On the Relationship between Emotional Intelligence and Demographical Variables in Nurses

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Abstract
Aims: Nursing profession is full of interactions especially regarding its affective dimension. Nurses need to have a better understanding and management of their own and their patients’ emotions so that they will be able to make the right decisions and offer the best health care services. The present study was an attempt to check the relationship between different components of emotional intelligence and some of the demographical variables in nurses.
Method: It was a cross-sectional descriptive-analytical study conducted in 2011 on 212 nurses (101 female and 111 male) in some selected military hospitals in Tehran, Iran. Bradberi and Greaves questionnaire was used in order to assess the components of emotional intelligence.
Results: The average emotional intelligence score was 79.4. Self-awareness and social awareness had the highest scores among the four components. From among all the demographic variables, only the level of education and salary showed a significant correlation with self-management.
Conclusion: The results showed that the majority of nurses enjoyed an average level of emotional intelligence.

Keywords: Emotional Intelligence, Demographic Variables, Nurses

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**Introduction**

Nursing, as one of the professions in the health care related jobs, is full of highly stressful situations [1]. Facing the patients expressing their pains, agitation, and depression due to their health conditions, long working hours, and physical exhaustion are among such situations [1,2]. In case nurses do not possess the necessary skills in dealing with such stressful situations, they will not be able to manage their emotions when in contact with patients especially in critical situations. As such, lack of control on emotions can lead to irrevocable negative effects on both nurses and patients [2].

The role of nursing staff is quite noticeable in offering high quality medical services and in interaction with patients [3,4]. Nurses’ paying attention to patients’ emotional needs and characteristics can result in patients’ higher satisfaction, peace, and recovery process [5]. As such, the management and understanding of one’s emotions is an important skill for the personnel working in health care systems because it can lead to more patient-centered cares and a better nurse-patient interaction, which will result in higher satisfaction on the part of patients [6].

Today, Emotional Intelligence and its capabilities has been the focus of most management and psychological discussions. It is also one of the individual characteristics emphasized on in the health care profession [7]. The phrase ‘emotional intelligence’ was first used by Goleman in 1990 as the ability to control one’s and others’ emotions and feelings, accept others’ point of view, and control one’s social and personal relations. Different sources hold different components for emotional intelligence (EI); however, Goleman himself revised the concept and stated that it can be summarized in four components: self-awareness, self-management, social awareness, and relationship management [8].

In other words, emotional intelligence includes two domains of abilities: one is the personal domain which includes self-awareness and self-management, and another domain includes the social skills as in social awareness and the relationship management [9].

Nurses with high emotional intelligence have a better self awareness and as a result are more skilled in their interpersonal relationships. By having a better empathy, they show more interest in connecting with patients and responding to their emotional needs [10]. That is where the role of emotional intelligence in having an efficient nurse-patient relationship demonstrates itself [11]. In fact, the nurses who are more aware of emotions have a more respectful attitude in their interactions with patients and can manage patients better by knowing their emotions and needs [11]. This skill is also known as one of the most important factors in improving cooperation among nurses themselves [12].

Those nurses with a lower level of self-management are less accepting of patients’ complaints and criticisms [13]. On the other hand, those with better self-management skills are more accepting of others’ views and demands and are after patients’ satisfaction [10]. High emotional intelligence can lead to more successful management, job satisfaction and organizational commitment [14-16].

Job stress and conflict is one of the major concerns in nursing. Those with a better ability to control emotions and manage stressful situations experience less stress, are in a better health condition [1,17], and have a better clinical performance [1].

Teaching the components of emotional intelligence can reduce the situational stress and anxiety in doctors and nurses in ICUs [18], which will help them cope with
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stressful situations much easier and have more efficient strategies in dealing with such situations. Therefore, one can conclude that emotional intelligence is important and valuable for all professions in health care systems [19]. Emotional intelligence is an acquired skill, which is an advantage. However, since the first step in planning and education is the awareness of the present state of affairs, investigating the level of emotional intelligence in medical staff in hospitals is of utmost importance. As such, the present study was done with the aim of examining the relationship between emotional intelligence and demographical variables in nurses in some selected military hospitals in Tehran.

