Original Article

Access this article online

Quick Response Code:

Website: www.jehp.net

DOI: 10.4103/jehp.jehp_544_19

Emotional intelligence and learning strategies of postgraduate students at Kerman University of Medical Sciences in the southeast of Iran

Hojjat Sheikhbardsiri, Hakimeh Sheikhasadi[1], Shahla Ayoubi Mahani[2], Mohammad Mahdi Doust Mohamadi

Abstract:

INTRODUCTION: Emotional intelligence and learning strategies are among the major requirements for success and academic achievement. The present research was designed and carried out to explore the relationship of emotional intelligence with learning strategies in postgraduate students.

METHODS: The study employed a cross-sectional design and was conducted at Kerman University of Medical Sciences in 2018. Using the emotional intelligence questionnaire by Bradberry and Greaves and a researcher-made questionnaire of learning strategic, we assessed the relationship of emotional intelligence with learning strategies in postgraduate students using a census method (n = 338). Data were analyzed using descriptive statistics including mean and standard deviation and analytic statistics such as Kolmogorov–Smirnov test, ANOVA, t-test, and Pearson's correlation coefficient at $P < 0.05$ significance level.

RESULTS: This study showed that the mean emotional intelligence score of postgraduate students was 91.12 ± 13.92 and also no significant relationship between the learning strategies and the emotional intelligence in the participants, but the emotional intelligence components showed a positive significant relationship with the learning strategy components, namely self-efficacy, rehearsal, critical thinking, cognitive self-regulation, time and study environment management, peer learning, and help-seeking.

CONCLUSION: It could be stated that emotional intelligence components can be taught and fostered to improve the emotional intelligence of the learners, optimal learning, and the quality of educational outcomes. However, a learning strategy is a natural, habitual, unique, and fixed preferential method that serves to absorb, process, and maintain new information and skills. In other words, reinforcement of emotional intelligence facilitates learning.

Keywords:

Emotional intelligence, Iran, learning strategies, postgraduate students

Social Determinants of Health Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, [1]Department of Nursing, Kerman University of Medical Sciences, [2]Department of Dental Public Health, Social Determinants on Oral Health Research Center, Kerman University of Medical Sciences, Kerman, Iran

Address for correspondence:
Dr. Mohammad Mahdi Doust Mohamadi, Social Determinants of Health Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran.
E-mail: mm.doustmohamadi@gmail.com

Received: 19-09-2019
Accepted: 14-10-2019

Introduction

Learning is a highly complicated process that is influenced by several factors such as intelligence, motivation, suitable environment, family factors, social factors, quality of educational institutions, and teachers.[1] Learning strategies refer to the cognitive solutions that form in the course of socialization and vary by age, gender, and culture. This variable is, therefore, a combination of cognitive and emotional traits and psychological factors. It also serves as a measure of learning and the perception, processing, and use of information in problem-solving.[2] In today's scientific societies, the education systems revolve around the provision

How to cite this article: Sheikhbardsiri H, Sheikhasadi H, Mahani SA, Mohamadi MM. Emotional intelligence and learning strategies of postgraduate students at Kerman University of Medical Sciences in the southeast of Iran. J Edu Health Promot 2020;9:66.

of a platform for experimental educational activities and teachings on thinking and learning. Hence, the identification of different types of learning strategies is an educational necessity.[3] In other words, by identifying the students' learning strategies, it is possible to help students select a more effective learning method and help educational designers and teachers facilitate learning by dint of appropriate teaching methods.[4] In this regard, emotional intelligence is one of the important determinants of learning.[5]

Emotional intelligence refers to the possession of self-knowledge skills and a person's knowledge of their own identity, thoughts, emotions, feelings, and personal traits. Emotional intelligence is, in fact, a skill that changes humans' abilities to evolve, develop, and have a positive feeling about life.[6] As a better predictor of social success and social adjustment, emotional intelligence plays a more important role in the individual's academic and professional success than general intelligence.[7] The research findings revealed that emotional intelligence is a skill that can be learned and acquired through practice and learning. Its quality and quantity can also be improved through education. For instance, the United States spends more than 50 billion dollars on the education of employees every year, and a considerable portion of this budget is allocated to the emotional and social capabilities and skills of the employees.[8]

