# **Original Article**

# Correlation of Emotional Intelligence with Evaluation Score of the Faculty Members of Kermanshah University of Medical Sciences in 2014

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# Abstract

**Introduction:** Emotional intelligence is a key element that determines the achievement and efficiency of a person so that 80% of the achievement is dependent on it. The current research was carried out to determine the correlation between emotional intelligence and evaluation score of the faculty members of Kermanshah University of Medical Sciences (KUMS) in 2014.

**Methods:** In this analytical-descriptive and cross-sectional study, 150 faculty members of KUMS were selected as study sample through convenience sampling technique in 2014. The instruments for data collection included demographic information questionnaire, the mean scores of the faculty members' evaluation reported by the students and Shrink emotional intelligence questionnaire. The collected data were fed into SPSS-21 software and analyzed by descriptive statistics, Pearson correlation coefficient, independent sample t-test and one-way ANOVA. P<0.05 was considered significant.

**Results:** Emotional intelligence was reported to be good in 133 (88.7%) faculty members, moderate in 15 (10%) faculty members and very good in 2 (1.3%) faculty members. There was a significantly positive correlation between emotional intelligence and the faculty members' evaluation score reported by the students (p=0.047, r=0.28). No significant correlation, however, was reported between emotional intelligence and work experience, age, marital status and gender. The faculty members of the schools of health and pharmacy obtained the maximum and minimum levels of emotional intelligence, respectively (p=0.02).

**Conclusion:** The emotional intelligence of the faculty members of KUMS was an acceptable level and was significantly correlated with their evaluation score.

Keywords: Emotional intelligence, Faculty members, Evaluation

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# Introduction

Intellectual intelligence was considered to be the main factor for the people's development until several years ago, and various methods were introduced to measure it. Later, some people were observed to have high intellectual intelligence and were more successful in schooling but not in their life. The observation of such people attracted the attention of researchers towards emotional intelligence and made them argue that although intellectual intelligence is required for people to succeed, it is not sufficient, and there are other significant factors involved in it. They believe that 80% of the people's achievement is associated with emotional intelligence and 20% is related to intellectual intelligence (1).

Thorndike was the first scholar who named the emotional intelligence skills. He believed social intelligence is indicative of the ability of the people who have adequate skills to deal with the people well (2). The term emotional intelligence was first proposed by Salovey and Mayer (1990) as a kind of social intelligence. They accounted for emotional intelligence as the ability to recognize the meaning of emotions and relationships that enables people to solve their problems. They later introduced attention, expression and emotion regulation as the major dimensions of emotional intelligence (3).

Goleman (1995) proposed emotional intelligence and believed that emotional understanding, emotional perception and emotional control are key factors for people to obtain health and achievement in life (4). The findings of various studies about emotional intelligence have indicated that emotional intelligence is associated with job satisfaction and organizational commitment (5), increased job satisfaction (6), improved performance of managers (7), the teachers' reduced job stress (8), increased job involvement (9), increased self-efficiency (10) and increased job performance (11). Further, studies carried out on emotional intelligence in the faculty members and teachers have shown that emotional intelligence is correlated with efficiency (12) and academic performance of the faculty members (13) and efficiency of faculties (14).

Amani et al. (15) reported no significant relation- ship between emotional intelligence and academic literacy and argued that academic literacy is the foundation of the knowledge and development in every society and the main support for higher education, which is necessarily accompanied by high emotional literacy, a key element in the success of a person in life. Also, emotional intelligence, unlike other types of intelligence, has the potential to be taught and promoted (4). Hassanmoradi et al. (2013) showed a significant difference between emotional intelligence of the staff and faculty members of the faculty of management and humanities at Tehran Islamic Azad University and organizational position, gender and work experience. The emotional intelligence of the faculty members, the women and those with over 20 years work experience was higher than the that of the personnel, the men and other groups, respectively. However, no significance difference was reported between the emotional intelligence of the personnel and faculty members, and their marital status and faculty (16). Eidi (2007) reported a significant correlation between emotional intelligence and its components and efficiency of the faculties of sport education (14).