Methods
It was a cross-sectional descriptive-analytic study carried out in 2011 with all nurses working in different departments of some selected military hospitals. The inclusion criteria for nurses were having at least AA degree, having at least a year of experience of working as a nurse in one of the departments in a hospital, and being willing to take part in the study. Participant selection was done using convenience sampling. After participants were briefed on the objectives of the research and ensured about the anonymity of the questionnaires and the confidentiality of the collected data, questionnaires were distributed among nurses. 212 questionnaires were returned.

The data collection apparatus consisted of a two part questionnaire with the first section asking for demographical information and the second section including items on emotional intelligence from Bradberi and Greaves [9]. The questionnaire on emotional intelligence is made of 28 items with a six-point Likert scale. It assesses total emotional intelligence as well as the above-mentioned four components. A higher score means higher intelligence. Its reliability (Cronbach alpha) was reported to be 0.83 with a convergent validity of 0.67 [20]. The collected data were analyzed using SPSS 17.

Results
The descriptive statistics showed that 77.9% of the participants were above 30 in age, with majority of them (31.1%) being between 30 and 35. More than 88 percent of them were married. 52.4% were male. 83.5% had a BA degree, and 47.2% had between 5 to 10 years of experience. There was a significant positive correlation between educational degree and self-management. Another factor showing a positive correlation with self-management was job financial incentive (see Table 1). There was also a trend in the relationship between self-management and nurses’ job title (nurse, head nurse, supervisor, etc.) and experience. A similar pattern of results was observed in the case of participants’ familiarity with emotional intelligence and social awareness. No relationship was found in the case of other demographical variables and emotional intelligence.

In the case of the relative frequency, self-awareness (Mean = 84.6; SD = 6.34), social awareness (Mean = 80.83; SD = 7.78), relationship management (Mean = 76.68; SD = 10.53), and self-management (Mean = 75.28; SD = 11.96) ranked first to fourth.

Table 2 is the crosstab of educational level and self-management in which participants were categorized into three levels of weak, average, and good according to their score in self-management component of emotional intelligence.
Table 1. The Relationship between Emotional Intelligence and Demographical Variables

<table>
<thead>
<tr>
<th>Demographical Variables</th>
<th>N</th>
<th>%</th>
<th>Self-awareness</th>
<th>Self-management</th>
<th>Social-awareness</th>
<th>Relationship management</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>age</td>
<td></td>
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<td></td>
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<tr>
<td>20-24</td>
<td>25</td>
<td>11.8</td>
<td>0.22</td>
<td>0.30</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
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<tr>
<td>25-29</td>
<td>24</td>
<td>11.3</td>
<td>0.22</td>
<td>0.30</td>
<td>0.77</td>
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<tr>
<td>29-34</td>
<td>66</td>
<td>31.1</td>
<td>df=72</td>
<td>df=116</td>
<td>df=60</td>
<td>df=10</td>
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<tr>
<td>35-39</td>
<td>49</td>
<td>23.1</td>
<td></td>
<td></td>
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<tr>
<td>Above 39</td>
<td>48</td>
<td>22.6</td>
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<tr>
<td>Male</td>
<td>111</td>
<td>52.4</td>
<td>0.24</td>
<td>0.32</td>
<td>0.35</td>
<td>0.57</td>
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<td>Female</td>
<td>101</td>
<td>47.6</td>
<td>df=18</td>
<td>df=29</td>
<td>df=15</td>
<td>df=25</td>
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<td>Degree</td>
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<tr>
<td>AA</td>
<td>24</td>
<td>11.3</td>
<td>0.84</td>
<td>*0.02</td>
<td>0.66</td>
<td>0.41</td>
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<tr>
<td>BA</td>
<td>177</td>
<td>83.5</td>
<td>df=36</td>
<td>df=72</td>
<td>df=58</td>
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<tr>
<td>MA</td>
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<td>Marital Status</td>
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<td>Married</td>
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<td>0.24</td>
<td>0.32</td>
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<td>Single</td>
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<td>df=29</td>
<td>df=15</td>
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<td>0</td>
<td>1</td>
<td>0.05</td>
<td>0.41</td>
<td>*0.03</td>
<td>0.09</td>
<td>0.21</td>
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<tr>
<td>50&gt;</td>
<td>9</td>
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<td>df=54</td>
<td>df=69</td>
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<td>50-100</td>
<td>26</td>
<td>12.3</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>100-150</td>
<td>56</td>
<td>26.4</td>
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Table 2. The Crosstab between Self-management and Education