Various studies have also unveiled the effect of emotional intelligence on the students' learning quality, their creative decision-making abilities, their performance during a crisis, the quality of care provided to patients, and the disease consequences.[9-11] For example, Kouchakzadeh Talami *et al*.[12] carried out a study titled "The Correlation between Emotional Intelligence and Academic Achievement on Nursing and Midwifery Students" and reported an average level of emotional intelligence in different medical fields. Costa and Faria explored the relationship of emotional intelligence and academic achievements; they concluded that emotional intelligence is a major determinant of academic achievement, and it can take a determining role in the competition over higher academic degrees.[13]

In Iran, various studies performed in different populations with an aim to assess the relationship between emotional intelligence and type of categories included educational motivation, self-efficacy, attachment styles, problem-solving styles, and decision-making styles but the relationship between emotional intelligence and learning strategies in Kerman province, especially medical science students less studied. Therefore, due to the importance of this issue the present research was designed and carried out to explore the relationship of emotional intelligence with learning strategies of postgraduate students at Kerman University of Medical Sciences in the southeast of Iran.

Methods

The present study is a cross-sectional design and was conducted at Kerman University of Medical Sciences, Iran, in 2018. The statistical population of the study included 338 postgraduate students (all medical sciences fields) who were selected using a census method. The inclusion criteria included the master's students, Ph. D. students, and residency students. The exclusion criteria included the lack of consent for participation and a failure to complete the questionnaire. Of the 338 participants, 16 disagreed about participation in this research, and 134 students did not completely answer the questionnaires and were excluded. Finally, 183 students were included in this research. For data collection in this research, a tree section questionnaire was used. The first part included questions about demographic characteristics of participants including age, gender, marital status, educational level, and housing. The second part included the emotional intelligence questionnaire by Bradberry and Greaves which was used to assess emotional intelligence, and the third part included learning strategies which were assessed using a researcher-made questionnaire.

The Bradberry and Greaves emotional intelligence questionnaire contains 28 items that measure the four components of emotional intelligence, i.e. self-awareness, self-management, social awareness, and relationship management. The questions are scored in six scales including never, rarely, sometimes, often, normally, almost always, or always. The score within the range of 100–140 shows an excellent capability; the score within 90–99 shows a good ability; the score within 80–89 may be interpreted a capability with a little reinforcement; the score within 60–70 should be worked on; and the score within 0–59 is a warning to which more attention should be given.[14] The content validity of the emotional intelligence questionnaire was approved by ten professors of Kerman University of Medical Sciences. Furthermore, the reliability of the emotional intelligence questionnaire was determined with internal consistency and intraclass correlation coefficients (ICCs). The Cronbach's alpha coefficient was 0.87, and ICC was used to establish the test–retest reliability of the questionnaire over an interval of 2 weeks using two-way mixed ICCs for absolute agreement at the level of individual items. Its results were interpreted as follows: 0.0–0.2 as low, 0.21–0.40 as fair, 0.41–0.60 as moderate, 0.61–0.80 as substantial, and 0.81–1 as almost perfect.[15] To assess the suitable sample size for the test–retest reliability, power analysis was performed. The power analysis identified that a sample of thirty postgraduate students was

required to have a power of 0.80 to detect a test–retest correlation of 0.90.

