

## **Effect of Emotional Intelligence Training on the Communication Skills of Final-year Nursing Students**

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### **Abstract**

**Aim:** Effective communication has a key role in nursing profession. Furthermore, controlling emotions as a part of communication skills has an important role in initiating and maintaining healthy social communications. The meaning of emotional intelligence is also effected considerably by the importance of this aspect of social communications. The aim of this study was to determine the effect of emotional intelligence training on the communication skills of final-year nursing students of Islamic Azad University, Isfahan branch (Khorasgan) in 2014.

**Methods:** This quasi-experimental study was done with semester 7 and 8 undergraduate (nursing) 77 students. Data were collected by Bar-On Emotional Intelligence Test and Queen-Dom Communication Skills Test. Initially, the questionnaires were completed by the students; then the emotional intelligence workshop was held in 6 sessions' each took 45 minutes. After a month, again both questionnaires were completed by the students. Analysis of results was performed by descriptive statistics (frequency, mean, middle and standard deviation) and analytic statistics (Kolmogorov-Smirnov test, Wilcoxon and Spearman correlation coefficient) in the SPSS software (version 19).

**Findings:** Difference of communication skills' scores before and after the intervention had a significant level ( $p=0.001$ ), and the scores increased after the intervention significantly.

**Conclusion:** Emotional intelligence training has a positive impact on communication skills of nursing students. So holding emotional intelligence workshops in one of the university alternatively annually for nursing students is recommended.

**Keywords:** Workshop, Training, Emotional intelligence, Communication skills, Nursing students

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## **Introduction**

Nurses are a large professional group in the health system, who are responsible for 80% of healthcare in the developed countries [1], and spend more than two thirds of their time with the patients in interpersonal communication [2]. Effective communication is not only one of the most important needs of the patient, it is also the base of nursing and the key to the nursing profession [3]. What is meant by communication skills is a kind of behavior, which helps to express feelings and needs, and achieving interpersonal goals [4]. Communicating with the patient is a clinical skill, and using effective communication skills is a humane and inseparable part of the medical profession; it is important to nurses and doctors to support patients and their families. Therefore, an important aspect of nursing is communicating with the patients [5]. The aims of establishing good communication with the patients in medical sciences are treatment, health education, support, and data collection [6]. Establishing effective communication is a vital issue in nursing; however, usually nurses are lacking in skills to communicate with the patients, coworkers, and other healthcare professions [7]. Communication skills are a prerequisite for suitable psychological health for clinical nurses, and emotional intelligence can guarantee this matter [8]. Controlling emotions as a part of

communication skills has an important role in initiating and maintaining healthy social communications. The meaning of emotional intelligence is also effected considerably by the importance of this aspect of social communications [9]. The specifications of emotional intelligence are completely compatible with the nursing profession, and this job in turn relies on emotional intelligence to acquire the knowledge related to this profession, intrapersonal and interpersonal skills, and emotional management, and to enhance sympathy and the medical relationship between patient and health worker [10]. According to the results acquired from Mikolojczak studies, higher emotional intelligence resulted in better sympathy and communication with the patient [11]. It has been shown that emotional intelligence and issues such as individual social skills, satisfaction of interpersonal communication and cooperation have a positive correlation [12]. Even though around half of the educational course for nurses is carried out in clinical environments which can provide suitable conditions to improve professional skills in nursing students, there is still an important vacuity in nursing care; weakness of communication of nurses [13-16]. Considering the studies carried out in this field based on the lack of efficiency in communication skills in nursing students and nurses and because of the

close contact this group have with the patients, improving the communication skills of this group is necessary. Also because emotional intelligence is a factor that directly effects communication; therefore, by emphasizing its importance and linking these factors in the nursing profession, this study was carried out with the aim of determining the effect of emotional intelligence training on the communication skills of final-year nursing students in Azad Islamic University (Khorasgan branch) in 2014.

