The Relation between Spiritual Intelligence and Hospital Performance (Case Study: Therapeutic Personnel of Shahid Fayazbakhsh Hospital)

Mojgan Asghari
Corresponding Author, M.S. Candidate of Master Business Administration (MBA)
Khorasgan Branch, Islamic Azad University, Isfahan, Iran

Alireza Shirvani
Ph.D of Government Management
Assistant Professor of Islamic Azad University Dehaghan Branch

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Abstract
In the current era, human society strongly needs to spirituality, religiosity and morality. Hospital personnel can treat their job as a spiritual mission through combining spirituality with their profession. The researcher addressed spiritual intelligence since, according to conducted researches; this mechanism has a fundamental role in recovering patients’ health and in improving therapeutic personnel performance. The present research aims to investigate the relationship between spiritual intelligence and hospital performance.

In this research, 910 people including physicians, supervisors and nurses constituted the statistical population, and 168 people were selected with random sampling as the sample population. To assess the validity of the questionnaire, Structural validity and Content validity were employed, and to evaluate the reliability of the questionnaire, Cranach’s alpha was used. The present study has an applied objective and a descriptive-survey nature, and variables have correlation with each other. The data collection was carried out through library research and applying a researcher-made questionnaire to confirm or reject the research hypotheses, and to test the hypotheses, correlation coefficient and structural equation modeling were used. In the area of Spiritual Intelligence, the results of structural equation modeling respectively emphasized on “Conscious State Expansion”, “Personal Meaning Production”, “Critical Existential Thinking” and “Transcendental Awareness”. Also, in the area of Hospital Performance, “Patients’ Satisfaction”, “Rapid Recovery of Patients and Maintaining and Promoting Health”, “Promoting the Quality”, “Strengthening the Relationship between Patients and Therapeutic Personnel” and “Reducing Costs” in consequence was of great importance according to structural equation modeling”.

The results of the research showed that a statistically meaningful relationship exists between spiritual intelligence of the personnel and hospital performance, and using a standard estimating model, it was perceived that about 24.01 percent of fluctuations in the hospital
performance were affected by spiritual intelligence of the personnel. Thus, the main hypothesis stating that, at a confidence level of 95 percent in the sample population, spiritual intelligence improves the hospital performance was accepted, and accordingly, all the hypotheses

**Key words:** Spiritual intelligence, Critical Existential Thinking, Personal Meaning Production, Transcendental Awareness, Conscious State Expansion, Hospital performance

**Introduction**

Technological advances and globalization in the 21st century led into rapid and revolutionary changes in jobs. These changes caused people to move from working for survival toward a meaningful and inspiring career path which matches their personalities. [7]

Spirituality evokes a feeling in humans which leads them to look for their own, to think beyond everyday problems and to seek the meaning of life, consciousness and awareness in a higher level. It can be said that spiritual intelligence is the intelligence through which people analyze fundamental issues of their life, solve their problems, make their activities meaningful, assess their behaviors and make decisions consciously. In other words, people employ spiritual intelligence when they want to use spiritual resources and capacities for major decision-makings. [19]

Spirituality is an inherent aspect of human nature, and as a result, is the source of all thoughts, feelings, values and behaviors. As the sense of spirituality affects the sense of health, attention should be paid to the role of therapeutic personnel in this area. According to Coyle, satisfying the spiritual demand of patients helps them to fight ailments [18]. In fact, spiritual care is considered as an important part of therapeutic personnel performance as the aim of therapeutic personnel is to promote health, to prevent ailments and to relieve pain and discomfort. Hospital performance should be based on professional competencies in the application of knowledge, access to resources and technology, efficiency in resources use, minimizing critical state of patients, patient satisfaction and recovery outcomes. In the health care environment, hospitals should have greater accountability for society demands and needs, and integration of services in therapeutic system should bring about health promotion.

