The Relationship between Emotional Intelligence and Students’ Academic Achievements in General EFL Classes

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Emotional Intelligence, the ability to be aware of, understand, and express oneself, the ability to be aware of, understand, and relate to others, the ability to deal with strong emotions, and the ability to adapt to change and solve problems of a social or personal nature, can be considered an important factor in learning a language as it enhances the verbal fluency which is the ultimate goal in FLL. The present study intended to consider the relationship between emotional intelligence and academic performance in Osku-Iran Islamic Azad University’s EFL classes. For this purpose, 110 undergraduate EFL sophomore and junior students participated in this study. First, in the middle of the term they were required to complete Bar-On (1997) Emotional Intelligence Inventory and their EI scores were computed based on the guidelines Bar-On (1997) provided. At the end of the term the academic course final exam was administered to the students to achieve their academic mean score which was computed out of 20. After that the degree of correlation between EI and academic mean score was found. It became evident that there is no meaningful relationship between total EI score and academic mean score but there is a meaningful and positive relationship between some sub-scales of emotional intelligence and academic mean

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score. Therefore, material developers and syllabus designers are required to take emotional factors into account when they want to design syllabuses or make materials ready for teaching.

Keywords: emotional intelligence, foreign language learning

In an increasingly competitive higher education market, institutional success is often defined by whether students complete their university degree and whether the degree of intelligence that individuals possess is high; but students success cannot be only defined by these factors. Since 1990, when for the first time emotional intelligence was introduced, it has been used in so many fields including education, management and artificial intelligence. According to Danial Goleman (1995), the famous scholar in the emotional intelligence field, about 80 percent of success that is unaccounted by IQ tests and similar tests can be explained by emotional intelligence factor. He has defined emotional intelligence as “abilities such as being able to motivate oneself, and persist in the face of frustration, to control impulses and delay gratification; to regulate one’s moods and keep distress from swapping the ability to think; to emphasize and to hope” (1995, p.34). Research has demonstrated that EQ more than IQ accounts for success in life and education (Goleman, 1995; Salovey&Mayer, 1990). The purpose of this study was to investigate the role of emotional intelligence in an EFL course to see the extent to which students’ academic success is defined by this important factor.

Emotional Intelligence: Bar-On: A mixed Model of Emotional Intelligence

According to Pishghadam (2009), from the 1900s, when Alfred Binet (1905), in response to a request by a French public school for a test that could identify children at risk of falling behind their peers in academic achievement, designed the first intelligence test and Lewis Terman (1916, cited in Pishghadam, 2009) coined the term “intelligence quotient” (IQ), the conceptions of intelligence have undergone different changes. The early
designers of intelligence tests focused only on cognitive abilities such as memory and problem-solving. For example, Alfred Binet (1905) equated intelligence with the abilities of logic and language. In fact as Wechsler (1958) stated, in the first half of the 20th century, IQ tests were considered adequate measures of intelligence and society linked IQ scores to an individual’s potential for success in life.

Current research denies IQ scores as the sole measure of intelligence. As Love and Guthrie (1999) stated, within the last several decades, there have been lots of research regarding the effect of emotional influence on learning which has been integrated with research on cognition and social processes. Mayor and Salovey (1990) were first who defined EI as a type of social intelligence to monitor one’s own feelings and those of others, to discriminate among them and to use the information to guide one’s thinking and actions. According to Mayer, Caruso and Salovey (2000), the use of emotions can provide people with valuable information about themselves and others. As Mayer, Salovey and Caruso (2000) stated, EI is considered scientifically legitimate as it met several standard Criteria of intelligence:

“(a) capable of being operationalized as a set of abilities, (b) meet certain correlational criteria: the abilities defined by the intelligence should form a related set (i.e., be intercorrelated), and be related to pre-existing intelligences, while also showing some unique variance, and (c) develop with age and experience.” (p.267)