Universities and higher education institutions play a major role in the development of the society. University is the major reference for training the students, who are the main elements of the economic, scientific and cultural cycle. The faculty members of the university, who have the highest level of relationship with students, can play a pivotal role in students' scientific development to the point that the more efficient are the faculty members of a university, the more knowledgeable are the students. Moreover, if the emotional intelligence of the faculty members is high, on the one hand, they will experience higher achievement, better job performance and higher efficiency in their individual domain, and on the other hand, the university and community will develop, as a result. Hence, the present study was aimed to determine the correlation between the emotional intelligence of the faculty members of Kermanshah University of Medical Science (KUMS) and their evaluation score.

# **Methods**

The study population included 152 faculty members of KUMS in 2014 that were selected via convenience sampling technique. The study sample, calculated by Morgan table, comprised of 152 faculty members out of a total of 250 faculty members. To this end, 200 questionnaires were given to the faculty members of different faculties to complete. A number of questionnaires were not returned and some of them were incomplete and discarded. Finally, the information of 150 faculty members was gathered and analyzed.

To collect the required data, two questionnaires and the evaluation score of the faculty members reported by the students were used. The first questionnaire was about demographic information of the faculty members, including gender, age and education level. The second questionnaire was Shrink emotional intelligence questionnaire which included 33 items based on Likert scale. The minimum and maximum scores were 33 and 165, respectively. The emotional intelligence scores were classified as follows: 132-165=very good, 99-131=good, 66-98=moderate and 33-65=poor. Mollaei et al reported the reliability coefficient of 83.2% for this questionnaire, calculated by Cronbach's alpha (17). The obtained data were analyzed by SPSS-21 software using descriptive statistics, Pearson correlation coefficient, independent t-test, one-way ANOVA and LSD post-hoc tests. The statistical significance was set as p<0.05.

The evaluation score of the faculty members is a score that is reported by the students at the end of every semester and is based on Likert scale. It evaluates the faculty members in terms of 1) dominance over the materials, 2) the teacher's academic ability to answer the questions, 3) introducing and making use of new resources, 4) presenting the course objectives, 5) monitoring and calling the roll, 6) compatibility of the course content with the presented objectives, 7) demonstration of the course materials, 8) motivating the students, 9) evaluating the academic achievement, 10) ontime class attendance, 11) considering the time of class, 12) relationship with students, 13) presentation style, 14) introducing new resources, 15) making use of teaching aids and 16) classroom management. Generally, the scores are calculated in three domains of personal characteristics, teaching method and academic ability of the teacher and the total mean is obtained. In this study, the latest evaluation score of each teacher was used.

#### Results

From all the faculty members, 99 (66%) faculty members were male and 113 (75.3%) of the faculty members were married. The mean age and mean work experience of the faculty members were  $41.34 \pm 8.27$  and  $13.19 \pm 8.79$ years, respectively. In terms of education, 123 (82%) faculty members had Ph.D degree and 27 (18%) had master degree. 50 faculty members belonged to the clinical departments of medical school, 36 (24%) of them belonged to the basic departments of medical school and the rest were the members of other faculties. The mean emotional intelligence of the faculty members of KUMS was  $112.7 \pm 9.81$ , which was at a good level (Table 1). From among the faculty members, 15 (10%) had moderate emotional intelligence, 133 (88.7%) had good emotional intelligence and 2 (1.3%) enjoyed very good emotional intelligence.

Moreover, the results of data analysis showed a significantly positive correlation between emotional

intelligence and the mean score of the faculty members' evaluation (p=0.047, r=0.28). The mean emotional intelligence of the females (113.64  $\pm$  10.7) was higher than that of the males (112.68  $\pm$  9), but the difference was not statistically significant (p=0.57). The mean emotional intelligence of the married faculty members (112.95  $\pm$  9.41) was similar to that of the single ones (112.81  $\pm$  10.38) (p=0.94). Also, there was no significant correlation between emotional intelligence and work experience (p=0.96, r=-0.04) and age (p=0.61, r=0.04). Furthermore, the results of the comparison of emotional intelligence revealed a significant difference between faculties (p=0.02) (Tables 2 and 3).