### **Methods**

This is a semi-experimental study, which was carried out in two phases, before and after intervention in the 7th and 8th semester female nursing students in Azad Islamic University (Khorasgan branch). The criteria for entering the study were being the 7th or 8th semester of bachelor of sciences in nursing and having complete consent to participate in the study. Sampling was done by convenience sampling in which 100 participants from the 7th and 8th semester students were chosen. From this amount, 77 people participated willingly and with complete consent. Data were collected through three questionnaires. The first questionnaire asked about the demographic data such as age and marital status. Queen-Dom communication skills questionnaire has 34 phrases in which the participants have to

determine the correlation of their current situation according to the questionnaire on LIKERT scale with 5 grades from 1 (never) to 5 (always). Accessory communication skills are analyzed in this index, which include the listening skill, the skill to receive and send messages, insight into communication, emotional control, and assertion communication. So the probable range of score for each person is between 34 and 170. The validity and reliability of this test has been analyzed by Masoud Hossein Chari and Mohammad Mehdi Fadakar [17] in a study titled “the effect of university on communication skills by comparing students and school pupils”. Analysis of the reliability of the test using the Cronbach’s alpha method reported the overall reliability of the test at 0.69, which is acceptable. In the current study, the reliability coefficient for the communication skills’ questionnaire equaled 0.87 using the Cronbach’s alpha method. The third questionnaire used was the Bar-On emotional intelligence questionnaire, which has 90 questions with a 5 grade index. The total score for each domain was equal to each of the questions in that domain, and the total score for the test was equal to the sum of the 15 domains. The maximum score for the test was 450, and the minimum was 90; for each domain, the maximum score was 30, and the minimum was 6. This tool was normalized in

Isfahan by Samuei et al. [18]. In the current study, the reliability coefficient for emotional intelligence using the Cronbach's alpha method was equal to 0.97.

After acquiring written permission from the university and considering the ethical principles, the subjects were informed and introduced to the workshop. The emotional intelligence workshop was organized in six 45 minute long sessions. During this workshop, necessary training in relation to familiarizing of the subjects with history of the emotional intelligence and its 15 components was given to the students along with related practices in order to support them. The training was held with the use of teaching aids equipment as video-projector, computer, power-point, way of training speech-feedback, and group discussion. Data collection was done in two stages (before intervening and one month later) using the mentioned questionnaires. The collected data were entered into a statistics

software. To analyze the data, firstly, the normal distribution of the data was examined using the Kolmogorov-Smirnov's test. The quantified variants were reported as mean, median and standard deviation, and the data were analyzed using the Spearman correlation coefficient, and Wilcoxon test, the SPSS software (version 19) and P-value <0.05 was considered as the statistically significant value.

### **Results**

75.3% of the subjects were in the 21-23 age group and this was the largest age group, 23.4% were in the 24-26 age group, and 1.3% were in the 27-29 age group, which was the smallest age group. 59.7% of the participants were single and 40.3% were married.

The Spearman's correlation coefficient showed a statistically significant relationship between emotional intelligence and communication skills before and after the intervention with a p-value of <0.001 (Table 1).

**Table 1:** Spearman's correlation coefficient between emotional intelligence and communication skills before and after the intervention

	<b>Spearman's correlation coefficient</b>	<b>P-value</b>	<b>Sample size</b>
Before intervention	0.752	P< 0.001	77
After intervention	0.478	P< 0.001	77

Before the educational intervention, as shown in Table 2, the mean score for communication skills was equal to 107.6104, in which the message understanding component with a

score of 28.8961 and a standard deviation of 5.67910 had the highest score, and the insight component with a score of 15.3506 and a standard deviation of 2.90538 had the lowest

score. The mean, standard deviation, median and maximum and minimum scores for communication skills in different aspects are presented in Table 2.

**Table 2:** Scores of communication skills’ components before the intervention

	Mean	Standard deviation	Median	Minimum	Maximum
<b>Listening</b>	22.5844	2.93505	23	14	28
<b>Controlling emotions</b>	24.4805	5.36953	26	14	33
<b>Message understanding</b>	28.8961	5.67910	30	15	39
<b>Insight</b>	15.3506	2.90538	16	10	22
<b>Assertion</b>	16.2987	2.27148	16	10	23
<b>Communication skills</b>	107.6104	15.45720	112	77	131

After the educational intervention, the results showed that the average score for communication skills was equal to 153.0779 in which the message understanding component had a score of 40.5325 and a standard deviation of 2.34288, which was the highest score. The lowest score belonged to the assertion component with a score of 22.1169 and a standard deviation of 1.63815 (Table 3). The results from Wilcoxon’s test showed that there is a statistically significant relationship between the components of communication

skills before and after the intervention with a p-value of <0.001 (Table 4). The median score for communication skills before the intervention was 112 with a standard deviation of 15.45720, and after the interference, it reached 153 with a standard deviation of 5.41384; with a 41 unit growth in the score, the standard deviation was also limited. According to the Wilcoxon’s test results and a p-value of 0.001, a statistically significant difference was observed between the scores before and after the intervention (Table 5).