Bar-On was first who coined the term emotional quotient (EQ) as a counterpart to IQ, that is, to cognitive ability. Bar-On thought of EQ as representing a set of social and emotional abilities that help individuals cope with the demands of social life. Bar-On's model of emotional intelligence relates to the potential for performance and success, rather than performance or success itself, and is considered process-oriented rather than outcome-oriented (Bar-On, 2002). It focuses on an array of emotional and social abilities, including the ability to be aware of, understand, and express oneself, the ability to be aware of, understand, and
relate to others, the ability to deal with strong emotions, and the ability to adapt to change and solve problems of a social or personal nature (Bar-On, 1997). In his model, Bar-On outlines 5 components of emotional intelligence: intrapersonal, interpersonal, adaptability, stress management, and general mood. Within these components are sub-components, represented in the following table. Bar-On posits that emotional intelligence develops over time and that it can be improved through training, programming, and therapy (Bar-On, 2002).

Bar-On hypothesizes that those individuals with higher than average E.Q.’s are in general more successful in meeting environmental demands and pressures. He also notes that a deficiency in emotional intelligence can mean a lack of success and the existence of emotional problems. Problems in coping with one’s environment is thought, by Bar-On, to be especially common among those individuals lacking in the subscales of reality testing, problem solving, stress tolerance, and impulse control. In general, Bar-On considers emotional intelligence and cognitive intelligence to contribute equally to a person’s general intelligence, which then offers an indication of one’s potential to succeed in life (Bar-On, 2002).

Table 1

\textit{Bar-On’s Model of Emotional Intelligence}

<table>
<thead>
<tr>
<th>Intrapersonal</th>
<th>Self Regard</th>
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<tbody>
<tr>
<td></td>
<td>Emotional Self-Awareness</td>
</tr>
<tr>
<td></td>
<td>Assertiveness</td>
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<tr>
<td></td>
<td>Independence</td>
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<tr>
<td></td>
<td>Self-Actualization</td>
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<tr>
<td>Interpersonal</td>
<td>Empathy</td>
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<td></td>
<td>Social Responsibility</td>
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<td></td>
<td>Interpersonal Relationship</td>
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<td>Adaptability</td>
<td>Reality Testing</td>
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<td></td>
<td>Flexibility</td>
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<td></td>
<td>Problem Solving</td>
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<tr>
<td>Stress Management</td>
<td>Stress Tolerance</td>
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<td></td>
<td>Impulse Control</td>
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<tr>
<td>General Mood Components</td>
<td>Optimism</td>
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<td></td>
<td>Happiness</td>
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</tbody>
</table>
Janani Vaidhyanathan (2010) states that the various elements of emotional intelligence like, self-awareness, self-regulation, motivation, empathy and social skill form the basic emotional and social competencies which are widely important in the process of language learning and academic performance. These should eliminate the emotion of fear that retards in a learner and causing a negative impact in one’s learning. Self-awareness gives us self-confidence. Motivation guides us towards goals and removes frustrations to quicken the progress. Self-regulation facilitates in pursuing goals. Empathy makes us understand others feelings and cultivates rapport with a broad diversity of people. Social skills can be used to persuade others, negotiate and settle disputes, for cooperation and teamwork. Therefore, it is vivid and clear that emotional intelligence is the crucial factor in the process of language learning, especially in EFL courses because the emotional regulation is the key factor in class activities.

Mayer, Salovey and Caruso (2000) Stated that there are two general models of EI: a mental ability model and a mixed model. Ability models of EI focused on the interplay of emotion and intelligence; and mixed models described a compound conception of intelligence that includes mental abilities, dispositions, and traits. According to Mayer et al., the models of EI offered by Goleman (1995) and Bar-On (1997) are mixed models that treat both mental abilities and a variety of other characteristics, such as motivation, states of consciousness, and social activity, as a single entity. Salovey and Mayer’s (1990) first attempt at defining EI included both mental abilities and personality characteristics, thus making it a mixed model approach. In later years, they clarified and redefined their theory to include a conception of purely mental ability in regard to EI. Although researchers define and measure EI in differing ways, both types of models may be useful in the study of human effectiveness and success in life but measurement tools designed for mixed model approaches, such as Bar-On’s model, have been used more extensively in research.
EI and Academic Performance

According to Jaeger and Eagan (2007), academic performance is often referred as achievement or the level at which a person has learned to perform a special skill. As they stated, there is a direct relationship between academic performance and variety of factors among which EI is the most important. This represent the fact that as Elder (1997) noted students feel something about what is going on in the classroom and that feeling, at least in part, determines how they act in the classroom and thus whether or not they will engage with the material.