Nowadays, hospital personnel can treat their job as a spiritual mission through combining spirituality with their profession. The researcher addressed spiritual intelligence since, according to conducted researches; this mechanism has a fundamental role in recovering patients’ health and in improving therapeutic personnel performance. In fact, spiritual intelligence is a behavioral compatibility which helps the person to match the environment and to achieve internal and external integration, and consequently, enhances the performance. Development of spiritual intelligence assists therapeutic personnel to see different models of life, to improve their social relation skill, to have a sense of professional purposefulness, to understand the real meaning of phenomena and consequently experience a more meaningful career environment. [1]

Also, doing studies about spiritual intelligence has been noticed in recent decade due to growing challenges of life in this complex world as well as the human need to spirituality as a
guide to know his own. Yet, research in the area of spiritual intelligence demands more attention, and it is still at the beginning of its way. The necessity to do data-driven research about spiritual intelligence and introduction of tools which benefit from common psychometric properties in the area of psychological research show the importance of this kind of intelligence in different areas (such as psychotherapy, counseling, education, etc.) and open up new horizons in the related literature. [8]

In this research, Shahid Fayazbakhsh hospital was chosen as the case study because of its accreditation procedures, clinical governance, patient bill of rights, the method of assigning a patient to a nurse, teamwork and training courses as well as conferences intended for health personnel which brings about improvement in hospital performance. As spirituality affects the sense of health, spiritual care is an important part of therapeutic personnel’s job, and since the present study seeks to investigate the relationship between spiritual intelligence and hospital performance, the researcher studies Shahid Fayazbakhsh hospital.

The addressed research problem of the present study is that; is there any relationship between spiritual intelligence and hospital performance? This study seeks to investigate the aforementioned relationship and answer this question. In this research, aspects of spiritual intelligence consisting of “Critical Existential Thinking”, “Personal Meaning Production”, “Transcendental Awareness” and “Conscious State Expansion” are considered as independent variable, and aspects of hospital performance including costs reduction, strengthening the relationship between patients and therapeutic personnel, promoting the quality, rapid recovery of patients and maintaining and promoting health and patients’ satisfaction are dependent variables.

**Methodology**

The aims and hypotheses of the research are determined according to the models of some researchers. In the present research, the primary aim is to determine “the relationship between spiritual intelligence of personnel and hospital performance”, and the secondary aims are “determining the relationship between critical existential thinking and hospital performance”, “determining the relationship between personal meaning production and hospital performance”, “determining the relationship between transcendental awareness and hospital performance”, “determining the relationship between conscious state expansion and hospital performance”. Also, in this research the main hypothesis is about “the relationship between spiritual intelligence of the personnel and hospital performance”, and secondary hypotheses are about “the relationship between critical existential thinking and hospital performance”, “the relationship between personal meaning production and hospital performance”, “the relationship between transcendental awareness and hospital performance” and “the relationship between conscious state expansion and hospital performance”.

To design the conceptual model of the research, foreign and domestic researches focusing on spiritual intelligence model and hospital performance were investigated. The researches of King, D.B (2008) [12], Amram & Dryer, C (2007) [2] and Emmons, R.A (1999) [5], Kaheni, S et al

Figure 1: Research proposed model

The present study has an applied objective and a descriptive-survey nature. The data related to the literature of the subject was collected through library research, searching the Internet and interviewing professionals, and researcher-made questionnaire (22 items related to aspects of spiritual intelligence and 24 items related to hospital performance) was applied to collect the required data for confirming or rejecting the research hypotheses. Furthermore, random sampling was used to select the sample. Table 1 shows the groups and the number of cases in the sample. This study is a field research using case study methodology. In respect to the aim of this research which focuses on the relationship between spiritual intelligence and hospital performance in Shahid Fayazbakhsh hospital in Tehran, 910 people forming the therapeutic
personnel of the hospital are the statistical population. Based on Cochran formula and with respect to the number of cases in the statistical population as well as the standard deviation of 0.36649 in the experimental condition for 30 cases, a sample size which equals to 168 was the minimum required. Thus, 168 questionnaires were randomly distributed among physicians and other members of therapeutic personnel, and finally, 167 questionnaires were returned, from which 165 questionnaires were completed.

Research hypotheses were analyzed and evaluated through appropriate statistical tests matching the questionnaire items. To analyze quantitative data, the descriptive statistical method of mean, frequency and standard deviation was used, and the software of SPSS (version 20) and LISREL (version 8.8) were employed. The research domain includes aspects of location, time and subject: The location of this research is Shahid Fayazbakhsh hospital. The research was designed on research July of 2013, was approved in September of 2013 and was finish in March of 2014. The research subject was the relationship between spiritual intelligence and hospital performance.