The third part for data collection in this research was a researcher-made questionnaire with a name learning strategic questionnaire. The research team initially developed a questionnaire after an extensive review of the relevant literature to achieve good content validity. We developed the questionnaire in Farsi to reconcile study issues and concepts culturally and linguistically for Persian-speaking study participants. Thereafter, a total of 105 questions were selected from the collected literature review to assess the learning strategies. To assess the content validity of the questionnaire, it was provided to ten faculty members of Kerman University of Medical Sciences, and their opinions were collected and taken into account. Finally, a questionnaire consisting of 75 statements was developed to assess the following 14 dimensions: self-efficacy, rehearsal, elaboration, organization, critical thinking, cognitive self-regulation, mastery goal (orientation), performance-approach goal orientation, performance-avoid goal orientation, time and study environment management, effort regulation, peer learning, and help-seeking. The reliability of this questionnaire was assessed using the test–retest method with a 1-month interval and a 30-member group similar to the main sample. The reliability of the questionnaire was confirmed using Pearson's correlation coefficient ($r = 0.8$), and the Cronbach's alpha coefficient was 0.87 for this scale. As regards the moral considerations included, research goals were explained and the research units were assured of the confidentiality of the information, the voluntary involvement in this research, the oral and written presentation of the research results, and the acquisition of informed consent.

Data analysis

To analyze data, descriptive tests, including frequency, percentage, mean, and standard deviation, and analytical tests, including the Kolmogorov–Smirnov test, were conducted to indicate that the data were sampled from a population with a normal distribution. The correlation between study main categories included emotional intelligence, learning strategic and participant's demographic data assess with the Pearson's correlation coefficient, *t*-test, and ANOVA using the SPSS software (version 19, SPSS Inc., Chicago, IL, USA). There was a significant difference at the level of $P < 0.05$.

Results

A total of 183 postgraduate students including master's (53.55%), Ph. D (25.68%), and residency students (20.76%) participated in this research. The majority of the respondents (66.7%) were female, while most of the participants were married (56.3%). Besides, most of the participants (90.16%) aged below 40 years, and the majority of participants were indigenous (55.73%).

The results from this research indicated that the mean emotional intelligence score of the postgraduate students was 245.8 ± 32.8. The ANOVA results also revealed the positive and significant relationship of age with the self-efficacy, self-management, social awareness, and relationship management components of emotional intelligence ($P \leq 0.05$). The ANOVA results also unveiled the positive and significant relationship of social awareness with the participants' academic degree ($P \leq 0.05$). On the other hand, according to the results from the *t*-test, there was a statistically significant relationship between self-awareness and social awareness with the participants' age ($P \leq 0.05$). The results from the *t*-test also reflected the statistically significant relationship between the self-awareness and the habitats of the participants ($P = 0.02$). There was no statistically significant relationship between the other emotional intelligence components and the demographic properties of the respondents, as shown in Table 1.

Pearson's correlation coefficient mirrored the lack of a significant relationship between the two main research variables, namely emotional intelligence and learning strategy, in the postgraduate students at Kerman University of Medical Sciences ($P = 0.08$). However, Pearson's correlation coefficient indicated the positive statistically significant relationship between some of the learning strategy components and emotional intelligence components. For instance, self-efficacy, as one of the components of the learning strategy variable, had a positive significant relationship with some of the emotional intelligence components, namely self-awareness, self-management, and social awareness ($P \leq 0.05$). Moreover, there were positive significant relationships between rehearsal and relationship management ($P = 0.02$), between critical thinking, self-management, and social awareness ($P \leq 0.05$), between cognitive

Table 1: The relationship between dimensions of emotional intelligence and demographic characteristics of participants

Components of emotional intelligence	Housing (*t*, *P*)	Educational level (*F*, *P*)	Marital status (*t*, *P*)	Gender	Age (*F*, *P*)
Self-awareness	4.33, 0.02*	1.32, 0.98	-0.44, 0.65	*t*=3.67, *P*=0.05*	3.35, 0.01*
Own management	-1.10, 0.80	1.12, 0.23	-1.11, 0.26	*r*=-1.74, *P*=0.08,	2.64, 0.03*
Social awareness	-0.4, 0.76	4.70, 0.001*	-0.3, 0.76	*r*=−0.02, *P*=0.046*	5.66, 0.001*
Relationship management	-0.016, 0.98	2.35, 0.09	-0.016, 0.98	*r*=0.54, *P*=0.58	3.44, 0.01*

**P* value is exist = 0.02

self-regulation and social awareness ($P = 0.02$), between time and study environment management and social awareness ($P = 0.04$), between peer learning and social awareness ($P = 0.01$), and between help-seeking, social awareness, and relationship management ($P \leq 0.05$), as shown in Table 2.