Nelson and Low (2005) believed that EI can result in a wise behavior, high achievement and mental health. Emotionally intelligent students can be successful in interpersonal communications, self-management, goal achievement, and demonstrate personal responsibility in completing assignments and working effectively.

According to Nelson and Low (2005), EI can be described as “transformative learning” which transforms the student into an effective person. As they stated transformative learning empowers students to: (1) develop healthy and productive relationship, (2) solve problems and make good decision, (3) manage self in achieving goals, (4) stay attuned to healthy outcomes, and (5) behave wisely and responsibly. In transformative learning environment, there is respect for learners, learners are encouraged to take apart in meaningful dialogues; active, cooperative and collaborative learning is taken place; and the teacher is involved actively in the learning process and learns with students through positive and engaging interactions. Therefore, the major factor in effective and transformative learning is the relationship between the student and the teacher which focuses on learning that understands and values contributions of the emotional mind. Emotionally intelligent behavior is a wise behavior. To behave wisely requires the synergistic effect of the emotional mind with the cognitive mind. Thinking and feeling are not totally independent processes, and emotionally intelligent behavior requires harmony of the two minds. The emotional mind
makes many positive contributions to academic achievement, productivity, mental and physical health.

Smith (2004) noted that learning and applying emotional intelligence skills are important in improving the achievement of academically at risk students. It is essential to engage actively at-risk students in the learning process. Engagement and meaningful learning are possible when students are involved actively in the learning process. Likewise, motivation and engagement are diminished when at-risk students are unable to relate to or find personal meaning in the instruction of content material. The result is often minimal achievement and higher problem indicators.

Purpose of the Study

Investigating the role of emotional factor in the process of language learning is not something new. A number of methodologies exist which address emotional factor and psychological issues (suggestopedia), some of which were motivated by Krashen’s claims in the Monitor Model, specifically the part about the affective filter. However, up to now few studies have investigated the role of EQ in foreign language learning. Aghasafari (2006) investigated the relationship between EQ and learning strategies among 100 EFL sophomore participants in Ghazvin Islamic Azad University. The results indicated that there is a positive relationship between overall emotional intelligence and language learning strategies. Fahim and Pishghadam (2007) explored the relationship between EQ and IQ and also the relationship between verbal intelligence and the academic achievement of students majoring in English language. Interestingly, they found that academic achievement was strongly associated with several dimensions of emotional intelligence (intrapersonal, stress management, and general mood competencies). Moreover, it was found that academic achievement did not correlate much with IQ, but it was strongly associated with verbal intelligence which is a sub-section of IQ test.

Due to little research done on EQ and foreign language learning, this study is intended to investigate the degree of association between emotional intelligence and academic success.
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Bar-On (1997) mixed model of emotional intelligence was used in this study and following research questions are developed to process the issue:

1. Is there any relationship between total EQ score and academic achievement of students in general EFL courses?
2. Is there any relationship between sub-scales of EI and academic achievement of students in general EFL courses?

Method

Participants

110 undergraduate EFL sophomore and junior students in Osku Branch, Islamic Azad University in Iran participated in this study. All of the participants were students majoring in Architecture, Accounting and Computer in Osku Islamic Azad University. In addition, because English is a foreign language in Iran, most of the students didn’t have chance or they were not interested to attend English Language Institutes; so, they had to learn English in class.