Table 1: The Number of Society in Shahid Fayazbakhsh Hospital

<table>
<thead>
<tr>
<th></th>
<th>The Hospital</th>
<th>Doctor</th>
<th>Supervisor</th>
<th>Nurse</th>
<th>Other’s</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Number of Society</td>
<td>260</td>
<td>9</td>
<td>378</td>
<td>263</td>
<td>910</td>
<td></td>
</tr>
<tr>
<td>% of Society</td>
<td>21.33</td>
<td>1.2</td>
<td>42.4</td>
<td>35.06</td>
<td>%100</td>
<td></td>
</tr>
<tr>
<td>The Number of Sample</td>
<td>28</td>
<td>9</td>
<td>51</td>
<td>77</td>
<td>165</td>
<td></td>
</tr>
<tr>
<td>% of Sample</td>
<td>16.97</td>
<td>5.46</td>
<td>30.9</td>
<td>46.67</td>
<td>%100</td>
<td></td>
</tr>
</tbody>
</table>

After the design of the initial framework, 12 people (consisting of 10 people from among physicians and nurses and 2 university professors) assessed the questionnaire of the research to determine its content validity. In fact, this assessment focused on the content validity of the criteria provided to evaluate the desired aspects of the research. Thus, content validity was used initially for assessing the validity of the questionnaire and revising it if necessary.

In the present research, factor analysis was employed to ensure the validity of the structure. Factor analysis is another method of assessing validity. Generally, validation must occur before final distribution of the questionnaire, but considering the fact that this method requires a large sample size, and doing so with a few number of questionnaires (with a total of 30 pilot questionnaires) is not practical, and considering the fact that factor analysis is a basis for the next steps, factor analysis was performed for 165 questionnaires.

In the present research, a researcher-made questionnaire was used to collect data, SPSS software was employed to analyze data, and Cronbach’s alpha was used for evaluating the reliability of the assessment tool. Using Cronbach’s alpha, the results of the reliability test for 30 questionnaires is presented in Table 2. In this study, the value of Cronbach’s alpha coefficient was respectively 90.9% for "spiritual intelligence", 90.2% for "hospital performance" and 92.6 for the whole questionnaire. As all these figures are greater than 70%, the questionnaire benefits from the required reliability.
Table 2: the Results of the Reliability Test for 30 Questionnaires (Using Cronbach's alpha)

<table>
<thead>
<tr>
<th>Area of Test</th>
<th>Number of Question’s</th>
<th>Cronbach’s alpha coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Intelligence</td>
<td>22</td>
<td>0.909</td>
</tr>
<tr>
<td>Hospital Performance</td>
<td>24</td>
<td>0.902</td>
</tr>
<tr>
<td>Total of Questionnaires</td>
<td>46</td>
<td>0.926</td>
</tr>
</tbody>
</table>

Findings of the Research

In data analysis, inferential statistical techniques especially exploratory factor analysis and confirmatory factor analysis are used. Here, the set of 22 items related to “spiritual intelligence” and the set of 24 items related to “hospital performance” are factored using factor analysis. The output of this part can be used for later confirmatory factor analysis. In fact, through exploratory factor analysis, the items are factored in an appropriate way. Then, through confirmatory factor analysis in structural equation modeling techniques, this factorization will be approved or rejected. For doing the analyses, SPSS software (version 20) is employed in the first part, and LISREL software is used in the second part. Consequently, the outputs of exploratory factor analysis and the outputs of structural equation modeling are respectively presented in the following.

After doing factor analysis on 22 items of “spiritual intelligence” questionnaire as well as 24 items of “hospital performance”, KMO test Indices for spiritual intelligence and hospital performance respectively equal to 0.924 and 0.917 based on the data derived from the questionnaires. Both indices are greater than 0.6, and it indicates the adequacy of the sampling. Also, given the fact that the significance level of Bartlett test is less than 5%, it can be stated that factor analysis is appropriate for identifying the structure. In addition, the number of items which could evaluate spiritual intelligence and hospital performance are only 4 and 5 in consequence.