According to the independent *t*-test, the performance-avoid goal orientation and help-seeking strategies have a positive significant relationship with the gender variable ($P \leq 0.05$). In other words, the female students' mean scores on the performance-avoid goal orientation (12.68 ± 3.68) and help-seeking (15.66 ± 1.98) strategies were higher than the male students. Besides, being married had a statistically significant relationship with the performance-approach goal orientation and time and study environment management learning strategies ($P \leq 0.05$). In other words, the single students' mean scores on the performance-approach goal orientation (11.05 ± 3.31) and time and study management (14.66 ± 2.09) learning strategies were higher than the married students. However, there was no statistically significant relationship between the other learning strategy components and the demographic properties of the participants, as shown in Table 3.

Discussion

According to our findings, the mean emotional intelligence score of the postgraduate students is 91.12 ± 13.92, which is good and satisfactory. This finding complies with the researches by Barkhordari *et al.*, Chew *et al.*, and Kaya *et al*.[6,16,17] Given that emotional intelligence is somewhat acquisitive and is affected by teaching, this finding can be attributed to factors such as the university admission method, types of university examinations and evaluation methods, teaching methods, and university fields. Seemingly, the different educational evaluation systems of universities somewhat contribute to the difference in the emotional intelligence levels reported by different researchers.

Research findings also mirrored the positive and statistically significant relationship of age with all

Table 2: Relationship between the components of emotional intelligence and the components of learning strategies among postgraduate students

Components of learning strategies	Components of emotional intelligence (*r*, *P*)			
	Relation management	Social awareness	Own management	Self-awareness
Efficacy	-0.14, 0.53	-0.13, 0.02*	-0.018, 0.01*	0.17, 0.02*
Practice	0.02, 0.73	0.036, 0.63	0.06, 0.35	-0.043, 0.53
Linking information to each other	0.00, 0.99	-0.03, 0.68	-0.1, 0.17	-0.38, 0.21
Organize content	-0.16, 0.02*	-0.11, 0.13	0.09, 0.22	-0.07, 0.23
Measuring critical thinking	–0.1, 0.16	-0.16, 0.02*	-0.14, 0.04*	0.14, 0.53
Cognitive self-regulatory measurement	-0.1, 0.16	-0.15, 0.03*	-0.11, 0.115	0.032, 0.63
Mastery of learning	-0.01, 0.16	-0.027, 0.71	0.14, 0.05*	0.15, 0.84
Measure the purpose of the approach	0.09, 0.22	0.042, 0.57	-0.008, 0.91	0.14, 0.53
The goal avoidance-performance	0.04, 0.59	-0.06, 0.42	0.01, 0.89	0.07, 0.29
Time management and study environment	-0.08, 0.24	-0.15, 0.04*	0.004, 0.95	0.000, 0.99
Set efforts	-0.01, 0.87	-0.09, 0.21	0.028, 0.07	-0.06, 0.37
Learn with classmates	-0.15, 0.03	-0.18, 0.01*	0.083, 0.26	0.17, 0.61
Search help	-0.15, 0.03*	-0.15, 0.01*	-0.038, 0.06	0.541, 0.48

**P* value is exist = 0.02

Table 3: Relationship between the components of learning strategies and the demographic characteristics of the participants