**Table 3:** Scores of communication skills components after the intervention

	Mean	Standard deviation	Median	Minimum	Maximum
<b>Listening</b>	31.9091	2.05952	32	23	35
<b>Controlling emotions</b>	35.8831	2.40052	36	27	40
<b>Message understanding</b>	40.5325	2.34288	41	35	45
<b>Insight</b>	22.6364	1.63763	23	18	25
<b>Assertion</b>	22.1169	1.63815	22	18	25
<b>Communication skills</b>	153.0779	5.41384	153	136	165

**Tables 4:** Comparing the communication skills’ components before and after the intervention

Wilcoxon’s test	Median before intervention	Median after intervention	P-value
Listening	23	32	P< 0.001
Controlling emotions	26	36	P< 0.001
Message understanding	30	41	P< 0.001
Insight	16	23	P< 0.001
Assertion	16	22	P< 0.001

**Table 5:** Comparing the scores of communication skills before and after the intervention

Wilcoxon's test	Median	P-value
Before intervention	112	0.001
After intervention	153	

## Discussion

The aim of this study is to determine the effect of emotional intelligence training on the communication skills of final-year nursing students in Azad Islamic University (Khorasgan branch) in 2014. The results showed that there is a direct relationship between the two variants, emotional intelligence and communication skills before and after the intervention, and these results correlate with those of the studies, which confirm the relationship between these two variables [19, 20, 21].

The data given in Table 2 show that the mean of communication skills in students before the intervention (107.6104) was at a moderate level; these results coincide with those from the studies, which reported moderate communication skills [22, 23]. Javaher et al. in a study amongst 330 nursing students titled "Study of communication skills in nursing students and its association with demographic characteristics" showed that students were at a medium level in the domains such as conscious starts, verbal and non-verbal skills, internal and external coordination, and respecting the client. Also Baghiyani Moghadam et al. researching on the "communication skills of

department heads in Shahid Sadoughi University of Medical Sciences", found that the heads of departments in this university (44 people) had a medium level of communication skills. Message understanding and insight from the different aspects of communication skills had the highest and lowest scores, respectively, before the educational intervention; this finding correlates with the results of Chari et al. [17] and Amraei et al. [20].

According to Table 3, the mean of communication skills in the students after the intervention (153.0779) increased; this is consistent with the findings of Amraei et al. [20]. Message understanding and assertion were, respectively, the highest and lowest scoring components in communication skills, similar to the result of Yousefi et al.'s study [19].

In the present research, the message understanding aspect had the highest score both before and after the intervention, and the insight component was the lowest before but it was replaced by assertion after the intervention. Although assertion achieved a higher score after the intervention than before, the educational intervention affected insight more than assertion.

As we can see from the research results the

score of communication skills after the training intervention increased, and emotional intelligence training had a positive effect. Therefore, education intervention caused an increase in the communication skills of nursing students. These results correlate with the results from Fletcher et al.'s study [24]. Fletcher et al. carried out an interventional study with a control group and a test group, entitled "A pilot study assessing emotional intelligence training and communication skills with 3rd year medical students". This study was carried out on 86 medical students in Liverpool. The most important results showed that in the test group the average scores were higher than in the control group.

The limitations of this study are the obligation to rely on the data reported from the subjects themselves on their communication skills and emotional intelligence, and using only subjects from one university. Therefore, caution should be taken in using and generalizing the results. On the other hand, when considering the particular response bias, the students having low emotional intelligence and communication skills were not eager to take part in the study, and this is part of the study's limitations.

### **Conclusion**

The results of this study showed that the emotional intelligence training program can increase the nursing students' communication

skills. Therefore, it can be used by educational organizers and be placed in the education system for students. It can further be used for nursing staff in the form of workshops in hospitals and also by researchers interested in the effect of emotional intelligence in professional achievements.

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### **References**

- [1] Hoyt P. Problem solving for better health nursing: A working approach to the development and dissemination of applied research in developing countries. *Appl Nurs Res* 2006; 19(2): 110-2.
- [2] Berry JA. Nurse practitioner/ patient communication styles in clinical practice. *J Nurse Pract* 2009; 5(7): 508-15.
- [3] Sadeghi Shermeh M, Amiri H, Karimi Zarchi A, Bahari F, Binesh A. Effectiveness of solution-focused communication training [SFCT] in nurses' communication skills. *Ir J Military Medicine* 2013; 14(4): 279-86.
- [4] Mirzaee O, Vaghei S, Koushan M. The effect of communicative skills on the perceived stress of nursing students. *Journal of Sabzevar University of Medical*