As shown in table 3, items 1 to 4 of “spiritual intelligence” have eigenvalues greater than and consequently, remain in the research. This indicates that the items of the questionnaire in this area can evaluate spiritual intelligence, and this shows the appropriate construct validity of these items.
Table 3: Total Variance Explained for “Spiritual Intelligence”

<table>
<thead>
<tr>
<th>Dimensions of Spiritual Intelligence(SI)</th>
<th>Initial Eigen values</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>Critical Existential Thinking (CET)</td>
<td>11.587</td>
<td>52.670</td>
<td>52.670</td>
</tr>
<tr>
<td>Conscious State Expansion(CSE)</td>
<td>1.166</td>
<td>5.299</td>
<td>74.425</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Also, the rotated factor matrix of these areas are estimated, and according to the rotated factor matrix of "spiritual intelligence", it can be concluded that the factors affecting "spiritual intelligence" fall into 4 groups, and considering the transformed variance, these groups investigate 74.425% of spiritual intelligence. As shown in table 4, items 1 to 5 of “hospital performance” are greater than 1, and therefore, remain in the research. This indicates that the items of the questionnaire in this area can evaluate hospital performance, and this shows the appropriate construct validity of these items.

Table 4: Total Variance Explained for “Hospital Performance”

<table>
<thead>
<tr>
<th>Dimensions of Spiritual Intelligence(HP)</th>
<th>Initial Eigen values</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>Promoting the Quality (PQ)</td>
<td>11.173</td>
<td>46.553</td>
<td>46.553</td>
</tr>
<tr>
<td>Strengthening the Relationship between Patients and Therapeutic Personnel (SRPTP)</td>
<td>2.026</td>
<td>8.441</td>
<td>54.994</td>
</tr>
<tr>
<td>Rapid Recovery of Patients and Maintaining and Promoting Health(RRPMP)</td>
<td>1.385</td>
<td>5.769</td>
<td>60.763</td>
</tr>
<tr>
<td>Reducing costs(RC)</td>
<td>1.144</td>
<td>4.765</td>
<td>65.528</td>
</tr>
<tr>
<td>Patients’ Satisfaction(PS)</td>
<td>1.001</td>
<td>4.172</td>
<td>69.699</td>
</tr>
</tbody>
</table>

Also, the rotated factor matrix of these areas are estimated, and according to the rotated factor matrix of "hospital performance", it can be concluded that the factors affecting "hospital
After extraction and explanation of the factors related to "Spiritual Intelligence" and "hospital performance", it is required to use confirmatory factor analysis so that the structure and factors of "Spiritual Intelligence" as well as "hospital performance" can be confirmed or rejected through statistical hypothesis testing. In this study, standard estimating models, significant numbers model and standard estimating model of second-order confirmatory factor analysis are employed on “spiritual intelligence” and “hospital performance”. In standard estimating model, the priority of factors and the most important parameters of “Spiritual Intelligence" and "hospital performance" are separately determined. The priority of the factors for "spiritual intelligence" are respectively CSE with path coefficient of 0.87, TA with path coefficient of 0.81, PMP with path coefficient of 0.78 and CET with path coefficient of 0.75, and the priority of the factors for "hospital performance" are respectively PS with path coefficient of 0.91, RRPMP with path coefficient of 0.87, PQ with path coefficient of 0.82 and RC, SRPTP with path coefficient of 0.78. In significant numbers model, fit indices of the model are determined which show that the models are in appropriate condition in terms of fit indices. Also, all the significant numbers related to different aspects of the model are significant as their significant number is greater than 1.96, and consequently, the models of “spiritual intelligence” and “hospital performance” are proved in confirmatory factor analysis hypothesis. There is a significant relationship between spiritual intelligence and hospital performance which indicates the main hypothesis of the overall structural model of this research. Standard estimation of Total is shown in figure 2.

Fit indices of the model shows that the model is in appropriate condition in terms of fit indices as the square of the degree of freedom (DF) equals to 1.8984 and is less than 3 which is the allowed level. Also, the root-mean square of the errors is equal 0.074 and is less than 0.1 which is the allowed level, and accordingly, there is no need to corrections. In this model, the P-
value is less than 0.05, the goodness of fit index equals to 0.94, and the modified goodness of fit index is 0.89.