Components of learning strategies	Housing (*t*, *P*)	Educational level (*F*, *P*)	Marital status (*t*, *P*)	Gender (*t*, *P*)	Age (*F*, *P*)
Efficacy	0.43, 0.08	3.35, 0.23	1.79, 0.74	-0.08, 0.93	5.01, 0.04*
Practice	2.45, 0.25	2.64, 0.03*	-1.76, 0.08	0.23, 0.83	0.08, 0.98
Linking information to each other	1.3, 0.76	2.64, 0.001	-0.3, 0.75	-0.28, 0.77	0.53, 0.08
Organize content	-0.61, 0.98	2.44, 0.78	-0.19, 0.84	-1.01, 0.31	0.89, 0.47
Measuring critical thinking	-0.34, 0.66	5.35, 0.53	-0.92, 0.35	0.94, 0.34	0.67, 0.61
Cognitive self-regulatory measurement	-1.13, 0.87	2.46, 0.45	-1.49, 0.13	1.24, 0.25	0.32, 0.81
Mastery of learning	4.7, 0.03*	2.66, 0.001*	-1.77, 0.07	-1.32, 0.18	0.63, 0.64
Measure the purpose of the approach	-0.016, 0.98	2.22, 0.56	-1.97, 0.49	-0.45, 0.65	0.79, 0.52
The goal avoidance-performance	-0.44, 0.65	3.38, 0.89	-0.41, 0.68	2.31, 0.02*	1.04, 0.22
Time management and study environment	1.22, 0.08	2.64, 0.03	-2.22, 0.27	-0.09, 0.92	1.04, 0.22
Set efforts	-0.3, 0.76	5.22, 0.74*	0.08, 0.93	0.24, 0.08	1.17, 0.32
Learn with classmates	6.34, 0.05*	1.54, 0.33	-0.59, 0.63	-1.28, 0.28	1.71, 0.14
Search help	0.98, 0.67	4.15, 0.76	-0.98, 0.32	3.07, 0.04*	158, 0.18

**P* value is exist = 0.02

emotional intelligence components. This finding is in line with the findings reported by Ahmadi *et al*.,[18] but it is contradictory to the findings reported by Yamani *et al*.[19] People foster their awareness in the course of their lives, and they can control their emotions and behaviors as they age. Our findings mirrored the statistically significant relationship of gender with self-awareness and social awareness. In other words, the mean emotional scores on the aforesaid dimensions were higher in men than women. This finding complies with the findings reported by Mohamed and Nagy and Razaghi *et al*.[20,21] These results were seemingly caused by the sociocultural differences between societies, the parenting styles of families, the lower availability of social environments to women, and women's limited presence in societies, which should be valued more by university planners and authorities.

Our research findings also revealed the statistically significant relationship between the social awareness component of emotional intelligence and academic degree. In this regard, the important belief about social awareness is that the first requisite for fostering emotional intelligence is social awareness and humans' awareness of their own conditions and others' conditions spark off evolutions and movement toward the ideal life. The outcomes are the human evaluations and actions designed to bring about social change and enhance emotional intelligence.[20] Our findings also indicated that there is a positive significant relationship between the self-awareness component of emotional intelligence and the students' habitats. In other words, the mean emotional intelligence score of students living in dormitories was lower than local students. Self-awareness is, in fact, the most important skill and capacity for improving emotional intelligence. Seemingly, people with a deeper understanding of their mental state and their emotions have higher emotional intelligence.[10]

Our findings also revealed the statistically significant relationship between the learning strategy components and the emotional intelligence components. For example, the self-efficacy component of the learning strategies has a positive significant relationship with the self-awareness, self-management, and social awareness dimensions of emotional intelligence. This finding is in line with the research by Hadadranjbar *et al*.[22] However, it does not comply with the findings reported by Heidari and Delfan.[23] It could be argued that a person demonstrating high levels of social awareness and self-awareness establishes more effective relationships with others, thereby asking for their support and feeling more efficient. People, who are unable to precisely understand their emotions (self-management) and others' emotions, suffer from poor social adjustment that reduces social support and self-efficacy. Research findings reflected the statistically significant relationship between the rehearsal component of the learning strategy variable and the relationship management component of emotional intelligence, which complied with the research by Boussiakou *et al*.[24] To explain this finding, it could be stated that students with effective interpersonal relationships learn coherently rather than in a fragmented process, which results in a more thorough understanding of the information. They also remember information for a longer time and pass examinations more successfully, hence their higher academic achievements. The research findings also indicated the positive significant relationship between the critical thinking component of the learning strategies and the self-management and social awareness dimensions of social intelligence. These findings comply with the research by Shatalebi *et al*.[25] but do not comply with the results reported by Haghani *et al*.[26] There is also a relationship between emotional intelligence and critical thinking, and critical thinking is a more effective predictor of emotional intelligence. Every person must have normal emotional intelligence to have the critical thinking skills.[27]