Instrumentations

This study made use of the following instrument for data collection:

Bar-on: Mixed Model of Emotional Intelligence (EQ-i)

Reuven Bar-On's measure of emotional intelligence, the Bar-On (1997) Emotion Quotient Inventory (EQ-i), is a self-report measure of emotional intelligence for individuals sixteen years of age and over. It was developed as a measure of emotionally and socially competent behavior that provides an estimate of one's emotional and social intelligence. According to Dawda and Hart (2000), the Emotion Quotient Inventory doesn’t measure personality traits or cognitive capacity, but rather measures one’s ability to be successful in dealing with environmental demands and pressure. One hundred and thirty three items are used to obtain a
Total EQ (Total Emotion Quotient) and to produce five composite scales corresponding to the 5 main components of the Bar-On model: Intrapersonal EQ, Interpersonal EQ, Adaptability EQ, Stress Management EQ, and General Mood EQ. Items are measured on a 5 point scale ranging from 1 (very seldom/not true for me) to 5 (very often/often true of me).

In this research study the revised version of Bar-on Emotion Quotient Inventory (EQ-i) was used in order to increase its face validity and reliability and correlation among items. For this end, the questionnaire was translated into Persian by Sina Research Center in Tehran. Then the correlation among items and also the correlation between every question and the total test score were calculated. The items which showed a low correlation with the total test score were eliminated or changed. In this way, this test was reduced to 90 questions. Then the reliability of test was estimated to be 0/88.

Procedures

In this study, three intact classes of undergraduate EFL sophomore and junior students from Osku Branch, Islamic Azad University in Iran were chosen to participate. Bar-On (1997) emotional intelligence inventory was administered to them in middle of the term and results were obtained based on the answers provided by students. The time needed to complete Bar-on emotional intelligence test was about 20 to 50 minutes. At the end of the term, their final exam was administered to determine their academic achievement scores. The scores were obtained out of 20.

In order to compare students more easily, after getting the results based on Bar-on Emotional intelligence test scores, students were divided by means of SPSS into three groups of emotionally high, average and low students. As items were measured on a 5 point scale ranging from 1 to 5, the range of emotional intelligence score computed to change from 90 to 450. Students getting the scores 90 to 210 were considered as having a low level of EI, students getting the scores 211 to 330 had a moderate level of EI
and at last students whose scores fluctuated between the scores 331 to 450 had a high level of EI.

And also based on their academic achievement scores they were divided into more successful, average and less successful students. Students with academic scores ranging from 0 to 10 were considered to be less successful students, students whose academic scores fluctuated between 11 and 15 were considered to be average students and those with scores from 16 to 20 were more successful students.

Data Analysis and Results

EQ questionnaires were first scored based on the guidelines provided by Bar-On (1998). Then the total EQ score and also the scores of EQ’s five major sub-scales were computed. The total EQ mean score was estimated to be 3.34. By considering the mean score of sub-scales, it became evident that the mean score of “social responsibility”, the sub-scale of interpersonal, was higher than other subscales (26.14). After social responsibility, “empathy and interpersonal relationship” showed higher mean score (EM: 24.50, IR: 24.51). Therefore, it can be said that students had a high score in interpersonal scale in comparison to other scales. Stress management scale with subscales of “impulse control” and “stress tolerance” represented lower mean scores in comparison to others (IC: 17.43, ST: 18.60).

After division of academic scores and emotional intelligence scores into three categories of high, average and low by means of the software SPSS, in order to know the degree of relationship between the total emotional intelligence score and academic achievement mean score of students (regarding the first research question), the correlation between these two was calculated by chi-square through SPSS:
Table 2.  
EI Academic Score Cross Tabulation

<table>
<thead>
<tr>
<th></th>
<th>low</th>
<th>average</th>
<th>high</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average</td>
<td>12</td>
<td>15</td>
<td>23</td>
<td>50</td>
</tr>
<tr>
<td>high</td>
<td>10</td>
<td>15</td>
<td>35</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>22</td>
<td>30</td>
<td>58</td>
<td>110</td>
</tr>
</tbody>
</table>