To study the correlation of the derived factors of “spiritual intelligence” and “hospital performance” in more details, two-tailed Pearson correlation was employed, and the output is summarized in table 5. [15] Based on the output of SPSS software, the significance is less than 0.05 (It should be mentioned that the error is 0.01 for the coefficients between variables, and it is shown with **).

Table 5: study the correlation of the derived factors of “spiritual intelligence” and “hospital performance”

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Reducing Costs</th>
<th>Strengthening the Relationship between Patients and Therapeutic Personnel</th>
<th>Promoting the Quality</th>
<th>Rapid Recovery of Patients and Maintaining and Promoting Health</th>
<th>Patients’ Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Existential Thinking</td>
<td>Pearson Correlation .387**</td>
<td>.352**</td>
<td>.384**</td>
<td>.308**</td>
<td>.386**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>165</td>
<td>165</td>
<td>165</td>
<td>165</td>
</tr>
<tr>
<td>Personal Meaning Production</td>
<td>Pearson Correlation .381**</td>
<td>.403**</td>
<td>.300**</td>
<td>.238**</td>
<td>.322**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>165</td>
<td>165</td>
<td>165</td>
<td>165</td>
</tr>
<tr>
<td>Transcendental Awareness</td>
<td>Pearson Correlation .331**</td>
<td>.290**</td>
<td>.199*</td>
<td>.240**</td>
<td>.281**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>165</td>
<td>165</td>
<td>165</td>
<td>165</td>
</tr>
<tr>
<td>Conscious State Expansion</td>
<td>Pearson Correlation .398**</td>
<td>.351**</td>
<td>.332**</td>
<td>.281**</td>
<td>.370**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>165</td>
<td>165</td>
<td>165</td>
<td>165</td>
</tr>
</tbody>
</table>

Using SPSS software and considering the output of Pearson correlation for the correlation coefficients between aspects of spiritual intelligence and aspects of hospital performance, it can be understood that the majority of spiritual intelligence aspects have a great correlation with the majority of hospital performance aspects, and accordingly, all the hypotheses are accepted. Also, a good correlation (0.403) exists between “Personal Meaning Production” and “strengthening the relationship between patients and therapeutic personnel”, and the variable of “IT compliance” (with a correlation equal to 0.49) approximately predicts 24.01% of hospital performance. As the main hypothesis is accepted, it can be said that, at a confidence level of 95 percent, improvement in spiritual intelligence leads into improvement in hospital performance. To evaluate the kind and intensity of the relationship between independent and dependent variables, and to test the hypotheses, SPSS software as well as Pearson correlation test are employed. The obtained outputs are presented in table 6.
Table 6: Testing Hypotheses and Correlation Hypotheses

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Sample</th>
<th>Sig. (2-tailed)</th>
<th>Pearson Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between “SI” and “HP”</td>
<td>165</td>
<td>.000</td>
<td>.462**</td>
</tr>
<tr>
<td>Between CET of “SI” and “HP”</td>
<td>165</td>
<td>.000</td>
<td>.439**</td>
</tr>
<tr>
<td>Between PMP of “SI” and “HP”</td>
<td>165</td>
<td>.000</td>
<td>.396**</td>
</tr>
<tr>
<td>Between TA of “SI” and “HP”</td>
<td>165</td>
<td>.000</td>
<td>.313**</td>
</tr>
<tr>
<td>Between CSE of “SI” and “HP”</td>
<td>165</td>
<td>.000</td>
<td>.415**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Considering the output of SPSS, the significance level is less than 0.5, thus, H0 is rejected, and it can be said with 99 percent confidence that there is a positive significant relationship between spiritual intelligence and hospital performance (It should be mentioned that the error is 0.01 for the coefficients between variables, and it is shown with **). Accordingly, this result can be inferred that hospital performance changes in line with spiritual intelligence, and if spiritual intelligence improves, hospital performance will improve as well. Furthermore, the correlation coefficient shows the intensity of the relationship.

**Discussion**

According to the results of exploratory and confirmatory factor analyses, four factors have the most significant role in “spiritual intelligence of the personnel”. Also, according to “spiritual intelligence of the personnel” standard estimating model, the main factors are CSE, TA, PMP and CET in consequence. In many aspects, the result of the present study matches the results of other studies. For instance, the most important factor in spiritual intelligence of the personnel is “Conscious State Expansion” based on the results of this study. It should be mentioned that some researcher approved this fact in their researches. For example, in the research of Imani rad and Haghigh (2011) [10] about the relationship between the 12 aspects of spiritual intelligence and business, the results show that “Conscious State Expansion” is one of the most dominant aspects of spiritual intelligence in business.

