



Emotional intelligence in nursing students

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Abstract

Introduction: Emotion is fundamental to nursing practice and Emotional Intelligence is considered as an important characteristic of nurses that can affect the quality of their work including clinical decision-making, critical thinking, evidence and knowledge use in practice, etc. The aim of this research was to assess and compare Emotional Intelligence between freshman and senior baccalaureate nursing students at Islamic Azad University of Yazd.

Methods: This descriptive, cross-sectional study was performed on a sample of 87 freshmen and senior baccalaureate nursing students at Islamic Azad University of Yazd. The data was collected, using a questionnaire. The questionnaire consisted of two parts; demographic information and the Baron Emotional Quotient Inventory (EQ-i). The data were analyzed through both descriptive and inferential statistics (t-test, and ANOVA).

Results: The mean score of emotional intelligence for the freshmen was 282.37 ± 27.93 and for the senior students 289.64 ± 21.13 . No significant difference was found between the freshmen and senior students' score patterns.

Conclusion: The findings showed that there was no statistically significant difference between the freshmen and senior students' scores. However, as emotional intelligence can have a significant role in what one does. So this quality should be given more importance in nursing education.

Keywords: Intelligence, Emotion, Emotional intelligence, Nursing students

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Please cite this paper as:
Barkhordari M, Rostambeygi
P. Emotional intelligence
in nursing students. *J. Adv
Med&Prof.* 2013;1(2):46-50.

Introduction

Excitement is a short, severe, and general reaction of an organism to an unexpected situation accompanied by a pleasant or unpleasant emotional state (1). It is an important part of a person's life and plays a significant role in our behavior and understanding of others' behavior (2). Humans need to coordinate their thoughts, feelings, and emotions in order to meet the requirements of a better and healthier life (3). Paying attention to excitement, using them in human relations, understanding our and others' excitement, controlling the momentary desires, sympathizing with others, and using excitement in thinking and understanding are some of the issues in the area of emotional intelligence (4). Emotional intelligence is an issue that can direct one's life and make him/her better adapt to a new situation (3). Features of emotional intelligence are completely

consistent with the nursing profession. The nurses' job requires them to gain the knowledge of self, interpersonal and intrapersonal skills, excitement management, and the extension of sympathy and patient-nurse therapeutic relationships. Nurses use the features of emotional intelligence in their interactions with colleagues and patients (5). A nurse, as the center of sanitary care, can preserve the balance and be productive if controls his/her excitement and shows mature behavior. The excitement of patients should be controlled. They may show tension, irritability, and imbalance, so a nurse should treat patients with patience, balance, and tact. He/she should try to counteract the negative excitement by positive thoughts. This needs a healthy interpersonal relationship. Sympathizing with patients and an appropriate understanding of them helps a nurse to accept them as humans (6). Emotional intelligence

plays an important role in education of supervisors to choose the best option. Emotional intelligence has a great effect on the quality of learning in students, clinical decision making, critical thinking, and application of the learned knowledge in practice. Excitement is a strong motivation for quality decision making as it leads the decision maker to develop and revise his/her work by reasoning and deduction and also critical thinking (7).

There have been few studies on emotional intelligence in nurses especially nursing students. The results of the studies on Emotional intelligence show that there has been a direct relationship between emotional intelligence and positive organizational performance including more appropriate teamwork, more effective interactions, more solutions for conflicts, and lower levels of tension (8, 9). Studied the emotional intelligence among the supervisors and found a positive relationship between the emotional intelligence and the level of performance and also a higher organizational commitment. The authors suggest that the inclusion of emotional intelligence in nursing education leads to an increased nursing performance in the possible future profession (9). Evans and Allen stated that although we need nurses who can control their excitement and understand the patients (10), emotional intelligence is not taken into account in nursing education. Freshwater and Stickley emphasize that emotional intelligence should be the center of educational programs and nursing instructors should try to increase the level of emotional intelligence in nursing students (11). In spite of the importance of emotional intelligence as a prerequisite for effective supervision, appropriate performance in nursing, quality results in clinical nursing, there are few studies about the emotional intelligence in nursing students. This paper aims to compare the level of emotional intelligence in first year students and last year students of nursing.

