Abstract

Background and Objectives: Philosophical mentality grant an individual the ability to think critically, analyse the situation correctly, make insightful decisions, and find appropriate solutions for the problems. Evidence shows that this mental capability can also positively affect the individuals' creativity. In the health domain, where the complexity of healthcare procedures poses challenges to efficient management, presence of such a mental capability in healthcare managers is highly demanded. The aim of this study was to evaluate philosophical mentality in nursing managers of different demographic groups, and explore the correlation between their creativity and philosophical mentality.

Methods: Five hospitals were randomly selected from 11 teaching hospitals in the Isfahan city situated in central Iran. All nursing managers in hospitals (80) were surveyed in the census. Smith's philosophical mentality questionnaire was used as the survey instrument, comprising 30 items related to three dimensions of the construct, including comprehensiveness, flexibility, and contemplation. Data were summarized using descriptive statistical methods. Comparison of philosophical mentality between demographic groups was carried out using t-test and ANOVA. Relationship between the philosophical mentality and its dimensions and creativity was explored using Pearson correlation coefficient.

Findings: The mean philosophical mentality score was determined to be 72.5. The highest (80.10) and the lowest (63.50) score means were obtained for comprehensiveness and flexibility dimensions, respectively. No significant difference in score mean of philosophical mentality was identified between the two genders and between nursing managers of different levels of education. Creativity showed significant correlation with philosophical mentality and all its dimensions.

Conclusions: Philosophical mentality can be equally achieved by any nursing manager regardless of their gender and level of education. Our results encourage hospital administrators to develop training programs on philosophical mentality to enhance creativity and thereby overall managerial performance in their nursing managers.

Keywords: Philosophical Mentality, Creativity, Nursing Managers, Hospital Management
which are obvious for the others, and gain insight into the underlying aspects of issues. Flexibility relates to the ability of thinking about issues from different angles. According to Hofish when one encounters new circumstances, the conditions may be so unprecedented that one would not be able to easily and properly react. When one is compatible with a specific and immediate action, and at the same time observes the principles and considers the general advisability and assets, one has in fact observed the flexibility dimension of the measures of philosophical mentality [5]. Managers with philosophical mentality are able to measure their behaviors and practice according to the above-mentioned factors [6, 7].

Although creativity is a relatively independent construct, it still is related to the philosophical mindedness [8]. Creative individuals are described by two major characteristics: the ability of critical (analytical and logical) thinking as well as creative thinking where the mind and imagination contribute to creation of new ideas for achieving appropriate solutions [3]. According to Amabile, creative individuals are independent and self-regular in their activities, keep them away from intellectual solidity, increase their tolerance toward the ambiguous issues, resist to the failures, and show remarkable tendency toward accepting risks [9].

Peyvastegar et al. found correlation between fluidity and flexibility as two components of creativity with subjective well-being in university students [11]. Aboutorabi showed that training of managers on philosophical mindedness can enhance their creative thinking ability, which in turn positively influence decision-making process and organizational leadership [12].

In their study on the impact of critical thinking on clinical decision making in nurses, Akhondzadeh et al. identified a low average critical thinking score among nurses. They argued that this observation may be due to the lack of training [13]. Jamshidi et al. examined the relationship between philosophical mentality and creativity and found that philosophical mentality and its dimensions can significantly predict the creativity level [14].

While these studies have provided useful insight into the relationship between philosophical mentality, creativity, and management performance, an examination of such a relationship in nursing managers and the impact of demographic variables on that is lacking.

In this study, we attempted to answer the questions that whether there is a relationship between the philosophical mentality and the gender and level of education in the nurses, whether the nursing managers are aware of the importance of such skills, and whether they use such ability in their own career. In addition, we examined the relationship between philosophical mentality and creativity among nursing managers.

Methods

Study Design, Settings, and Sample

This study adopted a comparative approach. Five samples were selected randomly from 11 teaching hospitals (Farabi, Kashani, Chamran, Al-zahra, and Noor hospital) in the Isfahan situated in central Iran (2012). All nursing managers in hospitals (80) were surveyed by the census.

Measurement Instrument

Smith’s philosophical mentality questionnaire [1] was used as the survey instrument. This questionnaire comprises 30 items related to three dimensions of the construct, including comprehensiveness, flexibility, and contemplation. Creativity was measured by the standard questionnaire of creativity developed by Rendsip [15]. The answers were quantified on Likert-type scales (1 = “Complete agreement”; 2 = “Agreement”; 3 = “Neutral”; 4 = “Disagreement”; and 5 = “Complete disagreement”). Reliability of the questionnaires was calculated using Cronbach’s alpha coefficient to be 0.73 and 0.77, respectively [15]. Content validity of the questionnaires was insured after introducing the opinion of experts.

Data Analysis

Data were summarized using descriptive statistical methods. Comparison of philosophical mentality between demographic groups was carried out using t-test and ANOVA (P < 0.05). Relationship between the philosophical mentality and its dimensions with creativity was explored using Pearson correlation coefficient. All statistical analyses were carried out using IBM SPSS Version 18 Software.