- Sciences 2010; 17(2): 88-95. [In Persian]
- [5] Nasiripour AA, Saeidzadeh ZS, Sabahi Beedgoli M. Correlation between nurse's communication skills and inpatient service quality in the hospitals of Kashan University of medical sciences. *JHPM* 2012; 1(1) :45-54. [In Persian]
- [6] Salimi M, Peyman H, Sadeghifar J, Tolui Rakhshan SH, Alizadeh M, Yamani N. Assessment of interpersonal communication skills and associated factors among students of allied medicine school in Tehran University of Medical Sciences. *J Med Educ* 2012; 12(12): 895-902. [In Persian]
- [7] Mullan BA, Kothe EJ. Evaluating a nursing communication skills training course: the relationships between self-rated ability, satisfaction, and actual performance. *Nurse Educ Pract* 2010; 10: 374-8.
- [8] Habibpour Z, Khorami Markani A. Emotional intelligence and its application in nursing. *Journal of Nursing and Midwifery Urmia University of Medical Sciences* 2005; 3(4): 156-66. [In Persian]
- [9] Razaghi A, Hosseinchari M. Investigating the relationship between identity status and communication skills in tribal high school students. *Research Journal of Education Systems* 2011; 9: 27-47. [In Persian]
- [10] Barkhordari M, Rostambeygi P. Emotional intelligence in nursing students. *J Adv Med Educ Prof* 2013; 1(2): 46-50. [In Persian]
- [11] Mikolajczak M, Menil C, Luminet O. Explaining the protective effect of trait emotional intelligence regarding occupational stress: Exploration of emotional labor processes. *J Res Pers* 2007; 41: 1107-17.
- [12] Stratton TD, Elam CL, Murphy-Spencer AE, Quinlivan SL. Emotional intelligence and clinical skills: preliminary results from a comprehensive clinical performance examination. *Acad Med* 2005; 80(10 Suppl): S34-7.
- [13] Anoosheh M, Zarkhah S, Faghihzadeh S, Vaismoradi M. Nurse-patient communication barriers in Iranian nursing. *Int Nurs Rev* 2009; 56(2): 243-9. [In Persian]
- [14] Joolae S, Hajibabae F, Jafarjalali E, Bahrani N. Assessment of patient satisfaction from nursing care in hospitals of Iran University of Medical Sciences. *Hayat* 2010; 17(1): 35-44. [In Persian]
- [15] Hajinezhad ME, Azodi P, Rafii F, Ramezani N, Tarighat M. Perspective of patients and nurses on caring behaviors of nurses. *Hayat* 2011; 17(4): 36-45. [In Persian]
- [16] Farmahini Farhani M, Kashaninia Z, Hosseini MA, Biglarian A. Impact of training communication skills to nurses on



- patient satisfaction with nurse-patient relationship. *J Nurs Res* 2007; 1(3): 47-54. [In Persian]
- [17] Hossinchari M, Fadakar MM. The effect of university on communication skills by comparing students and school pupils. *Behavioral Scholar Journal of Shahed University* 2005; 12(15): 21-32. [In Persian]
- [18] Salehi SH, Taleghani F, Afghari P, Moghadasi MH. Academic achievement and emotional intelligence among undergraduate nursing students of Isfahan University of Medical Sciences. *J Med Educ* 2012; 12(8): 629-37. [In Persian]
- [19] Yousefi F. The relationship between emotional intelligence and communication skills in university students. *Journal of Iranian Psychologists* 2006; 3(9): 5-13. [In Persian]
- [20] Amraei M, Ashrafi Rizi H, Papi A, Bahrami S, Samuei R. The relationship between emotional intelligence and communication skills of librarians in Isfahan University and Isfahan University of Medical Sciences. *Health Information Management* 2012; 8(5): 662-72. [In Persian]
- [21] Benson G, Ploeg J, Brown B. A cross-sectional study of emotional intelligence in baccalaureate nursing students. *Nurse Educ Today* 2010; 30: 49-53.
- [22] Javaher AA, Khaghanizadeh M, Ebadi A. Study of communication skills in nursing students and its association with demographic characteristics. *J Med Educ* 2014; 14(1): 23-31. [In Persian]
- [23] Baghiyani Moghadam MH, Momayyezi M, Rahimdel T. Communication skills of department heads in Shahid Sadoughi University of Medical Sciences. *J Med Educ* 2012; 12(6): 448-57. [In Persian]
- [24] Fletcher I, Leadbetter P, Curran A, O'Sullivan H. A pilot study assessing emotional intelligence training and communication skills with 3rd year medical students. *Patient Educ Couns* 2009; 76: 376-9.