The second factor affecting spiritual intelligence of the personnel is “Transcendental Awareness”. According to the research of Akbarizadeh et al (2011) [1], because of the transcendental nature of spiritual experience, people with spiritual beliefs are consistently connected to a special kind of understanding from their life experiences which include spiritual and divine intervention. These interventions can change life events as well as thoughts and behaviors of humans, and positively affect the way humans deal with adverse events. In this study, “Transcendental Awareness” is considered as an important aspect of spiritual intelligence.

Also, considering the research of Badie et al (2011) [4] about the relationship among spiritual intelligence, happiness and demographic variables in nurses of Fatemeh zahra and Bentahlhoda hospitals in city of Bushehr, it was understood that a linear significant relationship exists
between three variables of spiritual intelligence (“Transcendental Awareness”, “spiritual experiences” and “patience”) and happiness.

Now, with respect to the conducted researches and findings of statistical studies, it can be stated that recognition and identification of spiritual intelligence aspects in personnel lead into a better understanding of their interactions and consequently, improve hospital performance. Thus, we can put forward that “Transcendental Awareness” is the most important factor of personnel’s spiritual intelligence, and according to table 5, the greatest correlation coefficient (0.403) exists between “Personal Meaning Production” and “strengthening the relationship between patients and therapeutic personnel”. In addition, there is a good correlation (0.398) between “Conscious State Expansion” and “reducing costs”. Furthermore, given that the most important factor of hospital performance is "patient satisfaction", and based on the accepted main hypothesis which states promotion of "personnel's spiritual intelligence" can improve "hospital performance" in Shahid Fayazbakhsh hospital. Also, it can be said that promoting "Personal Meaning Production" can promote the "strengthening the relationship between patients and hospital personnel" and consequently promote "hospital performance". Moreover, according to standard estimating model of “spiritual intelligence of personnel”, the indices “My ability to find the meaning and aim of life helps me to make myself compatible with stressful conditions” and “I can make decisions according to my aims in life” from personal meaning production aspect assist the organization to improve personnel’s spiritual intelligence. Additionally, with respect to the most important indices mentioned in standard estimating model of “spiritual intelligence of personnel”, other aspects of personnel’s spiritual intelligence can be used to promote hospital performance.

Results

The hypotheses of the present study, obtained through employing Pearson correlation coefficient test and structural equation modeling, are as following:

**The main hypothesis:** There is a statistically significant relationship between aspects of spiritual intelligence of personnel and hospital performance in Shahid Fayazbakhsh hospital (correlation: 0.462 at a confidence level of 99%).

**Secondary hypothesis 1:** There is a statistically significant relationship between critical existential thinking and hospital performance in Shahid Fayazbakhsh hospital (correlation: 0.439 at a confidence level of 99%).

**Secondary hypothesis 2:** There is a statistically significant relationship between personal meaning production and hospital performance in Shahid Fayazbakhsh hospital (correlation: 0.396 at a confidence level of 99%).

**Secondary hypothesis 3:** There is a statistically significant relationship between transcendental awareness and hospital performance in Shahid Fayazbakhsh hospital (correlation: 0.313 at a confidence level of 99%).

**Secondary hypothesis 4:** There is a statistically significant relationship between conscious state expansion and hospital performance in Shahid Fayazbakhsh hospital (correlation: 0.415 at a confidence level of 99%).
With respect to structural equation model, there is a statistically positive significant relationship between spiritual intelligence and hospital performance.

Suggestions

As there is a statistically positive significant relationship between spiritual intelligence and hospital performance, we should search for ways to implement “spiritual intelligence model” and promote hospital performance through this method in Shahid Fayazbakhsh hospital. The suggestions of this research are based on the results of standard estimating model and structural equation model. The following applicable suggestions can be employed to improve spiritual intelligence of personnel:

According to the results of standard estimating model and structural equation model of personnel’s spiritual intelligence, the following suggestions are made to promote critical existential thinking in Shahid Fayazbakhsh hospital:

1. As the most important index of this aspect is “thinking about the almighty power of God”, it is suggested to promote the beliefs of the personnel through attention to cause and effect and the study of different religions.
2. Also, the aspect of “Critical Existential Thinking” can be promoted through thinking about the events of life, and to help this, the ability of critical thinking towards issues, the mental ability of pure-focusing on issues, the ability of demystification and the ability of making accurate judgments should be improved.