Moreover, according to the findings, the cognitive self-regulation component of the learning strategy variable has a positive and significant relationship with the social awareness component of the emotional intelligence variable. This finding complies with the research by Haghani *et al.* and Adib-Hajbaghery and Lotfi.[26,28] To wit, emotional intelligence enables the person to achieve self-regulation and learn better by controlling and directing their behavior. As a result, the person behaves in proportion to the situation in different social situations and directs their activities.[27] Concerning the relationship of the time management component of the learning strategy variable with the study environment and social awareness dimensions of emotional intelligence, this relationship is positive and significant. Therefore, this finding complies with the findings reported by Ashoori.[29] As we know, people with high levels of emotional intelligence can correctly manage time as an environmental stress factor by virtue of having emotional capacities, competencies, and skills that determine their abilities.[30] The "peer learning" component of the learning strategies has a statistically positive relationship with the social awareness component of the emotional intelligence variable. The research by Ashoori[29] also mirrored the effective relationship between peer learning and social awareness. To explain this finding, it could be stated that better social interactions between students with high levels of emotional intelligence and their classmates, teachers, and authorities of educational institutions improve the components of learning strategic. Finally, the relationship of the help-seeking component of the learning strategy variable with the social awareness

and relationship management dimension of emotional intelligence is positive. Studies of Jafari and Ahmadzade and Mousavi *et al*.[31,32] also reported the effective relationship between these variables, which comply with our findings.

The research findings unveiled the positive significant relationship of the performance-approach goal orientation and help-seeking strategies with gender. In other words, the female students' mean score on the performance-approach goal orientation and help-seeking learning strategy was higher than the male students. This finding complies with the research by Connor *et al*. and Hardy[33,34] To explain this finding, it could be stated that female students study their subjects of interest with more free time and fewer concerns than boys. They also utilize more learning strategies and finally gain more academic achievements than boys. Besides, it was found that being married has a positive significant relationship with the performance-approach goal orientation and time and study environment management learning strategies. In other words, single students' mean score on the performance-approach goal orientation and time and study environment management learning strategies was higher than married students. This finding is in line with the results reported by Jensen *et al*. and Naseri Jahromi.[35,36] In this regard, it could be stated that married students are busier than single students, for example, because they have to pay attention to their spouses and children. Hence, they have less time to adopt the learning strategies as compared to single students. The most important limitation of this study was the use of the correlation technique because the identified relationships could not be considered causal relationships. These relationships may be fueled by other variables. Another limitation of the present study was the use of self-report scales because the respondents could have refused to answer the questions honestly. These limitations were partially overcome by communicating to the participants properly and explaining that their participation is optional, their responses will be kept confidential, and they can fill it without writing their names on it.

Conclusion

In sum, it could be stated that effective control over one's emotions is necessary along with the cognitive skills for the acquisition of significant academic skills. In other words, learning can be optimized with a more effective realization of the emotional intelligence components. It could also be stated that the emotional intelligence components can be taught and fostered considering the results from some of the aforesaid studies concerning emotional intelligence and learning strategies as well as the results from this study regarding the lack of a significant relationship between the emotional intelligence and the learning strategies of postgraduate students. Moreover, an improvement in the learners' emotional intelligence leads to optimal learning, improving the quality of educational outcomes. However, a learning strategy is a natural, habitual, unique, and fixed preferential method that serves to absorb, process, and maintain new information and skills. In other words, reinforcement of emotional intelligence benefits learning.