Methods

The participants of this study included the first year and the last year students of nursing at Yazd Islamic Azad University in 2010-2011. They were asked to fill out a questionnaire consisting of 2 parts. The first part dealt with the demographic traits of the participants and the second part was concerned with the emotional intelligence scale. This test examines the 5 components of emotional intelligence (adaptation, interpersonal, intrapersonal, stress management, and general mood). The choices were adjusted based on a five-degree Likert range and scoring was done from 5 to 1 (5 means completely agree and 1 means completely disagree) and in negative questions from 1 to 5 (1 means completely agree and 5 means completely

disagree). The overall score of each scale was equal to the sum of scores for each question and the overall score of the test was the sum of the scores of the 5 scales. This questionnaire was used by Baron in 1980. The reliability of this test, using even-odd method and Chronbach's alpha were calculated 0.88 and 0.93, respectively (12). After being given explanation about the questionnaire, the respondents filled it out in 20 minutes. The mean and standard deviation were calculated using SPSS14 software and a t-test was used to compare the means in different groups. The relationship between emotional intelligence and some personal traits was studied using ANOVA, t-test, and Pearson correlation coefficient.

Results

87 nursing students participated in this survey. 47 of them were first year students and the rest were last year students. The mean of their age was 21.59 ± 2.48 with a minimum of 18 and a maximum of 34. 75.9% of the respondents were married and 24.1% of them were single. Most of them (85.1%) had no work experience and 59.8% showed a high interest in their major. The mean of their average grade point was 16.48 ± 1.66 . The level of education of their fathers was mostly (40.2%) associate's degree and the level of education of their mothers, was mostly (32.2%) high school diploma.

Kolmogorov-smirnov test was used to verify the homogeneity of the experimental data.

Mean, standard deviation, and the range of acquisitive scores of emotional intelligence and the components in the two groups are shown in Table 1.

The mean of scores in the 2 groups was compared using t-test and no statistically significant difference was observed.

There was a statistically significant difference ($p=0.006$) between the mean of emotional intelligence scores of the respondents and the level of their fathers' education, i.e., those whose fathers had a higher education level gained higher scores compared with those with fathers with low education. No statistically significant difference was observed in other personal traits (Table 2).

According to the Pearson test, there was no statistically significant difference between age and average grade point and emotional intelligence (Table 3).

Discussion

Nurses are in charge of their relationships with the patients and excitement which accompany. Since the ability to understand and realize the excitement is more important than practical skills in nursing, having the emotional intelligence is crucial in this

Table 1. The comparison of two groups in acquisitive score of emotional intelligence

Index	Mean \pm SD	Range of acquisitive scores	t	P
General mood component				
First year	46.61 \pm 5.35	12-60	0.75	0.45
Last year	45.70 \pm 5.94			
Stress management component				
First year	37.93 \pm 7.57	12-60	-0.53	0.59
Last year	38.85 \pm 8.52			
Interpersonal component				
First year	78.44 \pm 11.05	18-90	0.85	0.39
Last year	76.67 \pm 7.49			
Intrapersonal component				
First year	109.11 \pm 12.11	30-150	-0.68	0.49
Last year	111.02 \pm 14.07			
Adaptability component				
First year	60.55 \pm 6.21	18-90	-1.11	0.26
Last year	62.22 \pm 7.71			
Overall score of emotional intelligence				
First year	332.66 \pm 30.68	90-450	-0.25	0.80
Last year	334 \pm 36.11			

profession (13). The main objective of this study was to compare emotional intelligence in the first year and last year students of nursing. The finding of this study showed that the mean of overall scores of emotional intelligence in the first year students was 332.66 \pm 30.68 and in the last year students was 334.48 \pm 36.11. The last year students had a higher score but this difference was not statistically significant. Except for general

mood and interpersonal components, the rest of the components showed higher values in the last year students but no statistically significant difference was observed. Similar results were obtained in a study on medical students at King University of London (14), but the results of another study on nursing students at McMaster University in Canada are completely different (11). The mean of emotional intelligence

