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Investigating the relationship between emotional intelligence and self-esteem with educational performance in paramedical students

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ABSTRACT

Background: Emotional intelligence means the "ability" of a person to express, recognize, and manage "emotions" in themselves and others. Self-confidence means seeing oneself as capable, competent, lovable, and unique. Emotional intelligence can be effective in advancing goals for a person. Academic performance is one of the important indicators in student evaluation, which can also measure the extent to which a person has achieved the goal of acquiring knowledge. The aim of this study was to investigate the emotional intelligence of paramedical students of Hamedan University of Medical Sciences and its relationship with their academic performance.
Methods: The present study is a cross-sectional study of correlation. And it was done on 300 students of the School of Medical Sciences, who have passed at least two semesters of their studies and were selected by random sampling. In this study, students' demographic information was collected and Shering's standard questionnaire was used for emotional intelligence, Rosenberg's self-esteem questionnaire was used.
Results: There was a positive and significant relationship between students' academic performance and self-esteem ($p \geq 0.01$). The results of the study also showed that there was no significant relationship between students' academic performance and emotional intelligence ($p = 0.01$).
Conclusion: The results of our research showed that among the predicted variables, only self-esteem was able to predict academic performance in students. Self-esteem is the best predictor of academic performance.

Relación entre la inteligencia emocional y la autoestima con el desempeño educativo en estudiantes de paramedicina

RESUMEN

Antecedentes: La inteligencia emocional significa la "capacidad" de una persona para expresar, reconocer y manejar las "emociones" en sí misma y en los demás. La confianza en uno mismo significa verse a uno mismo como capaz, competente, adorable y único. El rendimiento académico es uno de los indicadores importantes en la evaluación de los estudiantes. El objetivo de este estudio fue investigar la relación entre la inteligencia emocional y la confianza en sí mismo con el rendimiento académico de los estudiantes de la Facultad de Ciencias Paramédicas de la Universidad de Ciencias Médicas de Hamadan.
Métodos: El presente estudio es un estudio transversal de correlación. Y se realizó sobre 300 estudiantes de la Facultad de Ciencias Médicas, que hayan aprobado al menos dos semestres de sus estudios y fueron seleccionados por muestreo aleatorio. En este estudio se recolectó información demográfica de los estudiantes y se utilizó el cuestionario estándar de Shering para inteligencia emocional, se utilizó el cuestionario de autoestima de Rosenberg.
Resultados: Hubo una relación positiva y significativa entre el rendimiento académico de los estudiantes y la autoestima ($p \geq 0.01$). Los resultados del estudio también mostraron que no existía una relación significativa entre el rendimiento académico de los estudiantes y la inteligencia emocional ($p = 0,01$).

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Conclusión: Los resultados de nuestra investigación mostraron que entre las variables predichas, solo la autoestima fue capaz de predecir el rendimiento académico en los estudiantes. La autoestima es el mejor predictor del rendimiento académico.

Introduction

One of the most influential factors in the development and expansion of countries is to achieve productivity and improve the quality of the educational system. One of the main tasks of educational systems is to prepare students to gain science, knowledge, job and cognitive skills for entering the community and accuracy in their research and cultural education.[1] Among the concerns of professors, educational officials and students 'families, as well as the fundamental goals of educational programs, academic achievement is academic achievement requires the use of students' internal and external abilities to achieve higher education goals.[2] Educational activities are one of the most important things to increase mental well-being. One of the educational activities that psychologists emphasize is emotional intelligence education.[3] university is not the only place where cognitive skills are taught. In the university environment, emotional skills also develop and increase people's adaptability and finally improve the psychological skills of the person. In this regard, a study stated that intelligence is often developed and can be expanded using education, planning, and therapy, and provide the context for academic growth for individuals.[4]

