyal to the organization and do their duties with more commitment(Hamid and Dehghanizadeh 2012).


**Conclusion**

This study assessed and determined some important variables predicting nurses’ job performance. We showed that spiritual intelligence, marital status, educational level, and age significantly affected nurses’ job performance. For retaining appropriate functional performance in nursing, special attention should be dedicated to the level of education and spiritual intelligence among nurses. Furthermore, the job performance can be upgraded by performing clinical retraining courses for nurses.

**Research limitations**

It was not possible to actually observe the functional performance of nurses in this study and the performance status was decided based on the self-reported questionnaire. It is recommended to use more practical and observational approaches to evaluate nurses’ job performance in future studies.

**References**

Adamson E. 2014. Caring behaviour of nurses in Malaysia is influenced by spiritual and emotional intelligence, psychological ownership and burnout. Evidence-based nursing 17(4):121-121.


Arshadi N. Design and test of pattern evaluations and consequences of important job motivation in employees of the National Company areas of South Oil of Ahvaz: PhD Thesis]. Psychology. Ahwaz: Shahid Chamran University of Ahwaz. 2008 ....


Table 1, Absolute and relative frequencies of demographic features among nurses participated in the study

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
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<tr>
<td>Marital status</td>
<td>Unmarried</td>
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<tr>
<td></td>
<td>Married</td>
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</tr>
<tr>
<td>Education</td>
<td>Bachelor degree</td>
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</tr>
<tr>
<td></td>
<td>Master degree</td>
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<tr>
<td>Gender</td>
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</tr>
<tr>
<td></td>
<td>Female</td>
<td>139</td>
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<tr>
<td>Ward</td>
<td>Women &amp; Gynecology</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Internal surgery</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>Emergency</td>
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</tr>
<tr>
<td></td>
<td>Other</td>
<td>25</td>
</tr>
</tbody>
</table>
Table 2, Absolute and respective frequencies of spiritual intelligence among studied nurses

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Spiritual intelligence</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>High</td>
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</table>

Table 3, The role of independent variables on nurses’ job performance in linear multiple regression model

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>Standard error</th>
<th>Beta</th>
<th>t</th>
<th>Significance</th>
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</thead>
<tbody>
<tr>
<td>Constant value</td>
<td>36.70</td>
<td>4.84</td>
<td>-</td>
<td>7.58</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Spiritual intelligence</td>
<td>0.14</td>
<td>0.03</td>
<td>0.28</td>
<td>4.28</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Age</td>
<td>-0.24</td>
<td>0.07</td>
<td>-0.21</td>
<td>-3.01</td>
<td>0.003</td>
</tr>
<tr>
<td>Marital status</td>
<td>2.17</td>
<td>1.001</td>
<td>0.15</td>
<td>2.17</td>
<td>0.031</td>
</tr>
<tr>
<td>Education</td>
<td>3.41</td>
<td>1.71</td>
<td>0.132</td>
<td>1.99</td>
<td>0.048</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.63</td>
<td>0.98</td>
<td>-0.043</td>
<td>-0.65</td>
<td>0.518</td>
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