According to the results of standard estimating model and structural equation model of personnel’s spiritual intelligence, the following suggestions are made to promote personal meaning production in Shahid Fayazbakhsh hospital:

1. To promote the aspect of “Personal Meaning Production”, the personnel should find the meaning and aim of life to make themselves compatible with stressful conditions. Also, they should improve their self-confidence, mental concentration, creativity and invention and make use of opinion exchange in order to better understand meanings and aims.
2. Promoting the ability of decision-making based on the aims of life can improve the aspect of “Personal Meaning Production”. In this regard, it is suggested to provide personnel with latitude in their positions, clarify the strategic aims of the organization, inform the personnel about these aims and hold expert meetings with regard to the strategies and aims of the organization so that promotion can be achieved in this area.

According to the results of standard estimating model and structural equation model of personnel’s spiritual intelligence, the following suggestions are made to promote transcendental awareness in Shahid Fayazbakhsh hospital:

1. To improve the aspect of “Transcendental awareness”, the personnel should be aware of the deep connection between their own and others and increase its effectiveness through promoting their interactions and communication skills. In addition, the personnel should pay attention to facilitating the interactions among various parts of the organization.
2. Also, to promote “Transcendental awareness”, it is recommended to focus on immaterial aspects of life, categorize them and allocate time to these priorities. According to the results of standard estimating model and structural equation model of personnel’s spiritual intelligence, the following suggestions are made to promote conscious state expansion in Shahid Fayazbakhsh hospital:

1. To promote “Conscious State Expansion”, the personnel’s consciousness can be improved so that issues and option can be clearly observed. Also, in this regard, the organization can encourage its personnel to take part in its monthly or yearly courses, conferences and workshops and make use of magazines and new books.

2. Also, to strengthen “Conscious State Expansion”, personnel’s consciousness can be promoted, and to do so, the personnel should have more and more interactions with each other. In addition, the personnel should boost their self-confidence and self-esteem and act with fine decision-making.

According to the results of standard estimating model and structural equation model of personnel’s spiritual intelligence, the following suggestions are made for reducing costs in Shahid Fayazbakhsh hospital:

1. In order to achieve promotion in reducing costs, it is recommended to employ ways such as improving the quality of workforce, continuous job-training for directors and employees, motivating employees to work better, preparing more suitable ground for innovative and creative managers and staff, establishing appropriate performance-based payment system and using participative management. Also, the cost effectiveness of services can be improved through providing some information, and promotion can be achieved in reducing costs which leads into improvement in hospital performance. It should be mentioned that this issue can be achieved through interactions and intimate relations between the members of organizations as well as opinion exchange meetings.

2. To promote the relationship between the personnel and patients, physicians and other members should work with enthusiasm and honesty and try to solve patient’s problems and meet their demand through caring attention and listening. In this regard, it is suggested to strengthen face-to-face relationships between the personnel through meetings or informal daily interactions, establish consulting centers to focus on social relations and free the system from insufficiencies. Also, the expertise and knowledge of the responsible personnel can be improved, and accountability can be promoted through providing and implementing effective strategies. These steps together result in strengthening the relationship between the personnel and patients and consequently, promotes hospital performance.

3. In order to achieve promotion in quality, the focus should be on training the personnel for management of patients’ problems. It is required to mention that this ability can be achieved through planning, holding training courses which are based on patients’ needs, and satisfying various training needs of the personnel by providing various courses. It should be added that the effectiveness of these training courses can be evaluated. The hospital can improve personnel’s training and
strengthen them in this way. Also, the hospital can identify, understand and predict the needs of patients through collecting and assessing data and consequently, achieve promotion in quality.

4. To achieve improvement in rapid recovery of patients, the supervising system controlling the effectiveness of patients’ recoveries should be promoted, and the personnel should be strengthened in laboratory skills so that the actions are done faster, and as a result, patients recover more rapidly.