Table 3.  
Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>1.770a</td>
<td>2</td>
<td>.413</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>110</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 indicates the degree of correlation between total EI score and academic performance. But as the table shows, there is no meaningful relationship between total EI score and academic performance because the degree of correlation is more than 0.05. (p < 0.05)

Regarding the second research question, the degree of correlation between academic mean score and sub-scales of EI was computed. According to the following table, there is a meaningful correlation between academic mean score and some sub-scales of EI:
Table 4 indicates that academic mean score has a meaningful correlation with stress tolerance (p=.004), the sub-scale of stress management. There is also a meaningful and positive relationship between emotional self-awareness and assertiveness, sub-scales of intrapersonal aspect of EI, and academic mean score because p value is less than 0.05 (p=.00 for emotional self-awareness and p=.002 for assertiveness). According to table 4 reality testing, the sub-scale of adaptability has also a positive and meaningful correlation with academic mean score as the p value equals (p=.006).

Discussion

The relationship between emotional intelligence and academic performance in foreign language learning produced divergent results. When the correlation between emotional intelligence and academic performance of students in foreign language learning was examined, total EQ score was found to be a poor predictor of academic performance because there was no meaningful correlation between total EQ score and academic performance mean score. However, this research study found some subscales of emotional intelligence to be good predictors of academic performance because there was a close relationship between academic performance and some subscales of emotional intelligence. This research study presented a close correlation between academic mean score and stress tolerance, the sub-scale of stress management, emotional self-awareness and assertiveness, sub-scales of intrapersonal aspect and reality testing, the sub-scale of adaptability. These finding are compatible with those studying
such as Fahim and Pishgadam (2007) who found a close relationship between academic performance and some subscales of emotional intelligence.

Therefore, important factors for success in academic performance can be presented as: stress tolerance, emotional self awareness and assertiveness, and reality testing. It means that the students with stress tolerance (the ability to withstand adverse events and stressful situations and conditions), with self awareness (the ability to recognize and understand one`s feeling) and assertiveness (the ability to express feelings, beliefs and thoughts, and to defend one`s rights in non-destructive manner), and also with power of reality testing will have better academic performance in foreign language learning classes (Bar-On, 1997). These findings are compatible with what is actually seen in real classroom settings. In foreign language learning context especially in Iran, learning English language is really a stressful and demanding task. The reasons can be explained in this way that learners do not mostly go to English classes before going to university and they start to learn and speak English at university for the first time and this makes them anxious and nervous. They are often negatively evaluated by their teacher and also their friends when they make a mistake in class and the teacher tends to correct their mistakes and errors on the spot; therefore, they are afraid of making mistakes and errors when they communicate. If teachers can develop techniques to decrease their anxiety and also help students to manage their stress, this fact can have a positive impact on the educational outcome. Another problem which can be actually seen in context of language learning is students` inability to be aware of their own feelings and those of others and also their inability to talk about and assert their own feelings. If techniques can be developed in foreign language learning syllabuses to help students feel relaxed with their friends and also their teacher, to share their own feelings and talk about them, this will cause them to believe in themselves not only in their life but also in academic learning environments. And in this way they can also increase their own ability for reality testing. And generally speaking, all these facts will have positive impacts on better academic performance.
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Implications and Applications

The findings of this study suggest several implications for English language teaching profession. If we believe that emotional intelligence can be increased, if we assume that it may be possible to educate those who are low in emotional competencies to improve their abilities to better recognize their feelings, express them, and regulate them (Mayer & Geher, 1996), there should be programs to raise the emotional competencies of their learners.

Moreover, English teachers are not only expected to be familiar with the EI, but also they should try hard to raise their own emotional competencies and then to try to enhance the emotional intelligence of their learners. Materials developers are required to include techniques which pay more attention to emotional factors. Some helpful techniques which can be used to increase emotional intelligence in the classroom include: discussion, asking students' opinions on different subjects, designing questionnaires and reading texts which motivate them to be more familiar with themselves especially their emotional aspect. Discussion groups in which the learners are asked to express their feelings freely and share it with others in an explicit way can help the learners get to know themselves more deeply, foster good relations with others, and reduce stress and anxiety to a great extent.