The maximum levels of emotional intelligence were reported for the faculties of Health (116.53  $\pm$  9.17), Paramedicine (116.18  $\pm$  8.91) and Basic medical sciences division (115.88  $\pm$  8.57), respectively. The minimum level of emotional intelligence, however, was reported for the school of Pharmacy (107.28  $\pm$  9.14) (Table 3).

Table 1. Mean and standard deviation, and minimum and maximum scores of emotional intelligence and its subscales

Variable	MD ± SD	Maximum	Minimum
Total emotional intelligence	$112.7 \pm 9.81$	84	132
Self-motivation	$19.68 \pm 2.11$	15	25
Self-awareness	$29.38 \pm 2.57$	21	36
Self-control	$24.06 \pm 4.32$	32	8
Social awareness	$20.76 \pm 3.21$	28	12
Social skills	$18.80 \pm 3.23$	25	9

Table 2. Mean and standard deviation of emotional intelligence in various faculties of KUMS

Faculty	MD±SD	Number	
Health	$116.53 \pm 9.17$	13	
Paramedicine	$116.18 \pm 8.91$	11	
<b>Basic medical sciences</b>	$115.88 \pm 8.57$	30	
Medical clinical sciences	$111.55 \pm 10.41$	50	
Nursing & Midwifery	$110.55 \pm 6.43$	19	
Dentistry	109.84 ±13.11	13	
Pharmacy	$107.28 \pm 9.14$	14	

Table 3. Comparison of emotional intelligence among the faculty members of different faculties

	Sum square	df	Mean square	Р
Between groups	1348/97	6	224.82	
Within groups	13008.52	144	90.94	0.02
Total	14357.50	149		

# Discussion

The findings of the current study showed a good level of emotional intelligence for the faculty members of KUMS. Also, there was a significantly positive correlation between the faculty members' emotional intelligence and their evaluation score reported by students; the more the teacher's emotional intelligence was, the higher academic ability and better personal characteristics they had. This finding is in line with the results of the study carried out by Maleki & Syedkalan. (12), in which they reported a significantly positive correlation between emotional intelligence and its components and efficacy of the faculty members. Further, the results of our study are in agreement with the findings of the study by Nouraei et al. (13), in which a significant relationship was reported between self-awareness and self-management (the components of emotional intelligence based on Goleman questionnaire) of the faculty members and their academic performance.

The results of statistical analysis also revealed that the mean emotional intelligence of the females was higher than that of the males; however, no significant difference was reported between them. Various arguments have been presented for the difference between the female and male emotional intelligence. In their study, Hasanmoradi et al. (16) showed that the emotional intelligence of women is higher than that of the men, indicating a significant difference between them. However, Safari & Abedi (18) and Haghighatjoo et al. (6) reported no significant correlation between gender and emotional intelligence.

Moreover, the results of this study showed no correlation between emotional intelligence and demographic variables, including age, work experience and education. This shows that emotional intelligence is not influenced by increased education, work experience and age. These results confirm the findings of Safari & Abedi's study where they investigated the relationship between demographic variables, including age, education, work experience and gender and emotional intelligence and cognitive intelligence of the managers (18). The findings of the present study are also compatible with the results of the study conducted by Amani et al. in which no significant correlation was reported between emotional intelligence and its components and academic knowledge (15).

The results of the comparison between faculties indicated that the maximum level of emotional intelligence was reported for the Health, Paramedicine faculties and Basic medical sciences division, with little difference but no statistically significant. However, the difference between these faculties and other faculties was statistically significant. It can be argued that the faculty members of different faculties are the successful people of the community. Since high emotional intelligence is one of the characteristics of the successful people, the faculty members of various faculties are expected to have similar emotional intelligence, and the difference reported between some faculties can be attributed to the conditions and content of the courses, physical environment and work pressure. During the completion of the questionnaire, the clinical faculty members were less willing to participate in the study, whereas, non-clinical faculty members were willing to participate in the study and were even eager to know about their emotional intelligence score.

# Conclusion

The faculty members of Kermanshah University of Medical Sciences enjoyed a good level of emotional intelligence. However, a number of faculty members had moderate or even low emotional intelligence. Also, emotional intelligence is correlated with the academic performance and academic knowledge of the faculty members and is a component that can be taught. Thus, various workshops are suggested to be held in university in order to promote the emotional intelligence of the faculty members.

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