Emotional intelligence is the latest and latest change in understanding the relationship between rational and excitement that first entered psychological literature by Myrosalvi. They defined emotional intelligence as the ability to receive and identify the excitement and adjust it to grow beliefs. Today, one of the new approaches used in education and communication is to rely on psychological methods. This effective method can support students in specialized activities. In this regard, intelligence can be an appropriate basis for building a favorable environment for learning and communication so that students can freely estimate your information needs and expectations for knowledge in academic environments.[4–6]

Another variable that affects academic performance is self-esteem. From a scientific perspective, self-esteem is an abstract construct like a pronoun, an entity that people cannot see, But you can feel it in interpersonal relationships. Having a valuable sense of self-confidence in strong self-esteem as a vital capital for all human beings, especially students with less social skills, is one of the best factors of growth and creativity.[6,7] Self-esteem involves one's sense of self and the value they give.[6] The categories of formation and influence and growth of people's self-esteem from early childhood to the moment of death are among the most important psychological and social issues.[8] Also, with the increase of self-esteem, a feeling of empowerment and value is created in a person, and it leads to positive changes such as academic progress, increased effort for success, high self-esteem, high effort, and the desire to enjoy better health appear in him.[6] Since self-esteem can have a positive impact on students' academic process and promote mental health and ultimately their academic achievement, the use of self-esteem strengthening methods will play an important role in their academic achievement.[9] In the study of Hwang et al. (2016) there was a mutual relationship between self-esteem and academic achievement, so that the impact of academic performance on self-esteem was more efficient than the effect of self-efficacy beliefs on academic achievement.[10] It was found that people with self-efficacy and self-esteem have higher academic performance.[11] In a study of Qamarkiani and Kakavand (2013), they found that emotional intelligence education is significantly effective in enhancing academic achievement.[12] Alizadeh et al. (2014) found in a study that there was no significant statistical relationship between the mean of self-esteem and emotional intelligence with their average. Also, there was no significant statistical difference between the mean of the emotional intelligence score with the level of self-esteem in students.[13] Given the functions of intelligence and self-esteem and their impact on students' academic performance and the decisive role of the two in their future and social future, the present study aimed at examining the relationship between emotional intelligence and self-esteem with academic performance in Paramedical Students.

Methods

The present study was a cross-sectional study, the statistical population of the present study included all undergraduate students of the paramedical faculty of Hamedan University of Medical Sciences who had completed at least 2 academic semesters in one of the academic fields of this faculty. Students who were studying in this faculty as guests, as well as students who were transferred to this university from another university, and students who did not want to cooperate in the research were excluded from the research. According to the number of students who met the entry criteria and according to the number of samples in previous similar studies,[14] 300 students were included in the study by census method.

In this study, the questionnaire used consisted of 4 sections. In the first part of the student demographic information was collected. In the second part, using the Standard Shering Questionnaire, the student's intelligence status was evaluated, and in the third part, using Rosenberg's self-esteem questionnaire, their self-esteem status was obtained. To measure students' academic status, their last semester's grade point average was used. Shering Intelligence Questionnaire: This questionnaire consisted of 33 questions on a 5-degree Likert scale, which included zero points, no time, 1 point 1 means rating 2 means 2 points. Sometimes, score 3 means often and rating 4 meant always. The questionnaire evaluated the intelligence score in five areas including self-awareness (8 questions), self-control (7 questions), self-evidence (7 questions), empathy or social consciousness (6 questions) and social skills (5 questions). The overall score of the questionnaire was also calculated as the overall score of emotional intelligence per person. The validity of the questionnaire was confirmed in the study of Mansouri et al. (2001) with Cronbach's alpha for 0.85.[15] Rosenberg's self-esteem questionnaire consists of four articles, in which the subject was asked to respond to the four-degree Likert scale from fully agreement to fully oppose. The scores of this scale ranged from 1 to 2, with higher scores indicating higher self-esteem. The method of scoring this scale was as follows: Questions 1 to 2, I completely disagree = zero, I disagree = 1, I agree = 1 and I fully agree. Also, in questions 1 to 2, I fully agree = zero, I agree = one, I disagree = 1 and I strongly have a score of 1. The reliability and validity of this tool has been reviewed and approved by students of Shahid Chamran University of Ahvaz.[16] The sampling method is selected as the desired number based on the Karaji and Morgan table. Among the research population, 300 people were selected by the Karaji and Morgan table. Students who have gone through at least two semesters and announced their consent to participate in the study were considered as the criterion of entry into the study. The exit criterion included non-cooperation at any point in completing or referring the questionnaires or their incomplete completion.