<table>
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<tr>
<th>Self-management</th>
<th>Weak</th>
<th>%</th>
<th>N</th>
<th>Moderate</th>
<th>%</th>
<th>Strong</th>
<th>%</th>
<th>total</th>
<th>%</th>
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<tbody>
<tr>
<td>AA</td>
<td>2</td>
<td>2</td>
<td>N</td>
<td>12</td>
<td>50</td>
<td>10</td>
<td>41.7</td>
<td>24</td>
<td>100</td>
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<tr>
<td>BA</td>
<td>38</td>
<td>21.46</td>
<td>N</td>
<td>101</td>
<td>57.08</td>
<td>38</td>
<td>21.46</td>
<td>177</td>
<td>100</td>
</tr>
<tr>
<td>MA</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>81.8</td>
<td>2</td>
<td>18.2</td>
<td>11</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>18.87</td>
<td>122</td>
<td>57.55</td>
<td>50</td>
<td>23.58</td>
<td>212</td>
<td>100</td>
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</tr>
</tbody>
</table>

Discussion

In the present study, from among the components in emotional intelligence, the highest scores were obtained in self-awareness and social awareness while self-management stood lower with no difference between genders, which corresponds the findings in [21,22]. Montes [2] too did not find any significant difference between male and female participants in their emotional intelligence. However, Molaei [23] and Haghighatjoo [16] reported that female participants had a higher score in self-awareness, self-management, and social awareness. One the contrary, in Sum-miya et al.’s [24] study, all components of emotional intelligence especially self-awareness were found to be higher in male participants. The contradiction in findings of different studies could be due to differences in the data collection tools used in each study.

The type and the process of data collection can affect results. When a self-report data collection procedure is followed, participants may tend to report their characteristics more optimistically [25]. Moreover, the observed difference between the two genders can be due to natural differences between them. The fact that men and women are observed to be similar in the case of self-awareness but not relationship management can be due to the fact that girls, when role playing in their childhood games and hobbies, use emotional intelligence more often. In addition, since women demonstrate such characteristics like empathy, self-control, and emotional evaluation more than men, it is logical to expect them to enjoy a better self-management [9]. Banihashemian’s results [26] also confirm this. Also, Molaei [23] could observe a difference between genders only in social awareness and self-management. As such, it can be concluded
that when there is a difference observed between genders, it is in interpersonal relationships in which ladies have a better performance [27].

Regarding the scores participants obtained in each component, in the present study social awareness was found to be high, which corresponds the results in [28] and [22]. Relationship management was found to be low as in [28-30]. Self-management was found to be low in the present study, which is in line with [22] and [30]. Self-awareness was high as in [29]. However, self-awareness was reported to be high by [28], which do not match the results of the present study. This indicates that nurses’ skills and capabilities are at an acceptable level only in some of the components of emotional intelligence. As such, paying attention to all components of emotional intelligence in nurses is of utmost significance.

A significant relationship was observed between self-management and nurses’ educational level, which should be noted by managers in the nursing profession. Mirhashemi et al. [28], examining the relationship between emotional intelligence and job conflicts in nurses, found a significant relationship only in the case of self-management component. Morrison [31] also found a significant negative relationship between self-management and job conflicts in nurses. While senior students were observed to have a higher emotional intelligence than students at the initial stages [34], no relationship was found between educational level and emotional intelligence in other studies [32,33].

Regarding gender, marital status, and work experience no relationship was found with the components of emotional intelligence, which is in line with the results in [32]. Another study, checking the relationship between these variables and the total emotional intelligence score, found no significant relationship either [35].

Another variable showing a significant relationship with self-management was nurses’ job incentives. This variable has not been considered in other studies. It is suggested that this variable along with job position and familiarity with emotional intelligence be considered in future studies because these two later variables showed a trend in the present study. In the previous studies, too, a relationship has been reported between job position and emotional intelligence. Midlevel managers were observed to have a high level of EI while managers at higher levels showed a decline in EI, which could be due to the fact that high ranking managers are less in contact with their personnel [9].

**Conclusion**

Only self-management, as one of the four components in emotional intelligence, was found to have a significant relationship with nurses’ educational level and the financial incentives they received. It was found that self-awareness and social awareness were at an acceptable level in nurses while other skills need to be improved by planning both clinical and theoretical educational programs. In addition, encouraging nurses to pursue their education can help improve EI in them. It is suggested that similar studies be done in different contexts and the relationship between EI and other variables such as job stress, organizational commitment, position etc. be investigated.

**References**