Table 2. The comparison of emotional intelligence scores for some personal traits

Variable	Mean \pm SD	P
Work experience	Have	321.41 \pm 34.04
	Don't have	335.33 \pm 33.04
	Little	323.25 \pm 35.73
Interest in nursing profession	Intermediate	335.61 \pm 32.85
	A lot	333.01 \pm 33.65
	Elementary and Secondary school	307.57 \pm 36.62
Father's education	High school and High school diploma	346.23 \pm 24.04
	Associate's degree	340.25 \pm 34.11
	Bachelor's degree or higher	332.66 \pm 19.46
Mother's education	Illiterate or elementary	323.25 \pm 33.07
	Secondary school	346.61 \pm 33.00
	High school diploma	334.75 \pm 30.13
Marital status	Associate's degree or higher	331.00 \pm 28.74
	Single	334.37 \pm 29.77
	Married	330.71 \pm 42.84

Table 3. Correlation of emotional intelligence with average grade point & age

Variables	Mean± standard deviation	Correlation coefficient	P
emotional intelligence	333.49±33.15	0.165	0.21
Average	16.48±1.66		
emotional intelligence	333.49±33.15	-0.178	0.1
Age	21.59±2.84		

in nursing students at Tabriz University and students of medical sciences faculty at Esfahan University and Islamic Azad University of Khorasgan were 332.08 ± 39.08 and 313.6 ± 37.1 , respectively which are less than the results of the present study.

It has been shown in this survey that the average of emotional intelligence in these two groups of students is at a satisfactory level. The concept of emotional intelligence in the nursery education program can help the students better deal with education pressures and communicate with people, a matter which seems to be more important than their physical tasks.

Additionally, instructors in nursing schools should know that nursing students have different levels of emotional maturity and in this profession there is a lot of pressure and stress. They should also take this fact into account that the way to deal with emotions is attainable to a noticeable extent through learning. So in addition to the important role of training and educating the students in the professional basics and principles, the growth of emotional intelligence in the clinical environment has, especially, a protecting role. Freshwater and Stickley (11) state that if the instructors pay less or no attention to the emotional intelligence, they will fail in communicating with the students, a fact which is really important in human relations. The instructors should help grow the students' emotional intelligence, using methods like reflecting experiences, mentorship, modeling, growing self-consciousness, empathizing, communicating, and role playing, writing daily events and brief reports of tasks, and practicing the speaking skill. Smith (7) also points out that emotional intelligence affects the critical thinking and decision making. Given the fact that it has been reported in many surveys that there is an unstable tendency in nursing students to think critically, it can be inferred that one of the guidelines to increase the critical thinking, which is essential in nursing profession, is to increase the emotional intelligence. In the results of this survey, it was shown that there was a significantly positive correlation between the emotional intelligence and father's education ($p=0.006$). No significant correlation was found for other features. This is consistent with what Arabi, (15) found in their studies on medical students at the University of Medical Sciences in Rafsanjan.

Moreover, it was shown that there was no correlation between the emotional intelligence and gender, age, and interest in nursing. Namdar, (16) in their study on the nursing students in the University of Tabriz found similar results. In that survey, there was just a meaningful correlation between the emotional intelligence and economic and social satisfaction. But in the survey conducted by Samari and Tahmasbi (12), there was a meaningful correlation between the emotional intelligence and the academic achievement. It was not so for gender or any other trait. It seems that more surveys with larger samples are needed in order to investigate the correlation between the emotional intelligence and personal and social traits. Of course, it was found in this survey that there was a statistically significant negative correlation between the components of public mood and age ($p=0.005$). The components of public mood include happiness and optimism for which those who were younger scored higher. Some students did not answer some of the items of the questionnaire, due to our study limitations.

Conclusion

Generally, the lack of incentive or eagerness to answer the research questionnaires is one of the common problems in these kinds of survey. It should be noted that this study is a pioneer and other longitudinal studies are required to achieve better results. The size of our sample society was small and so we cannot generalize the results. In addition, this survey was a cross-sectional one, and evaluating changes in students' emotional intelligence grades from entering the university to graduation was not possible.

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