Table 1
Demographic characteristics of sample individuals.

	No.	Frequency
Sex		
Girl	190	63.5
Boy	109	36.5
Major		
Anesthesiology	61	20.4
Radiology	52	17.4
Operating room	61	20.4
Laboratory sciences	43	14.4
Medical librarianship	49	16.4
Health information technology	33	11
Semester		
3	106	35.5
5	117	39.1
7	76	25.4

Table 2
The average and standardized research variables.

	Mean	SD
GPA	17.37	1.01
Self-Esteem	20.46	5.32
self -evidence	20.50	4.70
Self-awareness	23.81	6.10
Self-control	20.54	5.20
Social intelligence	18.27	4.15
Social skills	15.11	3.88
General emotional intelligence	98.26	19.44

Project in Student Research Committee with Design Number 9808286439 and in the Ethics Committee of Hamadan University of Medical Sciences with ir.umsha.rec.1398. 640. adopted.

After explaining the goals of the study and obtaining personal consent from the students, the questionnaire was provided and asked them to complete and deliver it carefully. The questionnaires were anonymous and the students were assured to provide the results in a group. In addition, the participants had the absolute right to withdraw from the project at each stage of the research. Due to some students' dissatisfaction with access to academic information, this plan had limitations. The data collected through SPSS software version 19 are analyzed in two descriptive and inferential sections, using tests such as Pearson correlation and regression.

Results

In this study, the average age of the subjects is 22.10 and its standard deviation is 1.77 years. Also, the oldest examination was 30 years and the youth was 19 years old. The number of male and female subjects in the sample of the study was 109 and 190, respectively. Most of the sample members were in the field of anesthesia and the operating room, and most of the sample members were in their semester 5 (Table 1).

According to the results of Table 2 and 3, there was a positive and significant relationship between the academic performance of the students and the self-esteem. And the correlation coefficient obtained was meaningful at 0.01. The results of this test suggest that there is no significant correlation between students' grade point average and some aspects of emotional intelligence. There was no significant relationship between students' academic performance with self-awareness, social awareness, and self-control, and there was a negative and significant relationship between student academic performance and social skills. And the correlation coefficient obtained was meaningful at 0.01. Therefore, this hypothesis was confirmed. (P = 0.01, R = 0.120). And finally, there was no significant relationship between the academic performance of the students and the overall emotional intelligence.

Table 4 presented the standard and standard coefficients between academic performance and self-esteem. According to the results, self-esteem was the best prediction of academic performance (P < 0.01, β = 0.312).

Discussion

In the study of sub-scales of emotional intelligence, the results of this research showed that there is no significant relationship between students' academic performance, social intelligence, self-awareness and general emotional intelligence score. The results obtained in this research are consistent with the study of Salehi et al. colleagues. In a study conducted by Salehi et al. colleagues on a group of students of the University of Medical Sciences, it was found that there is no significant relationship between emotional intelligence and academic performance.[17] However, the results of the study of Suleiman et al. on Pakistani students showed that there is a deep connection between emotional intelligence and academic performance of people, and by teaching emotional intelligence, people's academic performance can be improved.[18] In a systematic study conducted by Akpur, the relationship between emotional intelligence and academic achievement was investigated. In this research, 20 studies that were conducted on the subject of emotional intelligence were examined. The results of the research showed that different studies had different reports about this relationship, but based on the results of the research, people who have high emotional intelligence had more academic progress.[19] Which contradicted the results of the present study.