Acknowledgment

This article is based on the findings of an approved research project with a number: IR.KMU.REC.1395.849, and also, we would like to thank all the people who helped us to perform this study, especially emergency department nurses.

Financial support and sponsorship

This study was financially supported by Kerman University of Medical Sciences.

Conflicts of interest

There are no conflicts of interest.

References

1. Rahimi S, Sohrabi Y, Nafez AH, Dabirian M. Learning Styles in University Education (Systematic Review). Executive Editor. 2017 Apr;8(2):2386.
2. Ghasemi N, Fathi-Ashtiani A, Raeesi F. Attribution styles and converging-diverging learning styles in depressed and non-depressed students. International Journal of Behavioral Sciences. 2009 Jul 1;3(2):105-11.
3. Sarabi-Asiabar A, Jafari M, Sadeghifar J, Tofighi S, Zaboli R, Peyman H, *et al*. The relationship between learning style preferences and gender, educational major and status in first year medical students: A survey study from Iran. Iran Red Crescent Med J 2015;17:e18250.
4. Singh V. Exploring the relationship between cognitive style and learning style with academic achievement of elementary school learners. Educ Quest 2017;8:413.
5. Bhalli MA, Khan IA, Sattar A. Learning style of medical students and its correlation with preferred teaching methodologies and academic achievement. J Ayub Med Coll Abbottabad 2015;27:837-42.
6. Barkhordari M, Rostambeygi P, Ghasemnejad M. Measuring emotional intelligence of nursing student. Iran J Nurs Res 2016;10:12-9.
7. Khastavaneh M, Dehbanizadeh A, Hosseini N, Razmjooei P, Movaghghar M, Zabolypour S, *et al*. Comparing spiritual intelligence and emotional intelligence of nurse managers with commitment of nurses of Yasuj University of medical sciences. Amazonia Investiga. 2018 Aug 17;7(13):101-9.
8. Gupta R, Singh N, Kumar R. Longitudinal predictive validity of emotional intelligence on first year medical students perceived stress. BMC Med Educ 2017;17:139.
9. Babaeiamiri, N. And J. Ashoori, The Relationship Between Cognitive And Metacognitive Learning Strategies, Self-Efficacy, Creativity And Emotional Intelligence With Academic Achievement. Journal Of Cognitive Strategies In Learning, 2015. 2(3): P. 111-127.
10. Gorgich EA, Barfroshan S, Ghoreishi G, Balouchi A,