Suggestions for further Research

In the present research sex, age, and ethnic groups were not taken into account. A more detailed study is needed to explore the relationship between emotional intelligence and these variables in foreign language learning contexts. Moreover, in the current study, the effect of emotional intelligence was tested on foreign language learning, further studies are needed to investigate the effect of emotional intelligence on second language teaching. Another study should examine the role of emotional intelligence in language testing.
Conclusion

English is considered as a foreign language in Iran and if we take the nature of English classes in EFL settings into account, it becomes evident that learning English language is really a demanding task for learners because they only study English in schools without having a chance to use it. And after that they continue their English studies in ESP courses. Learners also are required to apply English accurately in classes and their mistakes are corrected immediately by their teachers. On the other hand, in our society many jobs require a good command of English language. Therefore, it seems to be natural that emotional factors and stress management abilities can be of great help in this context of learning.

The Author

Sepideh Berenji is a faculty member of Islamic Azad University, Osku Branch. She got M.A. degree in English Language Teaching. She has been teaching English in Osku branch for 6 years and also has been teaching in Tabriz branch for 7 years. She has written several articles. She has presented articles in universities like Islamic Azad University, Sanandaj Branch and Islamic Azad University, Shabestar Branch. Recently, she has also presented an article in International conference of NIDA University in Bangkok, Thailand. Her major areas of interest includes foreign language learning, multiple intelligences, and discourse analysis.

References


ارتباط هوش هیجانی و موضعیت تحقیقاتی دانشجویان در کلاسهای زبان عمومی

سیده برنجی
دانشگاه آزاد اسلامی واحد اسکو

هوش هیجانی، استعدادی برای آگاهی، فهم و بیان خود، استعدادی برای آگاهی، فهم و ارتباط با دیگران، قابلیت برای ارتباط با احساسات عمیق و توانایی برای سازگاری با تغییرات و حل مشکلات فردی و اجتماعی، به عنوان یک عامل اساسی و مهم در پیاده‌ریزی یک زبان محسوب می‌شود بنابراین هوش هیجانی باعث افزایش روانی کلام می‌شود که هدف اصلی و نهایی در پیاده‌ریزی یک زبان خارجی است. این مقاله در نظر دارد همبستگی بین هوش هیجانی و موضعیت تحقیقاتی دانشجویان را در کلاسهای زبان خارجی دانشگاه آزاد اسلامی اسکو مورد بررسی قرار دهد. به منظور این هدف، 110 نفر از دانشجویان سال دوم و سوم در کلاسهای زبان خارجی دانشگاه آزاد اسلامی اسکو در این بررسی شرکت کردند. در ابتدا از دانشجویان در اواسط ترم خواسته شد تا پرسشنامه مربوط به هوش هیجانی (Bar-On) (1997) بر اساس دستورالعمل‌های ارائه شده توسط (1997) محاسبه شد. در آخر نیمسال تحقیقاتی برای بدست آوردن میانگین نمره تحقیقی، امتحان پایان ترم به نمره 20 از دانشجویان به عمل آمد. در پایان درجه همبستگی بین هوش هیجانی و نمره میانگین تحقیقاتی محاسبه شد. نتیجه بررسی مشخص کرد که بین نمره کل هوش هیجانی و نمره میانگین تحقیقاتی همبستگی معنی‌داری وجود ندارد اما بین تعدادی از زیر مقياس های هوش هیجانی و نمره میانگین تحقیقاتی ارتباط معنی‌داری وجود دارد. این است که برنامه ریزی‌های تحقیقی و نوسازی‌های طرح درس عوامل اластیک مثور در یادگیری زبان را در نظر نشان داده است. به این ترتیب، زبان خارجی کلید و از آنها هوش هیجانی، یادگیری زبان خارجی