5. In order to achieve promotion in “patients’ satisfaction”, it is recommended to pay attention to patients and consult them. In this regard, the information and consultation which patients ask for should be provided easily and rapidly. Also, the focus should be on gaining patients’ satisfaction through solving their problems ethically and rapidly. Following the above-mentioned actions lead into achieving improvement in “patients’ satisfaction”.

Based on the correlations of the factors in model of “hospital performance” and the correlations of the factors in model of “spiritual intelligence of the personnel”, there is a good correlation “Personal Meaning Production” and “strengthening the relationship between patients and therapeutic personnel”, and according to the results in figure 2, about 24.01 percent of fluctuations in the hospital performance was affected by spiritual intelligence of the personnel. Thus, the main hypothesis stating that, at a confidence level of 95 percent in the sample population, spiritual intelligence improves the hospital performance was accepted. Also, according to table 5, promotion in “Personal Meaning Production” was effective on “strengthening the relationship between patients and therapeutic personnel” and consequently improved hospital performance.

Moreover, among the aspects in model of “spiritual intelligence of the personnel”, the greatest correlation coefficient (0.684) exists between “Critical Existential Thinking” and “Conscious State Expansion”. The model of “spiritual intelligence of the personnel” can be improved through promoting the indices of “Critical Existential Thinking” including “I think deeply about the almighty power of God”, “I have ideas about issues such as life, death, reality and universe” and “I usually think about the meaning of events taking place in my life” and the indices of “Conscious State Expansion” including “When I am in higher levels of consciousness, I can understand issues and options more clearly” and “I have techniques to reach higher levels of conscious state”, and consequently bring about hospital performance.

Finally, according to the coefficients among the aspects in the model of hospital performance, the greatest coefficient (0.750) exists between “rapid recovery of patients and maintaining and promoting health” and “patients’ satisfaction”. Also, as the most important indices in the aspect of “rapid recovery of patients and maintaining and promoting health” are “effective supervision on treatment of the patients” and “using skilled laboratory personnel for doing tests” and the most important aspects in “patients’ satisfaction” are “paying attention to patients and consulting them” and “protecting the privacy of patients, answering and hospitalizing them easily and rapidly”, the model of hospital performance can be promoted through improving these indices.

At last, the following issues are suggested for future studies:

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• Studying the relationship between the spiritual intelligence of personnel in state and private hospital
• Trying to create a common literature for calculation indices and using valid guidelines and procedures for determination of “Key Performance Indicators” of hospitals in improving the spiritual intelligence of personnel
• The present topic to be done in different locations and times in order to understand the correlation between these two variables and the significance of their relationship
• Research can be done on factors and barriers affecting all the aforementioned variables in hospital, and the ways to enhance the level of spirituality, spiritual intelligence and the performance of the hospital can be addressed in separate studies
• As the researcher used a questionnaire in collecting, care should be considered in interpreting the results. Also, to do more comprehensive researches, it is recommended to employ methods such as observation, interview and content analysis.

All researches usually face with some problem, barriers and limitations. The limitations of this study are:

• The spiritual intelligence was a new topic for some members of the aforementioned hospital personnel, and they knew little about this kind of intelligence. As a result, these members were provided with some instructional pamphlets during the distribution of questionnaires.
• The greatest limitation of this research was its short term for doing the study as well as employing correlation to show the relationships. Thus, to clarify the relationship between variables, a long term is required for doing the study.
• Every organization has its own organizational culture, as a result, the results of this study cannot be generalized to other hospitals.
• Another limitation of the study was the presence of intervening variable in the process of doing the research. Also, it may be possible to have intervening variables which affect the relationships but are hidden from the researcher.

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Corresponding Author

1. Mojgan Asghari
Supervisor of department of Obstetrics and Gynecology in Fayazbakhsh Hospital, Corresponding Author, M.S. Candidate of Master Business Administration (MBA)
2. Alireza Shirvani
PhD of Government Management
Assistant Professor of Islamic Azad University Dehaghan Branch
Email: BaleAndisheh@hotmail.com
Address: Islamic Azad University Dehaghan Branch, Dehaghan, Iran.
Tel: +98- 913-1155726 - +98-31-53334055

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