One of the causes of the difference between the results of this study and the above studies is the different sample size and population studied. It is noteworthy, however, that academic achievement structures are mainly related to cognitive functions, and in particular one's memory and learning capacities, while emotional intelligence is more related to one's success in interpersonal relationships.[20] Therefore, in this study, emotional intelligence was not an effective and anticipated factor in academic success. And in view of the findings, it seems that psychological structures such as emotional intelligence cannot be emphasized in examining the factors affecting academic progress. Goleman D, according to studies, says that about 8 % of the reason for success can be attributed to emotional intelligence. Emotional intelligence is one of the factors affecting one's self-esteem and the constant prevention of individual

Table 3
Matrice correction between research variables.

	Academic performance	Self-Esteem	self -evidence	Self-awareness	Self-control	Social intelligence	Social skills	General emotional
Academic performance	-							
Self-Esteem	0.312***	-						
self -evidence	−0.021	−0.178**	-					
Self-awareness	0.018	−0.100	0.656**	-				
Self-control	−0.117*	−0.242**	0.714**	0.607**	-			
Social intelligence	−0.070	−0.118*	0.598**	0.583**	0.543**	-		
Social skills	−.120**	−0.252**	0.450**	0.480**	0.447**	0.447**	-	
General emotional intelligence	0.070	−0.215**	0.857**	0.855**	0.836**	0.776**	−0.674**	-

Table 4
Non-standard and standard regression model coefficients.

	Non-standard coefficients		Standard coefficients	t	P-value
	B	Standard Error	B		
Self-Esteem	16.153	0.223	-	72.434	0.001
	0.060	0.011	0.312	5.669	0.001

emotional intelligence can also affect their self-esteem, so the results of Goleman's studies with the results we have achieved through analysis.[21]

According to the results of the present study, there is a positive and significant relationship between the academic performance of students with confidence (p = 0.112). The results of the present study also showed that among the predicted variables, only self-esteem was able to predict the academic performance in students. The results of the analysis of the model's variance and its meaning are indicated, indicating that the model is significant at the level of p ≤ 0.001. That is, predictions of academic performance have been confirmed through predicted variables (p = 0.001). The present study shows that there is a positive correlation between the average students' self-esteem and their average grade and their academic achievement. In the study of Lopez et al., which was conducted with the aim of investigating the relationship between resilience and academic progress of students and their self-esteem. The research results showed that high self-esteem can increase people's resilience and academic progress.[22] According to the results of self-esteem studies, it can increase people's perseverance and put them on the path of academic progress.[23] According to these studies, there is a close relationship between progress and self-esteem. Because self-esteem leads to progress and getting higher grades can also increase self-confidence in people.[24,25]

Considering the different results obtained in various researches about the relationship between emotional intelligence and self-esteem with academic progress and the importance of the subject in the development of the educational system, it is necessary to conduct more research, especially longitudinal and comparative.

Conclusion

Studies have shown that there is no solidarity between the components of emotional intelligence with academic achievement. But there is a positive correlation between self-esteem and academic achievement, which can lead to upgrading academic level. Although the statistical correlation between students' academic achievement was not achieved with the average overall score of emotional intelligence, the average emotional intelligence in students with high self-esteem was higher. Therefore, paying attention to self-esteem for students' success is of great importance and value. It is noteworthy that since the information of this study was obtained through the self-reporting of students, and the statistical community has been low, the information may not be real. However, in this study, it was attempted to get their maximum cooperation by explaining the students. However, it is suggested that similar studies be conducted on a wider level following the necessary training in this field and with different characteristics of trust in the field of trust in the academic achievement and the effect of education on these two variables. And, given the positive results in this study, between the self-esteem and the academic performance of the students, it is recommended that students be more focused on self-esteem and self-esteem in the school program.

Conflict of Interest

This study has had no conflict for the author

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