Nastizaie N, Arbabisarjou A. The association of self-assessed emotional intelligence with academic achievement and general health among students of medical sciences. Glob J Health Sci. 2016 Apr 29;8(12):55776.
11. Torbat S, Zarei I. Test and validity of emotional intelligence model with social adjustment in students. Iran J Posit Psychol 2018; 4:52-60.
12. Kouchakzadeh Talami S, Namazi A, Alizadeh S. The correlation between emotional intelligence and academic achievement on nursing and midwifery students. Iran J Nurs 2016;29:1-10.
13. Costa A, Faria L. The impact of emotional intelligence on academic achievement: A longitudinal study in Portuguese secondary school. Learn Individ Differ 2015;37:38-47.
14. Bradberry TR, Su LD. Ability-versus skill-based assessment of emotional intelligence. Psicothema. 2006;18:59-66.
15. Landis JR, Koch GG. The measurement of observer agreement for categorical data. Biometrics 1977;33:159-74.
16. Chew BH, Md Zain A, Hassan F. The relationship between the social management of emotional intelligence and academic performance among medical students. Psychol Health Med 2015;20:198-204.
17. Kaya H, Şenyuva E, Bodur G. The relationship between critical thinking and emotional intelligence in nursing students: A longitudinal study. Nurse Educ Today 2018;68:26-32.
18. Ahmadi S., B.T.R., Hosseini M.A., Mehrabian F., The study of emotional intelligence in medical and dentistry students of international branch of guilan university of medical sciences in 2013. Research In Medical Education, 2015. 6(2): P. 1-10.
19. Yamani N, Shahabi M, Haghani F. The relationship between emotional intelligence and job stress in the faculty of medicine in Isfahan University of medical sciences. J Adv Med Educ Prof 2014;2:20-6.
20. Mohamed SM, Nagy F. Emotional intelligence and job stress among academic members at faculty of nursing – Cairo University. J Nurs Health Sci 2017;6:10-9.
21. Razaghi M, Berjisian R, Tabatabai MS. Investigate the relationship between stress management and academic achievement of students. Int J Res Soc Sci 2015;5:419.
22. Hadadranjbar S, Sadipour E, Dortaj F, Delavar A, Ebrahimi Qavam S. Effect of Education based on Acceptance and Commitment Approach in Reducing students' Self-Defeating Behaviors: According to the educational package developed. Research in Medical Education. 2018 Jul 15;10(2):8-17.
23. Heidari Tg DA. Study of the relationship between students' emotional intelligence and their skills of dealing with stress. Educational Administration Research Quarterly 2011;2:15-24.
24. Boussiakou LG, Boussiakou IK, Kalkani EC. Student development using emotional intelligence. World Trans Eng Technol Educ 2006;5:53.
25. Shatalebi BS, Saeedian S, Javadi N, Hasan. Examining the relationship between emotional intelligence and learning styles. Procedia - Social and Behavioral Sciences 2012;31:95-9.
26. Haghani F, Aminian B, Kamali F, Jamshidian S. Critical Thinking Skills and Their Relationship with Emotional Intelligence in Medical Students of Introductory Clinical Medicine (ICM) Course in Isfahan University of Medical Sciences. Iranian Journal of Medical Education. 2011; 10 (5) :906-17.
27. Brackett MA, Rivers SE, Salovey P. Emotional intelligence: Implications for personal, social, academic, and workplace success. Soc Pers Psychol Compass 2011;5:88-103.
28. Adib-Hajbaghery M, Lotfi MS. The association of emotional intelligence with academic achievement and characteristics of students of Kashan University of medical sciences. Iran J Med Educ 2013;13:703-10.
29. Ashoori J. The Relationship of Cognitive and Meta-Cognitive Learning Strategies, Perceived Classroom Goal Structure, and Spiritual Intelligence with Academic Achievement among Nursing Students. Iranian Journal of Medical Education. 2013; 13 (8) :692-700.
30. Vahedi S, Heydarlou MM, Imanzadeh A. The relationship between emotional intelligence and critical thinking in nursing students of Tabriz University of medical sciences. Dev Strateg Med Educ 2015;2:47-57.
31. Jafari M, Ahmadzade F. Investigation of the association between the components of emotional intelligence and academic achievement in students. Razi J Med Sci 2014;21:85-93.
32. Mousavi, S., Jabalameli,Jalal,Alibakhshi,Fateme, study of the relation emotional intelligence (ei) and, motivation beliefs self-regulatory on the academic performance. journal of research in behavioural sciences, 2012. 10(3 (24)): p. 179-192.
33. Connor CM, Ponitz CC, Phillips BM, Travis QM, Glasney S, Morrison FJ. First graders' literacy and self-regulation gains: The effect of individualizing student instruction. Journal of School Psychology. 2010 Oct 1;48(5):433-55.
34. Hardy LS. Linear Relationships between Campus Environment, Student Involvement and Personal and Educational Outcomes at Tribally Controlled Community Colleges; 2005.
35. Jensen AR, Wright AS, Lance AR, O'Brien KC, Pratt CD, Anastakis DJ, *et al*. The emotional intelligence of surgical residents: a descriptive study. The American Journal of Surgery. 2008 Jan 1;195(1):5-10.
36. Naseri Jahromi R. Study of the relationship between self-regulated learners strategies with academic achievement. Res Med Educ 2018;9:57-49.