Results

Demographic Characteristics

Table 1 describes the demographic characteristics of the participant. Of total respondents half (38) were female, 71% held a Bachelor’s degree.
A Survey on Philosophical Mentality in Nursing Managers

Survey Findings

Table 2 shows the score mean and standard deviation of PM and its dimensions. While the mean PM score is 72.5, the highest and the lowest score means are related to comprehensiveness (80.10) and flexibility (63.50) dimensions, respectively. The score mean of philosophical mentality is 74 for men and 71.5 for women. In comprehensiveness and contemplation dimensions, male managers achieved a higher score than their female counterparts, whereas flexibility scored similar among the two genders. The highest mean score among managers was related to comprehensiveness, and the lowest was related to the flexibility. No significant difference in score mean of philosophical mentality was identified between the two genders. In addition, ANOVA identified no significant difference in philosophical mentality between nursing managers at different levels of education.

The mean score of the overall philosophical mentality was similar between the two genders. However, whereas male and female nursing managers scored equally on flexibility, males showed significantly higher scores in comprehensiveness and contemplation. The impact of gender on philosophical mentality is controversial in literature. For instance, while Essthaghyan observed higher scores in all dimensions of philosophical mentality in women as compared to men [17], Khaledan and Abkar [18] and Salehi [19] identified no corresponding significant difference between the two genders.

We also observed no significant difference in philosophical mentality scores between nursing managers at different level of education. This observation is congruent with the findings of a previous study [20]. However, there was a significant positive correlation between philosophical mentality and creativity of nursing managers, a result consistent with that of Jamshidi et al. [14].

Creativity and philosophical mentality are resources that stimulate creative thinking and the in-depth analysis of situations. Hence, developing creativity and philosophical mentality among nursing managers can improve the performance of management [2]. Regardless of gender and level of education, creativity and philosophical mentality enable managers, first to avoid self-centeredness in dealing with the organizational issues, and second to overcome the complicated problems related to both organization and patients by developing new strategies, and directing their efforts in the correct path [4]. Evidence shows that by possessing desirable philosophical mentality, nursing managers would be able to address the issues in line with the organization’s long-term goals and gain a wide range of options in making effective decisions [1].

Table 2  Score Mean and Standard Deviation of Philosophical Mentality in Nursing Managers

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Mean (Total)</th>
<th>Female Mean</th>
<th>Female SD</th>
<th>Male Mean</th>
<th>Male SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensiveness</td>
<td>80/1</td>
<td>78/1</td>
<td>8.8</td>
<td>82/4</td>
<td>6.58</td>
</tr>
<tr>
<td>Contemplation</td>
<td>74</td>
<td>72/6</td>
<td>6.2</td>
<td>75/2</td>
<td>7.1</td>
</tr>
<tr>
<td>Flexibility</td>
<td>63/5</td>
<td>63/4</td>
<td>6.5</td>
<td>63/5</td>
<td>7.8</td>
</tr>
<tr>
<td>Philosophical mentality</td>
<td>72/5</td>
<td>71/5</td>
<td>4.9</td>
<td>74</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Discussion

The present study aimed to explore whether there is a significant difference in philosophical mentality in nursing managers based on their gender and level of education, and to examine the relationship between nursing managers’ philosophical mentality and creativity. The highest score mean was received by comprehensiveness dimension, and the lowest mean score was related to flexibility dimension. These results are congruent with those obtained by Smith [16] and Akhondzade et al. [13].

Table 3  Correlations between Philosophical Mentality and its Dimensions and Creativity

<table>
<thead>
<tr>
<th></th>
<th>Comprehensiveness</th>
<th>Contemplation</th>
<th>Flexibility</th>
<th>Philosophical Mentality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>0.37*</td>
<td>0.42*</td>
<td>0.45*</td>
<td>0.57*</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level (two-tailed)
Study Limitations
A major limitation of the study was the low response rate to the questionnaires. Thus, caution should be exercised in generalization of the results. For this reason it is recommended that further research in philosophical mentality in nursing managers be conducted.

Conclusions
The results of our study showed that development of the philosophical mentality in nursing managers can positively influence their performance. No impact for gender and level of education of comprehensiveness, contemplation and flexibility of nursing managers was identified. This observation implies that philosophical and creative thinking can be equally achieved by any nursing manager regardless of their gender and level of education. The fact that there are positive significant correlations between philosophical mentality and its dimensions and creativity encourages hospital administrators to develop training programs on philosophical mentality to enhance creativity and thereby overall managerial performance in their nursing managers.

Competing Interests
The authors declare no competing interests.

Authors’ Contributions
AS was involved in the study design, data analysis, interpretation of the results, and preparing and revising the manuscript. MY determined the settings and coordinated the study procedures and contributed to preparation of the manuscript. MF contributed to the collection and analysis of the data. AS contributed to interpretation of the results. All authors read and approved the final manuscript.

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